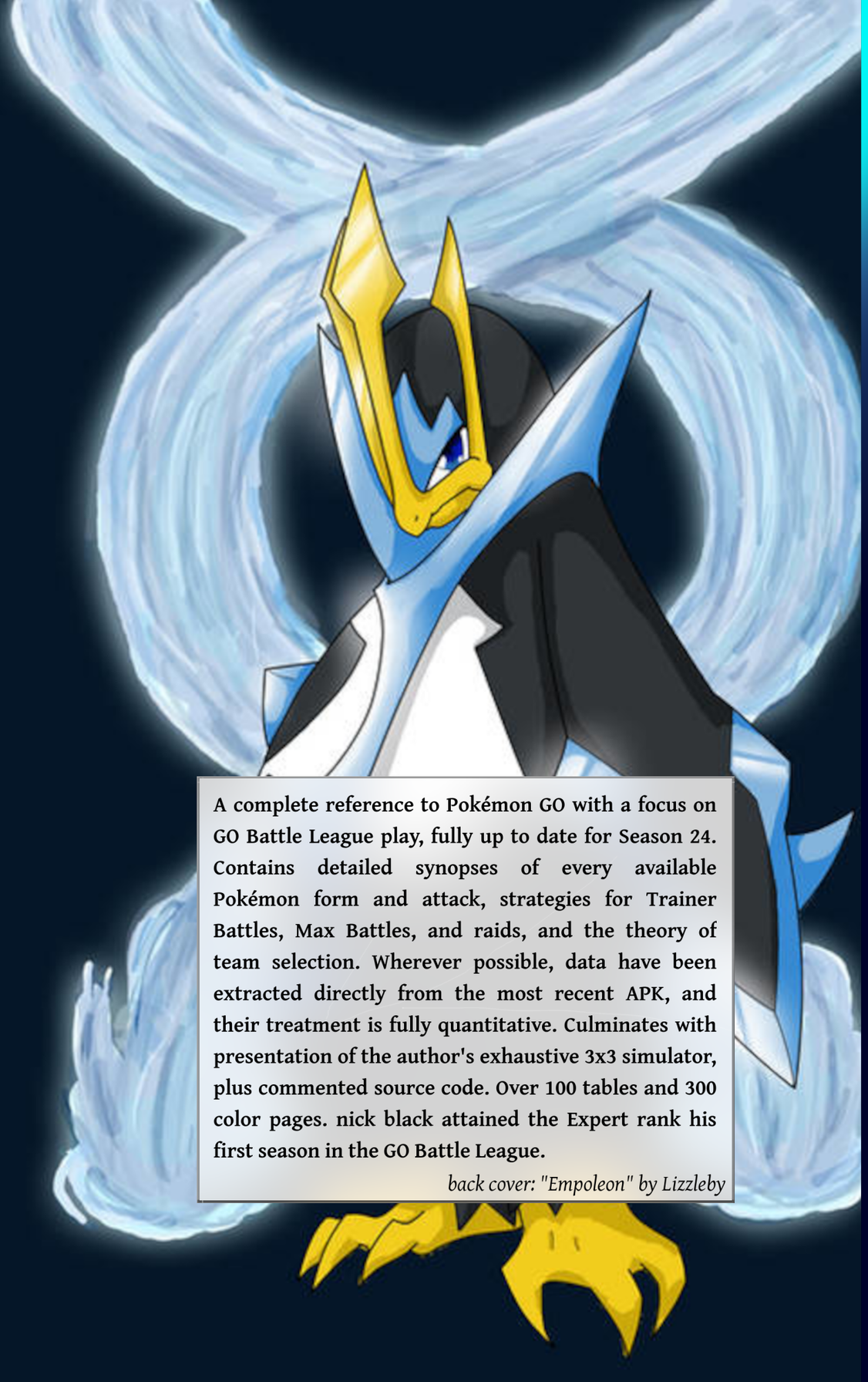


A complete reference to Pokémon GO with a focus on GO Battle League play, fully up to date for Season 24. Contains detailed synopses of every available Pokémon form and attack, strategies for Trainer Battles, Max Battles, and raids, and the theory of team selection. Wherever possible, data have been extracted directly from the most recent APK, and their treatment is fully quantitative. Culminates with presentation of the author's exhaustive 3x3 simulator, plus commented source code. Over 100 tables and 300 color pages. nick black attained the Expert rank his first season in the GO Battle League.

back cover: "Empoleon" by Lizzleby

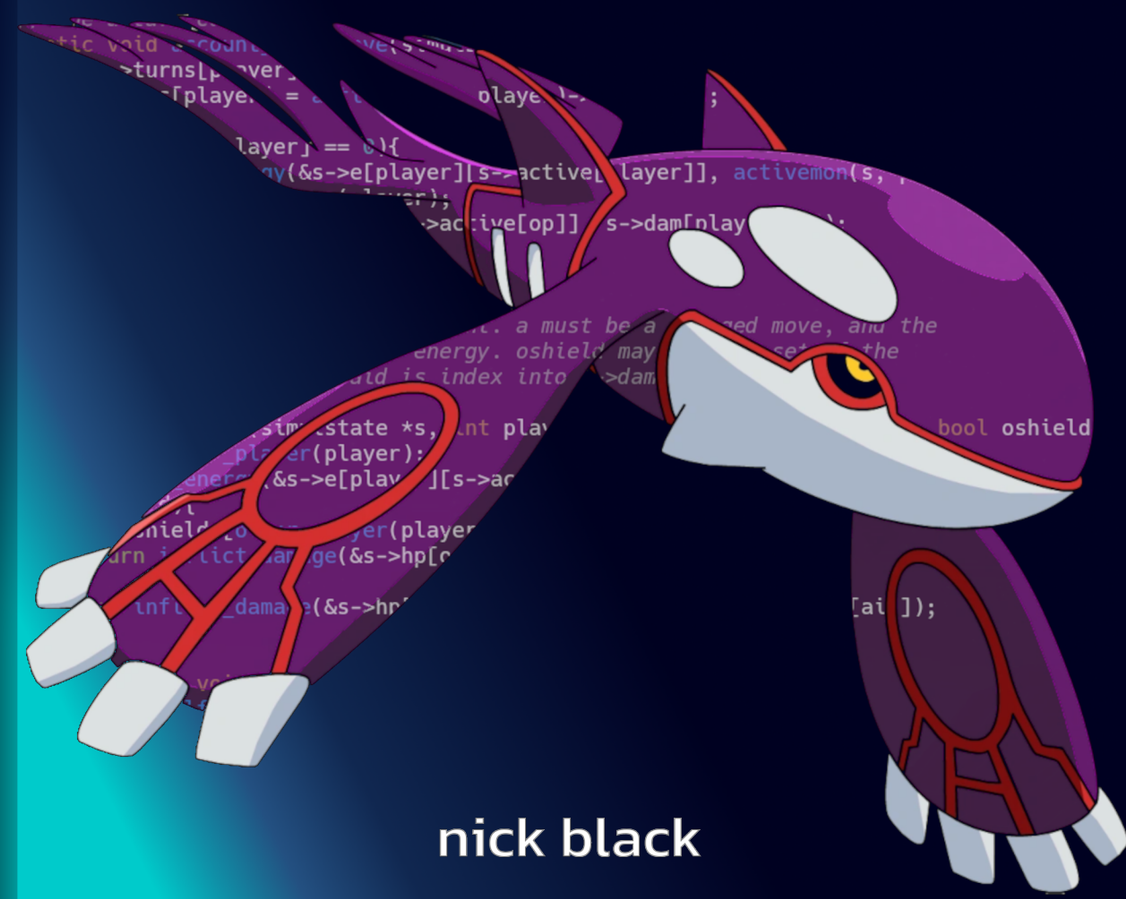
Pokémon GO

a quantitative approach

nick black

Pokémon GO

a quantitative approach



nick black

Pokémon GO
A Quantitative Approach

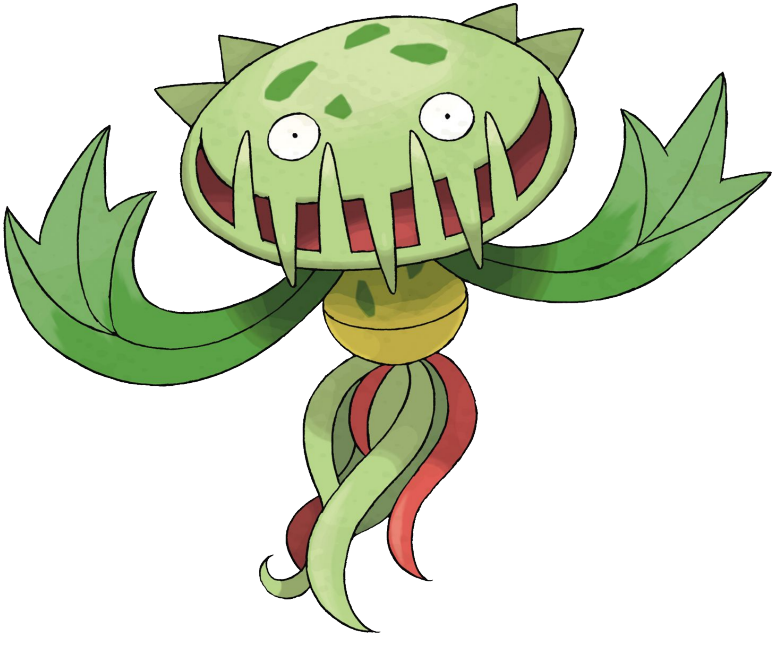
nick black

Gold & Appel Publishing

Version 0.999.27, built September 5, 2025.

Venmo: @dankamongmen

Thanks! ♥ **nick**



Contents

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Foreword

Pokémon and Pokémon character names are trademarks of Nintendo. This book and its author are in no way associated with the Nintendo, Niantic, or Scopely corporations.

The text is specific to Pokémon GO, and focuses on the free-to-play and PvP "League" aspects of that game, though many details apply to the rest of the Pokémon family. In particular, it is based on my experimentation with and analysis of the 0.369.0 Android release, using decompilation, debuggers, and traffic analysis. Whenever possible, I have relied exclusively on official Niantic communications and my own research. I have noted all data not personally validated.

Changes are frequently made to the game, some of them quite fundamental. This text documents PGO as it is played in July 2025. I have not generally explored variances with historical gameplay. Mathematical sophistication is not required. A basic familiarity with algebra ought suffice. I resort to calculus only once. Only chapter 16 can be called "technical".

Much of the information herein will be old news to experienced PGO players, but I hope to provide both a rigorous (if opinionated) reference and an ordered collection of wisdom. The community established a large body of knowledge long before I began playing in March of 2025. Still, some of my theories regarding team selection and battle strategy might be new to you. My novel contributions are primarily found in chapter 12, chapter 14, and chapter 16. I will not be recommending Pokémon, nor teams thereof—ephemeral information at best—but instead giving you the tools to make your own creative decisions.

I extensively consulted the Pokémon GO Database[1], the GamePress Pokémon GO Wiki[2], the Fandom Pokémon GO Wiki[3], and the work of the now-disbanded Silph Road research group. In particular, all bitmaps were sourced from the wikis. All graphs, diagrams, and text are my original work.

Please send corrections and feedback to nickblack@linux.com.

[1] `https://db.pokemongohub.net/`
[2] `https://pokemongo.gamepress.gg`
[3] `https://pokemongo.fandom.com/`

1 Objectives

The goal of Pokémon GO is to consume time and divert one's attentions, ideally triggering regular releases of dopamine in your ratlike brain. A secondary objective is stunting on webfora adolescents, but one can simply lie, making the game something of an unnecessary complication. Would you like to be hit by a car? Brother, if so, this is the game for you.

Like the Halting Problem, there is no necessary end condition. Eventually most of the matmuls for which you are responsible will be performed in a data center. You'll receive UBI, perhaps, I guess, for some reason, or simply be transferred to the Professor. Either way, you can shove cute iconography into your fat face until you die unheralded, stepping down into the darkness before the footlamps, destined for a night that is eternal and without name.

The only winning move is not to play, but one could after all say the same thing about life itself.

Let's begin!

2 Trainers

A Pokémon GO account is synonymous with its associated Trainer.

2.1 Levels

New Trainers start at Level 1 (of 50) with 0 XP. A new Level is conferred as soon as the Trainer's XP meets or exceeds that Level's XP threshold (Table 2.1). It is possible to advance multiple Levels via a single award of XP. Levels 41 and above have extra requirements beyond XP (Table 2.2). Certain elements of gameplay are gated by Trainer Level (Table 2.3), and a Trainer cannot control Pokémon whose Level exceeds the Trainer's by more than 10—a Level 22 Trainer will be unable to power up (section 9.1) a Pokémon past Level 32. Reaching a new Level is rewarded with items (Table 2.4). Levels 7, 8, 13, 15, and 20 introduce Special Research (section 2.6), as do 43, 45, 48, and 50 (under the guise of "challenges"). All level-gated mechanics, including the ability to fully power up Pokémon, are available at Level 40[1]. Levels 41, 43, 45, 47, 49, and 50 open some cosmetic options for Trainer avatars. Trainer Level determines the maximum level of wild spawns (section 5.1) and the difficulty of Team GO Rocket opponents (section 4.6).

2.2 Teams

Each of Professor Willow's three assistants lead a team, and Trainers can join one upon teaching Level 5: Instinct (yellow, led by Spark), Valor (red, led by Candela), or Mystic (blue, led by Blanche), The only non-cosmetic effect of Team choice regards gyms (section 10.6), which are held by one Team at a time. A Trainer can change their Team by purchasing and making use of a Team Medallion. The cost is 1,000 Pokécoins, and 365 days must pass between Medallion purchases.

It seems sadly impossible to join GO Rocket. Alas!

2.3 Capacities and initial inventories

Trainers enter this world with no Pokémon, no Pokécoins, no Stardust, no Max Particles, no Candy of any kind, no Mega Energy of any kind, no Primal Energy of any kind, no Fusion Energy of any kind, and no Crown Energy of any kind. They have initial carrying capacity sufficient for

[1]The maximum Pokémon Level is 50 (chapter 9).

Level	kXP	ΔkXP	Level	kXP	ΔkXP
1	0	0	21	260	50
2	1	1	22	335	75
3	3	2	23	435	100
4	6	3	24	560	125
5	10	4	25	710	150
6	15	5	26	900	190
7	21	6	27	1,100	200
8	28	7	28	1,350	250
9	36	8	29	1,650	300
10	45	9	30	2,000	350
11	55	10	31	2,500	500
12	65	10	32	3,000	500
13	75	10	33	3,750	750
14	85	10	34	4,750	1,000
15	100	15	35	6,000	1,250
16	120	20	36	7,500	7,500
17	140	20	37	9,500	2,000
18	160	20	38	12,000	2,500
19	185	25	39	15,000	3,000
20	210	25	40	20,000	5,000

Table 2.1: Requirements for Trainer Levels 1–40

300 Pokémon. Additional storage can be added in increments of 50, up to a total of 10,500. Each upgrade costs 200 Pokécoins. A full upgrade will thus currently run you 40,800 Pokécoins.

During the initial tour with Professor Willow, the Trainer selects one of Bulbasaur, Charmander, Squirtle, or Pikachu to catch. They will enter the Encounter screen, be provided an infinite supply of Pokéballs for the encounter, and enjoy a catch rate (section 5.2) set to 100%.

The Trainer has a Bag capable of storing 350 items (strangely, not all items count against this limit, including Gifts, Stickers, and the Postcard Book[2], which I suppose are shoved down the front of one's Trainer uniform). The Bag comes with an Infinite Incubator, a Camera, 2 Incense, and 50 Poké Balls, and thus space for 296 new items. The Bag can be upgraded to store up to 9,500 items. Here again, each upgrade costs 200 Pokécoins, and increases capacity by 50 items. The maximum Bag is thus 36,600 Pokécoins.

[2]Items which count against Bag space have a trash can next to them on the Item screen, except incubators and Gimmighoul coins for whatever reason.

Level	MXP	ΔMXP	Special requirements
41	26	6	20 Legendary/Mythical power ups, 30 raid wins, 5 Gold medals, 200 Pokémon caught in calendar day
42	33.5	7.5	Evolve all 8 Eevee forms, 3 excellent throws, 200 Pokémon caught with berries, 15 item-assisted evolutions
43	42.5	9	Earn 100k Stardust, 5 platinum medals, 200 effective Charged Attacks, 5 Legendary/Mythical catches
44	53.5	11	30 Trainer Battle wins in each of Great, Ultra, and Master League, 20 GO Battle League wins
45	66.5	13	100 GO Rocket Grunt wins, 100 Pokémon purified, 50 GO Rocket Leader wins, 10 platinum medals
46	82	15.5	100 Field Research tasks, 30 Eggs hatched, 7 consecutive days w/snapshot, 50 Excellent throws
47	100	18	30 raid wins with heterogenous teams, 3★+ Raid win with CP1500-bounded team, 3 power ups to max CP, 20 platinum medals
48	121	21	10 Souvenirs from buddy, 300 hearts with buddy, 200 km walked with buddy, 8 weeks with 25 km walked
49	146	25	10 trades of 300 km+ catch distance, 50 Lucky Pokémon received in trades, 500 gifts sent, 35 platinum medals
50	176	30	5 consecutive Legendary/Mythical catches, 3 GO Rocket Leader wins with CP2500-bounded teams, Rank 10 in GO Battle League, 999 Excellent throws

Table 2.2: Requirements for Trainer Levels 41–50. Only the medal requirements take prior achievements into account; everything else must be accomplished after the challenge has been unlocked.

Level	Features unlocked
2	Nanab berries
5	Potions, Revives, Teams, Appraisal, Gyms, Raids
7	Adventure Incense, “An Intriguing Incense”
8	Razz berries, Team GO Rocket, “A Troubling Situation”
10	Super Potions, Golden Razz berries, Evolution items, Trades, Trainer Battles
12	Great Balls
13	Max Pokémon and Battles, “To The Max!”
15	Hyper Potions, Fast TMs, Parties, “A Mythical Discovery”
18	Pinap berries
20	Silver Pinap berries, Ultra Balls, Mega Evolution, “A Mega Discovery”
25	Max Potions, Charged TMs
30	Max Revives, Route submission
31	XL Candy
35	Pokéstop submission (Wayfarer access)

Table 2.3: Features unlocked by Trainer Levels

The Trainer has a Postcard Book with seven pages, each capable of retaining 50 Postcards, for an initial limit of 350. Pages can be added for 100 Pokécoins each, up to a maximum of 40 Pages supporting 2,000 total Postcards. Such a monster will cost 3,300 Pokécoins.

The Trainer can carry up to twenty Gifts at a time, and up to 25 of each sticker. To date, no one has found any use for the stickers.

Upon obtaining four Shadow Shards, they are automatically refined into a Purified Gem. The Trainer can carry up to ten Purified Gems. Shadow Shards cannot be collected while holding ten gems, though any extras following the tenth gem’s purification will be retained (this can only happen when receiving multiple shards in a single award).

A trainer cannot normally collect Max Particles while in possession of 1,500 or more. The Trainer can collect no more than 9,999 units of any Mega Energy, Primal Energy, or Fusion Energy. A limit on Crown Energy is not yet known, but seems likely to be 9,999.

No limit is known for Candy nor Candy XL. A lower bound has been established in the millions. It seems plausible that the limit is one less than a large power of 2: 2,147,483,647 seems as good a guess as any[3].

Trainers will not infrequently receive rewards which, combined

[3]If the limit is driven by UI requirements, it’s likely lower.

2	10			6																		
3	15			8																		
4	15			15																		
5	20							1	10		10											
6	15								5		10						1					
7	15							1	5		10									150		
8	15				10				5		10				1							
9	15				3				5		10					1						
10	20				10			1	10			20			1	1	1					
11	15				3				3			10										
12		20			3				3			10										
13		10			3				3			10										
14		10		3					3			10										
15		15			10			1	10				20		1	1	1					
16		10		5					5				10									
17		10			5				5				10									
18		10				5			5				10									
19		15			5				5				10									
20			20	20				2	20				20		2	2	2					
21			10			10			10				10									
22			10		10				10				10									
23			10	10					10				10									
24			15		10				10				10									
25			25			15		1	15					20	1	1	1					
26			10		15				10					15								
27			10	15					10					15								
28			10		15				10					15								
29			10			15			10					15								
30			30		20			3		20				20	3	3	3					
31			10	15						10				15								
32			10		15					10				15								
33			10			15				10				15								
34			10		15					10				15								
35			30	20				2		20				20	1	1	1					
36			20		20					10				20								
37			20			20				10				20								
38			20		20					10				20								
39			20	20						10				20								
40			40		40			4		40				40	4	4	4					
41			20		20					20				20			1		1			
42			20	20						20				20			1		1			
43			20				20			20				20			1		1			
44			20		20					20				20			1		1			
45			40					2		40					2	2		1	2		1	
46			30		25					20				25			1		1			
47			30	25						20				25			1		1			
48			30				15			20				25			1		1			
49			30			25				20				25			1		1			
50			50					5						50	5	5		5	2			1

Table 2.4: Items awarded for reaching Trainer Levels

with existing supplies, exceed capacity. The full award will be processed in such cases. If capacity has been met or exceeded before the award, however, no part of the award is received. Since Pokémon are never acquired other than one at a time, this situation cannot arise for them. When Pokémon storage is full, the Trainer will not be allowed to incubate eggs, nor enter encounters. They can fight raids etc., but the bonus challenge will be skipped. Having upgraded storage or otherwise made space available, the Trainer can reenter and complete the challenge (assuming the relevant raid boss/Power Stop is still available).

2.4 Pokédexen

The Trainer has ten Pokédexen[4]: "Pokémon", "Shiny", "XXL", "XXS", "G-Max", "Mega", "Shadow", "Purified", "★100%", and "Lucky". All ten start empty, and several start locked. Unlocking "★100%" requires 20 4★ Pokémon. 15 Shiny Pokémon must be captured for "Shiny". 10 Shadow, Purified, or Lucky Pokémon will unlock their respective dexen. Entries are filled in as the relevant Pokémon are acquired (via any means). Once registered, Pokédex entries are never unregistered. If an entry is made in some Pokédex, the corresponding entry is also made in the primary Pokédex. Shiny Shadow Pokémon and Shiny Purified Pokémon are registered to the "Shiny" Pokédex along with the "Shadow" or "Purified" Pokédex. Effective searching is covered in section 9.8.

Besides pointless nostalgia, the "Info" and "Battle" tabs of filled entries provide information regarding evolution (section 8.2), type relations (chapter 6), and attacks (chapter 7). Trainers can place an alert on one filled or silhouetted entry to receive notifications when that Pokémon is nearby.

Living Pokédexen

Some extreme collectors maintain "living Pokédexen", i.e. one of each species/form in their usable Pokémon storage. I suppose you never know when you'll need reach for Throh.

2.5 Grinding

For me, the joy of Pokémon GO is almost entirely found in its PvP League play (section 10.5). Others take pleasure from its collection and social aspects. Either way, you'll be doing a good bit of slogging in order to find,

[4] "Pokédexes" to the uncultured.

develop, and evolve powerful Pokémon. Those willing to spend money can speed the process up a bit, but there's no escaping the fundamental cycles of Catch, Appraise, Transfer and Catch, Appraise, Develop. I began playing on 2025-03-01. As I write this about four months later, I have caught 26,539 Pokémon, and retained 441—a little less than 1.7%.

Grinding Pokémon

Pokémon can be received via trades (section 4.3), and hatched from eggs (section 5.3), but most are caught with Pokéballs in encounters. An encounter involves a single subject Pokémon, a single Trainer, and possibly that Trainer's current Buddy Pokémon. Outcomes (aside from certain plot-based encounters) include capture, flight, and departure.

Pokémon will spawn on the Map screen, seemingly at random (see section 5.1 for details). Pressing on them will open the Encounter screen with that Pokémon, providing an opportunity to catch it. Encounters are also triggered by the completion of certain Research, defeats of Team GO Rocket, Raid wins, Max Battle wins, GO Battle League wins, and photobombs. Up to one hundred encounters from Research can be arbitrarily postponed by leaving the encounter, or simply not closing the research out. Leaving wild encounters might see the Pokémon disappear from the Map, especially if you've moved significantly, or much time has gone by. Victories against Team GO Rocket in their balloon are a one-and-done deal: the balloon will depart if the Trainer exits the encounter.

Grinding XP

Gaining sufficient XP advances the Trainer's level. It is most regularly received for capturing Pokémon, but large awards are available by other means, and can be the source of a majority of a Trainer's XP. The Gifts system is essentially a machine for converting time into experience points (section 4.1). Raids and Max Battles, especially 4★ or higher, are munificent with the XP. Using a Lucky Egg doubles all XP awards for thirty minutes (time remaining is displayed on the upper right of the map). Lucky Eggs can be bought from the Shop (one for 80 Pokécoins or eight for 500), and are sometimes awarded for completing Research. Routes and showcases can also be good sources of XP[5].

[5] My recent rather dubious 159th place in a Zacian showcase netted 1000 XP.

Action	XP
Feed berry to Gym defender	50
Spin Pokéstop	50
Sending a Gift	200
Spin new Pokéstop	250
Spin first Pokéstop of the day	500
Evolution, new main Pokédex registration	1000
Spin first Pokéstop of the 7th day of streak	2500
Research breakthrough	3000

Table 2.5: XP awards not captured elsewhere

Grinding Stardust

Trainers pay a cost (partially) in Stardust to level up their Pokémon (section 9.1), to trade them (section 4.3), to purify Shadow Pokémon (section 8.3), to teach them second charged attacks (section 7.2), to change certain forms (section 8.1), and to activate Adventure Effects (section 7.2). Stardust becomes the primary bottleneck on advancement fairly early in the game: Pokémon at higher levels require more Stardust to power up (Table 9.1), but the amount of Stardust awarded for their capture doesn't change. There is never enough.

The primary means of acquiring Stardust is catching Pokémon. The vast majority of Pokémon result in one of three awards based on their stage (section 8.2), but a few offer more (Table 2.6), making them excellent targets for Razz berries. A Pokémon which is weather-boosted (section 3.1) awards 25% more than normal. Stardust can also be collected for wins in the GO Battle League, opening Gifts (section 4.1), completing Routes, completing Research, participating in Showcases, defeating Team Leaders in Trainer Battles, defeating Team GO Rocket, hatching eggs, feeding berries to Pokémon defending your team's gyms (30 per), and from weekly Adventure Sync rewards based on the total distance walked. 5★ and 6★ Max Battles award 15,000 and 25,000 Stardust respectively. A Star Piece increases all Stardust awards by 50% for thirty minutes. Star Pieces can be bought from the Shop (individually, or eight at wholesale), and are sometimes awarded for Research.

Grinding Candy

Each family (section 8.2) has its own flavor of Candy and Candy XL. Along with Stardust, most Pokémon enhancement is driven by Candy. Candy is primarily acquired by capturing Pokémon: each capture (in any context) awards Candy (and possibly Candy XL) of the capture's

Pokémon	Award
Audino	2100
Cloyster	1200
Shellder, Chimecho	1000
Alolan Persian, Starmie, Vespiquen, Garbodor	950
Alolan Meowth, Staryu, Sableye, Combee, Trubbish	750
Parasect, Persian, Breloom, Amoonguss, Shiinotic	700
Paras, Meowth, Delibird, Shroomish, Foongus, Morelull, and stage 3 Pokémon not yet specified	500
Stage 2 Pokémon not yet specified	300
All other Pokémon	100

Table 2.6: Stardust awards for capturing Pokémon

family. Three Candy are awarded for capture of a Stage 1 Pokémon, five for a Stage 2, and ten for Stage 3[6]. Pinap and Silver pinap berries increase this award (section 5.2). Candy XL is necessary for advancing Pokémon past level 40. 100 Candy can be exchanged for a single Candy XL of that flavor. Each Rare Candy can be converted into arbitrarily flavored Candy; Rare Candy XL can become any flavor of Candy XL.

A Pokémon can be "transferred to the Professor" for soul harvesting. Its loss of existence is your gain of one tasty Candy. Certain plot armored Pokémon cannot be harvested (section 8.4). Pokémon can be transferred to a linked Pokémon HOME account, resulting in a single Candy. Evolution consumes many Candies, but returns one when complete. Trading (section 4.3) nets Candy (and possibly Candy XL) of the Pokémon traded away. Winning Max Battles awards Candy (and possibly Candy XL); 5★ and 6★ Max Battles award 10 and 30 Candy.

Walking with a Buddy (section 4.4) will generate Candy (and possibly Candy XL and Mega Energy). The distance that must be walked depends on the Buddy's cost group (section 8.1). Giving berries to gym defenders results in Candy very infrequently (in addition to guaranteed XP and Stardust). The bonus Candy from an active Mega evolution (Table 8.2) adds up, especially with higher Mega levels—try to always have a Mega evolution running. Hatching an egg yields substantial Candy of the hatched family, depending on the egg type (section 5.3). It is possible through Research to receive Candy for a family not present in your Pokédex, i.e. one whose constituent species you have never captured. You'll keep this Candy, but it doesn't result in a Pokédex entry. Likewise, Candy is retained even if all Pokémon of that family

[6]Legendaries give only three, even if they're evolved.

have been transferred.

Grinding particles

Interacting with Power Stops awards Max Particles once per day per Stop. Each Stop awards 120 the first time, and 100 subsequently. Walking 2 km makes available 300 MP. Claiming them resets the pedometer, which does not track walking while they're unclaimed. Once 800 or more MP have been collected on a calendar day via these methods, no more can be collected[7]. This timer resets at 0500h local time. Max Particles from Research are not subject to this restriction, nor are Max Particle Packs. The latter are available from the Shop (individually, or in packs of three); each contains 800 MP.

Grinding energies

Form-changing energies (Mega, Primal, Fusion, and Crown) can be acquired by winning a raid of that type or completing certain research tasks. The amount of Mega or Primal energy awarded depends on how quickly the raid is won. If a Buddy Pokémon is of an evolutionary line where any member of that line has undergone Mega evolution or Primal reversion, walking will earn 5 energy per kilometer. This rate is constant across all species, but the energy is awarded only when the Buddy finds Candy, as determined by its cost group (section 8.1). Walking cannot earn Fusion or Crown energies. Very rarely, spinning Pokéstops will result in Beedrill Mega energy.

Note that Mega and Primal evolutions are temporary, while Fusion and Crowning is persistent until explicitly undone.

Grinding Pokécoins (and F2P vs. P2P)

Pokémon GO is free to download, with optional microtransactions through the in-game Shop and the Pokémon GO web store. Pokécoins can be used to purchase most items[8], and local currency can purchase Pokécoins. Interestingly, the ratio of exchange rates for Pokécoin and USD diverges wildly across regions[9]. A one-time award of 150 Pokécoins (a humble sum ensuring that Trainers are aware of the game's spending opportunities) is presented upon reaching Level 7. More usefully, Pokémon defeated while defending a gym (section 10.6) can return with

[7]Note that this allows up to 1080 MP per day. Claim a walk award and interact with four new Power Stops for 780 MP, then close it out with a walk award.

[8]Event passes generally require cash, as does anything specific to the web store.

[9]Use of e.g. a VPN to purchase Pokécoins remotely is a violation of the ToS.

Pokécoins. The Pokémon receives one Pokécoin for every ten minutes spent in the Gym, and presents these weregild to the Trainer. The Trainer can collect only 50 Pokécoin each calendar day (requiring 8⅓ hours' occupancy), no matter how many Pokémon return.

As an example, a Trainer leaves Pokémon in aligned gyms at 2200h and 2210h local time. The first returns at 2341h that evening, the second at 1001h the next morning. The Trainer receives 10 Pokécoins at 2341h, and 50 Pokécoins at 1001h, for a total of 60. If the first returned instead at 0001h, the Trainer would receive 12 Pokécoins at 0001h, and 38 Pokécoins at 1001h, for a total of 50. Note that the second case earns less, despite greater occupancy time. By regularly taking gyms, with a little luck a Trainer can accumulate 350 free Pokécoins each week.

Is it possible to play PGO at a high level without spending money? The serious collector-style Trainer has costs for storage and raiding (section 10.6) that can't easily be met by 350 Pokécoins per week, especially in pursuit of Shiny Pokémon (section 5.4), but millions of people collect at a hobbyist level for free. For the PvP-oriented Trainer, there's little need to spend at all, especially if you live in an area with lots of PGO activity. I have minimal Bag and Pokémon storage (800 and 500 respectively), and raid almost exclusively locally using the daily free pass. Very few of my Pokémon have the optimal IVs for their Leagues (chapter 14), and I don't yet have many of the Pokémon with which I'd like to experiment, yet my Great and Ultra League Elos rarely dip below 2100. Frankly, I consider my free play a point of pride[10]. Whether one needs spend money in Pokémon GO is entirely a matter of goals, dedication, and patience. With that said, if you want to spend, go with God—thanks for making my free play possible.

The calculus changes for rural Trainers. Without local raiding (and at least four or five other Trainers to join on larger battles), it will be difficult to collect a diverse team of competitive Pokémon. There are three alternatives: trading (which requires meeting Trainers already in possession of the desired Pokémon; see section 4.3), hosting raids, and remote raiding. Raids can be effectively hosted using the Campfire app or various websites. Remote raiding requires passes, which require Pokécoins—525 for 3 passes at this time. Collecting the maximum 50 from gyms eleven out of every fourteen days, you can do three free remote raids every two weeks. Even better, host local raids using the three raid passes for 250 Pokécoins, and do three raids every five days. If you're sufficiently patient to save 5,425 Pokécoins, there's a Daily Bundle box with 99 Premium Battle Passes that comes around pretty regularly. You will initially be at a definite disadvantage in PvP, but it

[10] I've spent a little less than 80 USD to date, so not quite "free".

is one that can be largely overcome with cunning, and eliminated with a year's tenacious and savvy play.

Grinding items

A calendar day's first spin of a gym disc wins a raid pass unless one is already held (section 10.6). Basic berries, low-grade potions, and balls are the constant output of spun Pokéstops. Gym discs tend to output more potions and revives. On rare occasions, spins can output evolution items (Table 8.10). Opening a gift can yield items and Stardust. A sack of items is presented following victories in Team GO Rocket encounters, raids, and Max battles. Each week, awards are made based on total walking distance. Each day's first victory against a Team Leader in a Trainer Battle can award items, including evolution catalysts.

The most important items to carry are Pokeballs. Berries are of little use without them[11]. Encounters are much more frequent than battles; battle rewards almost always include potions and revives sufficient to cover damage suffered therein. I never carry more than about twenty Max Potions and Max Revives, yet keep my Pokémon fully healed at all times. Once Golden Razz berries are unlocked, there's no point in carrying Razz berries; use them immediately in encounters, or feed them to gym defenders. Nanab berries are only marginally useful (primarily with Shadow Pokémon): eschew them. Pinap berries are great. I set out with about half as many Pinaps as balls, and let them fly almost by default. Rare Silver Pinaps are worth hanging onto for considered use. Berries ought feed Pokémon, not fill up your bag.

Rare Candy (obtained from raids, Max Battles, GBL, or Team GO Rocket) is great when you make active use of it, but more than a hundred probably means you've got some underachieving Pokémon. Rare Candy XL (local raids and Max Battles) is worth carrying around until you have a Pokémon you really want to push above level 40, or whose Max Moves you want at level 3. More than five of any evolution item seems a bit much. Elite TMs are precious, but regular TMs (both fast and charged) can be readily had from routes. Even with the default capacities, this discipline ought leave space for at least one hundred balls. Storage constantly under pressure is not sustainable; I try to keep at least one third free.

[11]Successful captures consume at least as many balls as berries, and usually more.

2.6 Research

Research is a diverse set of challenges, each with its own reward. The Research screen is summoned up with the binoculars logo in the lower right of the Map screen. It is broken into three tabs:

- **Events:** Research and bonuses related to the calendar year, including ticketed research. Timed research is also shown here, despite acting more like Special research.
- **Today:** Field research—short-term (usually) tasks acquired by spinning Pokéstops. A Pokéstop will not assign more than one per day. Up to four field research tasks can be active at a time, with an additional possible Pokéstop scanning task. Field research tasks can be dismissed without completion.
- **Special:** Longer-term research structuring the game's plot, so far as one exists. Tasks and rewards are of greater magnitude. Special research comes in multipart stories, where each part consists of multiple tasks. All tasks within a part must be completed to advance within the story.

The rewards of field research are generally on the order of Pokéstop items—berries, balls, etc.—but also include encounters. Pokémon met in research encounters have a higher IV floor than most spawns (Table 9.4), and are thus disproportionately powerful for their species. Special and Event research rewards can be quite substantial, and are the only way to acquire some Pokémon. Event research includes Collection Challenges, which require the capture of a set of Pokémon within a time period, and are associated with their own medal.

Maximizing the value of research encounters

If you have the patience, stack research encounters (up to one hundred, remember) until an event (section 3.2) featuring a multiplier on XP, Stardust, and/or Candy.

2.7 Medals

A large set of Medals can be achieved at the Bronze, Silver, Gold, or Platinum level (Table 2.9). The vast majority are functionally useless, though several levels beyond 40 require earning Platinum medals (Table 2.2). The "Hero" and "Purifier" medals result in additional Premier

Region	Bronze	Silver	Gold	Platinum
Kanto	5	50	100	151
Johto	5	30	70	100
Hoenn	5	40	90	135
Sinnoh	5	30	80	107
Unova	5	50	100	156
Kalos	5	25	50	72
Alola	5	25	50	86
Galar	5	25	50	89
Hisui	1	3	5	7
Paldea	5	30	80	103

Table 2.7: Regional Pokédex medals

Medal	Type	Medal	Type	Medal	Type
Bug Catcher		Kindler		Schoolkid	
Delinquent		Bird Keeper		Punk Girl	
Dragon Tamer		Hex Maniac		Psychic	
Rocker		Gardener		Hiker	
Fairy-Tale Girl		Ruin Maniac		Rail Staff	
Black Belt		Skier		Swimmer	

Table 2.8: Medals with catch bonuses

Balls (section 5.2) when rescuing Shadow Pokémon—1, 2, 3, or 4 extra balls for each tier of each medal. Medals associated with catching Pokémon of a type give capture rate bonuses of 10%, 20%, 30%, and 40%. Catching a dualtyped Pokémon advances both associated medals. When encountering a dualtyped Pokémon, the catch bonus is averaged between the two relevant medals. Bronze requires 10 catches, silver 50, gold 200, and platinum 2,500. The "Elite Collector" medal is inscribed with the number of Collection Challenges completed (section 2.6), and is always gold. Each region (section 8.4) has an associated medal (Table 2.7) for filling in its primary Pokédex (section 2.4). For Vivillon medal details, see section 8.6. There are a great many event-specific medals; I shan't cover them here.

Name	Counts	B	S	G	P
Jogger	Kilometers walked	10	100	1k	10k
Collector	Captures	30	500	2k	50k
Scientist	Evolutions	3	20	200	2k
Breeder	Hatches	10	100	500	2.5k
Backpacker	Pokéstop spins	100	1k	2k	50k
Sightseer	Unique Pokéstops	10	100	1k	2k
Fisher	Large Magikarp captures	3	50	300	1k
Battle Girl	Gym battle wins	10	100	1k	4k
Ace Trainer	Team Leader wins	10	100	1k	2k
Youngster	Tiny Rattata captures	3	50	300	1k
Pikachu Fan	Pikachu captures	3	50	300	1k
Unown	Unique Unown captures	3	10	26	28
Champion	4★- raid wins	10	100	1k	2k
Battle Legend	5★+ raid wins	10	100	1k	2k
Berry Master	Gym berry feeds	10	100	1k	15k
Gym Leader	Gym occupancy hours	10	100	1k	15k
Pokémon Ranger	Field Research	10	100	1k	2.5k
Idol	Best Friends	1	2	3	20
Gentleman	Trades	10	100	1k	2.5k
Pilot	km of Trades	1k	100k	1M	10M
Great League Veteran	GL wins	5	50	200	1k
Ultra League Veteran	UL wins	5	50	200	1k
Master League Veteran	ML wins	5	50	200	1k
Cameraman	Snapshot photobombs	10	50	200	400
Purifier	Purifications	5	50	500	1k
Hero	GO Rocket Grunt and Leader wins	10	100	1k	2k
Ultra Hero	Giovanni wins	1	5	20	50
Best Buddy	Best Buddies	1	10	100	200
Wayfarer	Wayfarer agreements	50	500	1k	1.5k
Triathlete	7-day streaks	1	10	50	100
Rising Star	Unique raid wins	2	10	50	150
Rising Star Duo	Raid wins with friends	10	100	1k	2k
Picnicker	Pokémon spawned due your lures, but captured by other Trainers	5	25	500	2.5k
Successor	Mega evolutions	1	50	500	1k
Mega Evolution Guru	Unique Mega evolutions	1	24	36	46
Friend Finder	Referred Trainers	1	10	20	50
Raid Expert	Raid Achievements earned	1	50	200	500
Tiny Pokémon Collector	XXS height captures	5	25	100	500
Jumbo Pokémon Collector	XXL height captures	5	25	100	500
Vivillon Collector	Vivillon medals unlocked	1	5	10	18
Expert Navigator	Routes completed	10	50	200	600
Showcase Star	Showcase contests won	1	10	50	100
Community Member	Campfire event checkins	1	20	50	100
Life of the Party	Party challenges completed	10	50	100	200

Table 2.9: Unstructured medals

3 Space and time

Pokémon GO is played on a representation of the Earth's surface. The game's horizon is sufficiently close that curvature of this two-manifold cannot be discerned, facilitating simple projection onto Euclidean mobile devices. The Trainer is localized using the device's location services, which typically combine signals from GPS, WiFi radio, cellular radio, and sensors. Flaky location services or networking will have a highly deleterious effect on your game, and substantial functionality is unavailable when moving at high speed[1]—in particular, Pokémon cannot usually be caught while "speed locked".

3.1 The worldline of Pokémon GO

The Map view always shows the Trainer. It can be zoomed up to some limits; I *highly* recommend keeping it maximally zoomed out most of the time (zoom in if you're having trouble distinguishing between proximate Map elements). Real world surface elements are drawn, but do not affect Trainer movement (though they might have effects on spawns—section 5.1). The planet's surface is partitioned into S2 cells[2], a hierarchy (typically using quadtrees) of geodesic quadrilaterals (their boundaries are straight lines on the curved surface) numbered along a set of Hilbert curves (preserving spatial locality as index locality)[3].

If that meant nothing to you...

The world is carved into chunks. You can see the ones nearby.

The smallest S2 cell thought to be used is level 20, with a maximum of ten meters to a side. The center of such a cell is a potential spawn point section 5.1, and there are over seven trillion level 20 cells. Spawning seems influenced at least by Trainer activity and input from OpenStreetMap, but this is speculative at best. A level 17 cell contains zero or one "point of interest" (Pokéstop, Power Stop, Gym), sourced from Niantic's *Ingress* game and Wayfarer community. Gyms are distributed among level 14 cells according to the number of contained points of interest (Table 3.1), and usually involve automatic conversion of a Pokéstop. A level 14 cell also seems capable of containing two

[1]Common claims include 10.5 km/h and 15 km/h, but I've seen no evidence.
[2]None of this information has been confirmed, but it has solid evidence.
[3]Octavian Propcopiuc's "Geometry on the Sphere: Google's S2 Library".

Points of interest	Gyms	Points of interest	Gyms
1	0	6–19	2
2–5	1	20–34	3

Table 3.1: Gym allocation in level 14 S2 cells (source: "A Comprehensive Guide to S2 Cells and Pokémon GO", Zeroghan 2024-03-07)

Weather	Icons	Types	Weather	Icons	Types
Clear			Rainy		
Partly Cloudy			Cloudy		
Windy			Snow		
Fog			Extreme		None

Table 3.2: Weather-boosted types

Power Stops (note that Power Stops are not always visible). Weather (thought to be sourced from AccuWeather) seems a property of level 11 cells. Pokémon are tagged with a capture location associated with level 10 cells. Everything geographical in the game—the matrix of nearby Pokémon, the lists of raids and Max Battles, the rendered map, egg location—is based on some level of S2 cells.

Weather boosts

Local weather "boosts" associated types (Table 3.2), affecting attack strength in PvE (section 10.2), raid boss strength (section 10.6), spawn rates (section 5.1) and the levels of those spawns, and catching (section 5.2). The game's assessment of your weather is communicated via an icon on the Map View.

3.2 The timeline of Pokémon GO

Since late in 2000, Pokémon GO operates on scheduled "Seasons" of approximately ninety days. Event themes tend to tie into the season. The pools for wild spawns (section 5.1), eggs (section 5.3), raids, GBL awards, and research encounters see seasonal changes, though they are also subject to in-season events. Seasons typically have bonuses applied through their duration. GO Battle League standings are reset each season, and its reward pools change, but more significantly each season sees a number of changes to attacks (chapter 7), and which Pokémon can learn them.

Within a season, there are events on scales from hours to weeks. Every Tuesday from 1800h to 1900h local time is Spotlight Hour, with increased spawn rate for the featured Pokémon. Legendary Raid Hour (Wednesdays at 1800h) puts a selected Legendary, Mythical, or Ultra Beast raid boss (section 8.4) in every gym for two twenty-five minute rotations. Raid Days feature some Pokémon as a rapidly respawning raid boss for several hours, and usually provide multiple free raid passes. Max Battle Days work similarly for Dynamax and Gigantamax Pokémon, and typically allow more access to (and storage of) Max Particles. Each month sees a Community Day highlighting some Pokémon: for several hours, that Pokémon spawns copiously, can learn a special move without use of an Elite TM, and has an increased shiny rate (section 5.4). Recent seasons have seen GO Battle Weeks, where Trainers can play 20 sets per day rather than five, while enjoying a substantial Stardust award multiplier. The annual GO Fest is a multicity extravaganza. Introductions of new Pokémon usually have associated events.

Daily limits are based on calendar days, and honor the local timezone. The timezone seems to be pulled from the device's time service, not via location[4], while offset from the hour appears to be based on server receipt of messages. Raids will generally be available beginning at 0500h, and end not long after 2100h. Max Battles can only be fought between 0600h and 2100h local time, and these hours similarly constrain Team GO Rocket Leader takeover of Pokéstops. Grunts take over Pokéstops at all hours, and Leaders can still be found in the balloon outside their normal shift. Speaking of the balloon, it operates on four six-hour intervals, showing up once per interval. It appears as soon as the game is open during each interval, and remains present for twenty minutes.

The Special Research "A Troubling Situation" brings Team GO Rocket into the game. There are typically several Special Researches per year related to Team GO Rocket, but are unlocked only if there is no TGR-related research outstanding. These researches are furthermore time-locked, and thus can be missed entirely. Only during these researches can the charged attack "Frustration" be removed from a Shadow Pokémon (section 7.2, section 8.3).

[4]Manipulating the system clock is explicitly called out as cheating in the Community Ambassador FAQs.

4 Friends, buddies, enemies, Mateo

For a game touted as bringing people together, Pokémon GO tries hard to elide social elements. Aside from opt-in partners at local raids, there are no in-game means to discover other Trainers. It is not generally possible to send messages. Use of real names in Trainer handles is gently discouraged. Despite this, a Trainer can have up to 450 other Trainers as "friends". How can this capacity be exploited?

When two Trainers agree to friendship, they are assigned a friendship level of zero. The friendship can progress through four levels, based on the number of calendar days the Trainers interact (Table 4.1). Reaching a new level awards XP to both Trainers, and the awards for levels 3 and 4 are very substantial. Interaction can take the form of battling together, trading, a friendly 3x3 match (section 10.5), or opening a gift sent by the other Trainer (section 4.1). Addition of and regular gift exchange with other Trainers, facilitated by online friend code parlors, is the fastest way to progress through levels. In the words of Ferris Bueller, "it's a little silly and childish, but then again, so is [Pokémon GO]." Damage is enhanced when battling with friends, and winning together makes more Premier balls available (these bonuses do not stack). Higher friendship levels provide large discounts to trades.

4.1 Gifts

Up to 100 gifts can be acquired from Pokéstops each calendar day. So long as neither this daily limit nor the maximum capacity of twenty gifts is exceeded, spinnning a Pokéstop always provides a gift. Buddy Pokémon can provide up to fifteen gifts per day, and the Trainer can open up to twenty. Together, a Trainer can maintain a daily flow of 135 gifts. If these are all exchanged with new friends, they represent 405,000 XP generated every day. This would be rather tedious and

	Good	Great	Ultra	Best
Days	1	7	30	60
XP	3,000	10,000	50,000	100,000
XP/friend-day	3,000	1,857	2,100	1,811
Damage bonus	3%	5%	7%	10%
Ball bonus	0	1	2	4
Trade discount	0%	20%	92%	96%

Table 4.1: Friendship levels and resulting bonuses

impersonal; I don't recommend it. Instead, if you want to quickly gain levels, regularly add a few dozen Trainers. Take them through at least the Ultra Friend level. While this falls short of the maximum XP per day, it's much less work, and facilitates use of Lucky Eggs. You're going to be swimming in items either way.

Remember, only one Trainer needs open a gift to count that calendar day. Unless I need the items, I try to open my twenty gifts late in the evening, preferring Trainers who didn't interact with me that day. When browsing your list of friends, Trainers with a blue halo have already interacted with you: opening their gift will not advance the friendship state.

A tip regarding gift UI

Pressing the ⓧ element immediately after pressing "Open Gift" or "Send Gift" skips the animation without affecting function.

4.2 Parties

Trainers can play as a party, with party-specific challenges and rewards. They need not be friends, but will require a code and relative proximity. Any Trainer can create a party, but at least two Trainers must be involved to engage in party play. A party can have up to four Trainers, and can last up to three hours. New trainers can replace departures, but the party is dissolved if all other Trainers leave. Trainers cannot take over a party or form a splinter faction; departure of the host will require remaining Trainers to create a new party, and lose any progress. While party play is active, the other Trainers (and their Buddy Pokémon, if any) will be visible on one another's Maps. When raiding in a party, a Party Power gauge fills, charged by each fast attack used. When full, charged attacks deal double damage.

4.3 Trading

Trainers who share both friendship and spatial proximity can trade Pokémon. Trades always exchange a single Pokémon for one other. Trades reroll IVs (section 9.2) with a floor based on friendship level (Table 9.4), and reduce level if necessary for the receiving Trainer[1]. Level

[1]As noted earlier, the level is the receiving Trainer's level plus two, or plus five if the Pokémon was captured with weather boost. Weather at the time of the trade has no effect.

Type	Good	Great	Ultra	Best
Registered	100	100	100	100
Unregistered, reg. Special	20,000	16,000	1,600	800
Unregistered Special	1,000,000	800,000	80,000	40,000

Table 4.2: Trade costs in Stardust

is otherwise unchanged, as are shininess, size, battles won, nickname, and attacks. A Pokémon can be traded only once across its lifetime. Interactions with Best Friends can sometimes make them "lucky", guaranteeing that the next trade with them will result in Lucky Pokémon (section 9.4). A Lucky Trinket applied to a Great Friend who is not currently a Lucky Friend makes them a Lucky Friend immediately. Trading a Pokémon results in Candy of the *departing* Pokémon's family, and possibly Candy XL. The chance of Candy XL depends on how far apart the Pokémon were captured. A Trainer cannot typically make more than 100 trades per calendar day, nor more than a single Special Trade.

All trades have a cost in Stardust (Table 4.2). "Special" trades are those involving Legendary, Mythical, Ultra Beast (section 8.4), Shiny, Purified, or Gigantamax (section 8.1) Pokémon. If either Pokémon qualifies, the trade is Special. Forms (section 8.1) present in the receiving Trainer's Pokédex are "registered trades", and can be made at the bargain price of 100 Stardust (both Pokémon must be registered). If a Pokémon cannot be transferred to the Professor, it can't be traded. Shadow Pokémon, current Buddy Pokémon, Pokémon defending gyms or Power Stops, and Pokémon in Mega, Primal, Fused, or Crowned forms (chapter 8) are also excluded from trading. Traded Pokémon cannot be fainted, and must have full health. A few Pokémon can be evolved at no cost if they have been traded (Table 8.8).

A non-obvious application of trading is the "mirror trade", where the two Pokémon exchanged are of the same form, generating large amounts of the relevant Candy while rerolling the IV of each Trainer's Pokémon. This can take advantage of a high IV floor in the quest for higher IVs, or a low IV floor to reduce the naturally high IVs from upper tier raids[2]. This technique is particularly apt for Legendaries caught outside of raids, such as the Galarian Birds.

[2]Why might this be desirable? See chapter 14.

Level	Hearts	Perks
Good	1	Adventuring Buddy, Readable Mood
Great	70	Catch Assist, Finding Presents
Ultra	150	Finding Souvenirs, Finding Locations
Best	300	CPM boost, Ribbon

Table 4.3: Buddy level requirements and perks

Moving a friendship forward

Is a friend sitting on your gift and not sending any back, despite being only a step or two away from advancing to Best Friend status? They're most likely waiting to use a single Lucky Egg on a large number of friend level transitions. If you want the XP now, try jumping into a raid of theirs from the friends list, or challenging them to a Trainer Battle. Either will count as an interaction, moving the status forward.

4.4 Buddy Pokémon

Any Pokémon neither defending a gym nor posted at a Power Stop can be designated your Buddy Pokémon. Once so designated, it cannot be left at gyms or Power Stops, and cannot be transferred, until replaced by another Pokémon. A Trainer's Buddy may be swapped twenty times per calendar day. It is not possible to return to a Buddyless state after designating a Buddy Pokémon. If fed three berries or a Poffin, the Pokémon will become "active", joining its Trainer on the map and becoming visible to any party members. Three berries result in three hours of activation; a Poffin leads to six. Like the friends system, interactions with a Buddy contribute to a Buddy level (Table 4.3). Interactions are indicated with hearts. Walking will cause the Buddy to regularly find Candy; it might also find Candy XL and/or Mega Energy (Table 8.4). It needn't be active to do this. Feeding your Buddy a Poffin cuts the walking distance in half. The CPM boost only applies while the Pokémon is designated Buddy, and is worth two halflevels (section 9.6). A level 20.5 Best Buddy will thus enjoy Eff_A, Eff_D, and Eff_S values as if it were level 21.5 (section 9.7). This holds true even at levels 49.5 and 50: the CPMs for these unattainable pseudolevels 50.5 and 51 are 0.8428 and 0.8453. This boost *is* carried into League 3x3 play (section 10.5), and counts against any CP bound.

4.5 Routes and Mateo

Routes are named paths connecting two Pokéstops or Gyms. Any Trainer of level 30 or higher can submit a route; if approved, it becomes available to all Trainers. Walking the route requires proximity to the starting point and ending point; between those two, it is not necessary to hew overly closely to the path. If you leave the route too long, it will be paused, and resuming it will require returning to the precise point where it was paused[3] Routes have their own additional spawn points, and can thus lead to more encounters. At a route's end, you'll find Mateo the roadbuilder. He'll offer to exchange a gift with you; this will not involve a gift from your inventory. The gift you receive will have a random postcard, and counts towards Vivillon goals (section 8.6). If you have space, the gift might contain a 7 km egg. Once a gift has been exchanged with Mateo, he won't show up again until the next calendar day. Like gyms, each route has an associated badge, and completing the route develops the badge. In addition to regular Pokéstop items, walking a route can award Rare Candy, Rare Candy XL, Golden Razz Berries, Fast TMs, and even Elite Fast TMs. A Buddy Pokémon can earn one heart per calendar day by being present when a route is completed.

4.6 Team GO Rocket

Existence is conflict, and conflict in Pokémon GO centers around the stylish Team GO Rocket and their rakish hierarch, the libertine Giovanni[4]. Beneath the Don sit Leaders Arlo, Sierra, and Cliff, charged with overseeing an army of nameless lackeys: the smarmy Male Grunt, and the disturbingly sexy Female Grunt. Team GO Rocket is the source of Shadow Pokémon (section 8.3), as seen when encountering team members and in Shadow Raids (section 10.6).

Pokéstops will sometimes go black, indicating takeover by Team GO Rocket. Upon reaching Level 8, Trainers can challenge these Grunts to a 3x3 battle (section 10.5; it is not necessary to battle to spin the Pokéstop). The Grunt will employ three Shadow Pokémon, and will usually have a theme type. This type is indicated by their dialogue (Table 4.4). Other taunts indicate mixed teams. Grunts make use of neither shields nor substitution. Their teams are sourced from pools

[3] If you think you're at the start, resume, or end point, and the game isn't picking up on it, restarting the app can help.

[4] I personally find much to admire about the maligned TGR.

Type	Taunt
Bug	Go, my super bug Pokémon!
Dark	Wherever there is light, there is also shadow.
Dragon	ROAR! ...How'd that sound?
Electric	Get ready to be shocked!
Fairy	Check out my cute Pokémon!
Fighting	This buff physique isn't just for show!
Fire	Do you know how hot Pokémon fire breath can get?
Flying	Battle against my Flying-type Pokémon!
Ghost	Ke... ke... ke... ke... ke... ke!
Grass	Don't tangle with us!
Ground	You'll be defeated into the ground!
Ice	You're gonna be frozen in your tracks.
Normal	Normal does not mean weak.
Poison	Coiled and ready to strike!
Psychic	Are you scared of psychics that use unseen power?
Rock	Let's rock and roll!
Steel	You're no match for my iron will!
Water	These waters are treacherous!

Table 4.4: Team GO Rocket Grunt taunts and typings

which change monthly. In encounters, Shadow Pokémon move, dodge, and attack frequently; employing a Nanab berry is not unreasonable.

If the Trainer does not have a Rocket Radar, defeating a Grunt awards a Mysterious Component[5]. Six such components will be automatically assembled into a Rocket Radar. When a Radar is enabled, Arlo, Cliff, and Sierra can also take over Pokéstops. These battles are similar, except that Leaders will employ shields against the first two charged attacks thrown. Each Leader has their own monthly pool; a Leader's first Pokémon is constant across the month, while the second and third are selected from groups of three. Defeating a Leader consumes your Rocket Radar. After winning against a Grunt or Leader, you will have an encounter with a Shadow Pokémon (usually, but not always, the first they employed). Grunts and Leaders sometimes fly around in a gaudy Team GO Rocket balloon, and can be fought there.

During Takeover Events, certain Special Researches award a Super Rocket Radar, the only way to encounter the dapper chief. The Super Rocket Radar is fallible, sometimes identifying Grunts as Giovanni (your SRR will not be consumed in this case). While the SRR is enabled, Giovanni always occupies the balloon. Giovanni's team will employ at least one Shadow Legendary Pokémon, which will be encountered following a victory. This Pokémon will have a 100% catch rate.

[5]Certain researches also award Mysterious Components, and it is thus possible to assemble multiple Radars. They can even be purchased from the Shop.

5 Spawning and catching

Pokémon GO is intended to be played on the move. Trainers primarily interface with the Map screen, onto which is projected some approximation of the local geography. Pokémon spawning on this map will be a Trainer's major source of raw materials. In addition to the Map, encounters follow victories against Team GO Rocket, wins in raids and Max Battles, and completion of certain research. Encounters feature a summary display including the Pokémon's CP (section 13.1), and icons indicating any weather leading to boosting (section 3.1), any type of lure that led to the spawn, Shiny status, and that the species has been previously captured[1]. The CP will be replaced with "???" if the species has never been seen, or if the CP exceeds that of any owned Pokémon.

5.1 Wild spawns

Decorations around a Pokémon indicate how it spawned (Table 5.1). Weather-boosted (section 3.1) types enjoy higher spawn rates, in addition to higher levels and IVs (Table 9.4).

Lures and incense

Spawn rates can be increased by means of incense and lures. Incense lasts for an hour, affects only the Trainer using it (i.e. other Trainers will neither see nor be able to interact with resulting spawns), and moves

[1]These traits are stored, and can be seen when browsing inventory.

Decoration	Reason for spawn	Visible to
Single white circle	Daily spawn	Trainer
Three white circles	Spawn point	All
Rotating blue spiral	Weather-boosted	All
Pink circles	Incense	Trainer
Blue circles	Adventure incense	Trainer
Swirling petals	Lure	All
Orange circles	Sunsteel Strike	Trainer
Dark blue circles	Moongeist Beam	Trainer
Yellow wavy circle	Mighty Pokémon	All

Table 5.1: Spawn decorations

with the Trainer. A Trainer can make use of only one incense at a time[2]. Incense will result in a spawn every five minutes for immobile Trainers. Otherwise, incense will result in a spawn every 200 meters moved. Incense is awarded at certain Trainer levels and for some Research, and can be bought for 40 Pokécoins (or eight for 250).

Once unlocked, the Trainer can use Adventure incense. This special incense results in a greater diversity of spawns, including a small chance of the "Legendary Galarian Birds" (section 8.4). Adventure incense functions only if the Trainer is moving. So long as it is completely consumed by midnight, it is automatically replenished upon the change of day. Adventure incense usually lasts fifteen minutes, so it must be applied before 2345h to receive the next day's portion. Application of Adventure incense grants thirty Poké Balls if the Trainer's bag holds fewer than thirty total Poké, Great, and Ultra Balls (Table 5.3), and can accommodate the balls.

Six kinds of lures (Table 5.2) can be installed into Pokéstops. A Pokéstop supports only one lure at a time. Flower petals will swirl around a Pokéstop with an active lure, and also any Pokémon spawned as a result of the lure. Unlike incense, spawns due to lures are available to all Trainers. A lure is active for thirty minutes, and then consumed. Once installed into a Pokéstop, a lure cannot be removed nor deactivated. Some evolutions (section 8.2) can only take place near an active lure (Table 8.7). Pokémon spawned due to incense or lures do not show up in the matrix of nearby Pokémon.

5.2 Catching

Catching a Pokémon requires throwing a ball close enough to capture it, and that the Pokémon not escape from the ball. Each form has a `CollisionRadiusM` and `CollisionHeightM`; this (possibly scaled by the individual Pokémon's height) defines the size of the hitbox. Each species has dodge, movement, and attack characteristics, a distance, a catch rate C, and a flee rate F[3]. Attacks during encounters cannot hurt the Trainer, but the Pokémon cannot be caught while attacking (the ball will bounce away, though it might be saved by a Great Buddy). Catching can still occur during a dodge or move. The catch rate determines likelihood of the Pokémon escaping a ball, while the flee rate determines likelihood of the Pokémon leaving the encounter altogether. Pokémon flee only immediately following an escape; they will not flee

[2]The Mystery Box, Coin Bag, Sunsteel Strike Adventure Effect, and Moongeist Beam Adventure Effect similarly cannot be used alongside incense, or each other.

[3]See the `PokemonEncounterAttributes` protobuf.

Cause	Effects
Lure	General increase in spawns
Glacial Lure	Increased Ice and Water spawns
Magnetic Lure	Increased Electric, Rock, and Steel spawns
Mossy Lure	Increased Bug, Grass, and Poison spawns Apple drops
Rainy Lure	Increased Bug, Electric, and Water spawns
Golden Lure	Attracts Roaming Form Gimmighoul Gimmighoul Coins from spins Extra items from spins
Mystery Box	Meltan spawns Movement not required
Coin Bag	Gimmighoul spawns Enhanced Gimmighoul catch rate
Moongeist Beam	Nighttime spawns Perform nighttime evolutions any time
Sunsteel Strike	Daytime spawns Perform daytime evolutions any time

Table 5.2: Lures and their effects

after a throw which does not result in capture. Pokémon that flee do not reappear on the map[4]. Research and GBL award encounters cannot flee. Encounters following raids, Max Battles, and Team GO Rocket have a fixed number of balls; Pokémon cannot flee until they are exhausted, at which point they always flee. While holding a ball, a target ring will encircle the Pokémon, looping from a maximum to a minimum size. Its color (red, orange, or green) is an indicator of the capture probability P_C:

$$P_{\mathrm{C}} = 1 - \left(1 - \frac{C}{2 \cdot \mathrm{CPM}}\right)^{M_{\mathrm{C}}}$$
$$M_{\mathrm{C}} = M_{\mathrm{Ball}} \cdot M_{\mathrm{Berry}} \cdot M_{\mathrm{Throw}} \cdot M_{\mathrm{Medal}} \cdot M_{\mathrm{Adv}} \cdot M_{\mathrm{Enc}}$$

- CPM is the Combat Power Multiplier (section 9.6).
- M_{Ball} is the multiplier due the ball:
- M_{Berry} is the multiplier due a berry (Table 5.8).
- M_{Throw} is the multiplier due throw accuracy. Throw accuracy is summarized with “Excellent!”, “Great!”, “Nice!”, or silence. This

[4]The Trainer does receive 25 consolation XP points.

Ball	Multiplier
Poké	1
Great	1.5
Ultra	2
Master	∞

Table 5.3: Balls and their capture multipliers

summary is a low-resolution signal of M_{Throw}, with a range over [1.0, 2.0]. M_{Throw} is multiplied by 1.7 for a curveball.

Summary	M_{Throw} range
"Excellent!"	[1.7, 2.0]
"Great!"	[1.3, 1.7)
"Nice!"	[1.0, 1.3)
No summary	1

Table 5.4: The throw summary is an indication of M_{Throw}

- M_{Medal} is the multiplier due medals (section 2.7).
- M_{Adv} is 1.5 for Ice Burn, 1.25 for Freeze Shock, and 1 otherwise.
- M_{Enc} is 2 for research encounters, and 1 otherwise.

If you throw your ball too directly at Tyrunt, it'll eat it. If a response is not received from the server in a timely fashion, the Pokémon will escape. If GPS indicates determines sustained travel over a certain speed, the Pokémon will escape, and probably flee. In neither case is there an indication of the escape's irregular cause.

Raids and Team GO Rocket encounters use special "Premier Balls" rather than your inventory. Max Battles use "Power Balls" with the same principles. Premier Balls cannot be saved after the encounter, and regular balls from a Trainer's bag cannot be used in these encounters (though berries can). The number of Premier Balls available for an encounter depends on a number of factors (Table 5.5 and Table 5.6), and their catch rate increases up to two times normal as more are thrown in an encounter. Shiny (section 5.4) Legendary raid bosses have a 100% catch rate. Any capture, whether a result of spawns, battles, or research, awards XP (Table 5.7), Stardust (Table 2.6), and Candy (section 2.5).

Criterion	Balls
Defeat Grunt	2
Defeat Leader	5
Remaining Pokémon	1–3
Hero medal	0–4
Purifier medal	0–4

Table 5.5: Premier balls for Team GO Rocket encounters

Criterion	Balls
Defeat boss	6
Damage contribution	0–6
Gym control	0–2
Gym level	0–3
Friendship bonus	0–4
Speed bonus	2–8

Table 5.6: Premier balls for raid bonus challenges

Event	XP
Basic capture, unless...	100
“Nice!” capture, unless...	120
“Great!” capture, unless...	200
“Excellent!” capture	1000
Curveball capture bonus	20
First throw bonus	50
100th collection of species bonus	100
AR Plus bonus	300
First capture of the day bonus, unless...	1500
First capture of the 7th day of streak	6000
Master Ball bonus	1000

Table 5.7: XP awards for captures

Berry	Effect
Razz	150% catch percentage
Nanab	Immobilizes Pokémon
Pinap	Boosts Candy rewards: 3→7, 5→11, 10→23
Silver pinap	180% catch percentage
	Boosts Candy rewards: 3→7, 5→11, 10→23
Golden razz	250% catch percentage
	Restore full HP to Gym defender

Table 5.8: Berries and their uses

Berries

Berries can enhance the catching process (Table 5.8). Only one berry can be applied to a Pokémon at a time. If a berry is active, its icon will be shown on the encounter summary. The berry is consumed upon use, but persists on the Pokémon across Pokéballs and even encounters (i.e., you can leave the encounter, and if you return, the berry will still be applied). If the Pokémon escapes a Pokéball, however, any applied berry is gone forever. A new berry can be used in this case. No aiming is necessary for berries[5]. The berry control always displays a Razz berry, even if there are no Razz berries in inventory—don't get tricked!

5.3 Eggs

Eggs can be received from gifts, spinning Pokéstops, Adventure Sync rewards, and defeating Team GO Rocket leaders. Eggs placed in an incubator will hatch after sufficient travel. An incubator can hold only one egg at a time, and eggs cannot be removed from incubators. Incubators cannot be loaded without an open slot in Pokémon storage, which the egg will fill until it hatches. Trainers start with an incubator with unlimited uses. Limited incubators and Super incubators can be used only three times. Super incubators cut the necessary travel distance by 33%. Pokémon hatched from eggs use their egg's origin for their "catch location", which can be useful in trades (section 4.3). The hatchling's IV, size, and shininess are determined when the egg is created. Level is set at the same time, to the lesser of the Trainer's level and 20. Hatching an egg rewards XP, Stardust, and Candy (Table 5.9).

[5]Aiming *is* necessary when feeding a Buddy Pokémon. If you miss, the Pokémon will gaze forlornly at the berry as it disappears into nothingness.

Km	Source	XP	Stardust	Candy
2	Pokéstops and gyms	500	400–800	5–15
5	Pokéstops, gyms, Adventure Sync	1000	800–1600	10–21
7	Gifts (friends and Mateo)	1000	800–1600	10–21
10	Pokéstops, gyms, Adventure Sync	2000	1600–3200	16–32
12	Team GO Rocket leaders	4000	3200–6400	16–32

Table 5.9: Eggs

Baby Pokémon

"Baby Pokémon" are available only from eggs (or trades). This includes Pichu, Cleffa, Igglybuff, Togepi, Tyrogue, Smoochum, Elekid, Magby, Azurill, Wynaut, Chingling, Budew, Riolu, Bonsly, Mime Jr., Happiny, Munchlax, and Mantyke.

There is sufficient storage for nine eggs of any type, plus three "bonus" spots for eggs won from Team GO Rocket Leaders or as Adventure Sync rewards. Whatever their origin, eggs will first fill up the main storage. Different classes of egg source from different pools of potential Pokémon. Pools are divided into multiple tiers according to rarity. A tier is selected using a weighted random number, and the particular hatchling is randomly chosen from that tier. Egg pools change on a seasonal basis, and are often changed for events (section 3.2).

Seeing the egg pool

Press on an egg and scroll down to see the various tiers for that egg, ranging from one egg (most common) to five eggs (least common).

5.4 Shiny Pokémon and other visual forms

Many Pokémon have an alternate presentation known as their "Shiny" form (chapter 8). These forms are collected in their own Pokédex (section 2.4). Shadow and Purified Pokémon can be Shiny. Shininess is preserved across evolution, purification, and trades. Shininess is determined for individual Trainers' encounters: two Trainers might disagree on whether the same spawn is Shiny. Shiny forms are fairly rare (Table 5.10), but various events enhance the probability of their gener-

Context	Probability of shine
Wild spawns	1/512 (0.195%)
Team GO Rocket Grunt shadows	1/256 (0.39%)
Team GO Rocket Leader shadows	1/64 (1.56%)
Wild spawn capable of Mega Evolution	1/64 (1.56%)
Ditto	1/64 (1.56%)
Community Day spotlight	1/25 (4%)
5★ raid	1/20 (5%)

Table 5.10: Likelihood of Shiny Pokémon

ation[6]. Premier Balls have 100% catch rates against Shiny Legendary raid bosses, (but *not* shiny raid bosses in general). Shiny Legendaries encountered in the wild (in particular, the Galarian Birds) do not typically flee[7]. Zorua and Ditto (section 8.6) do not indicate Shiny status until revealed (an encounter with a bare Zorua *will* immediately indicate Shiny status). Despite offering no advantage in battle, and being in no way associated with higher levels or IVs, Shiny forms are of great importance to many players. Personally, unless I expect to trade them, I transfer them to the Professor; his usual culinary magic leads to a particularly shiny feast of harvested Pokésoul. For those determined to collect Shiny forms, the key is always to maximize encounters. Enter as many encounters as possible, check the Pokémon summary for the Shiny icon (✨), and exit the encounter immediately if it's absent. Pokémon thus encountered can be distinguished by their turning to face the Trainer on the map. When raiding for Shiny Pokémon, try to avoid weather-boosted raid bosses, as they will require more time to defeat. Shadow Pokémon can be Shiny, but the availability of a Shiny form does not imply the availability of a Shiny Shadow form.

Events sometimes make possible special backgrounds or clothed forms. Pikachu gets dressed up in something every few months. Such "costumed" Pokémon often cannot be evolved (section 8.2).

[6] I have been unable to validate these rates myself; they are taken from the Fandom wiki and Reddit. Strong evidence exists that certain forms enjoy persistently boosted Shiny rates, but—as far as I can tell—Niantic has never confirmed this. Check out shinyrates.com.

[7] They *will* flee if the speed limit is exceeded.

An aside regarding independent events

Q: How many raids need I do to guarantee at least one Shiny?
A: No finite number of events guarantees the desired result.
Q: OK, but if I do, like, twenty raids, and it's a 5% chance, it basically has to happen, right?
A: Alas, twenty is finite. 36% chance of zero gets.
Q: Bullshit, what if I do fifty raids?
A: Alas, fifty is finite. There is about a 7.7% chance of no love.
Q: My friend got four shiny Pokémon in three raids.
A: That's not a question. It is furthermore untrue.
Q: I'm pretty sure—
A: It's a bullshit patty between two slices of lies is what it is.
Q: Maybe it was four raids.
A: There's a 0.000625% chance of four wins in four tries. They're independent of your tests, so the chance of your friend pulling juice four times in a row while you ate shit given the same 5% chance is 0.000509%. That's about five times out of a million. If you find a lottery offering those odds on the jackpot, well, I'm not saying buy—
Q: Oh shit, does this affect my chance of winning the lottery?

Put another way, if you have a 5% chance of an outcome, and do tests in sets of fourteen, over the long term you'll see the outcome in a little over half those sets. Put yet another way, over the long run, you can expect a little over two Shiny Pokémon for every thousand wild spawns.

The probability of an outcome with probability P never being seen in N independent events is $(1-P)^N$. For a 5% likelihood, $1-P=0.95$. For thirteen events,

$$0.95^{13} \approx 0.513$$

There is about a 51.3% chance that thirteen raids generate no Shiny Pokémon, so please don't go on Reddit claiming conspiracies on the part of random number generators or Niantic, looking like an innumerate dumbass.

6 Types

There are eighteen types, each with a representative icon. In trainer battles, the types of active Pokémon are indicated using these icons. It is absolutely necessary that you immediately recognize them.

Table 6.1: The 18 base types

Each attack has a single type (chapter 7). Each species (more correctly each form, as typing can vary across a species; see chapter 8) has a *typing* of either one or two distinct types. The attacker benefits if it has a type in common with the attack being used: the Same Type Attack Bonus (STAB). The relationship between attack type and defender typing is more complex. For each type, the attack type can be *very ineffective*, *ineffective*, *neutral*, or *effective*. These are mapped to −2, −1, 0, and 1. Going the other way, a type is *very weak*, *weak*, *neutral*, or *strong* against each attack type; we will see that a typing can also be *extremely weak* or *very strong*. For each member of the defender's typing, determine the attack type's effectiveness on that type, and add the results for net effectiveness. See section 10.1 for a quantitative treatment of the effects.

There are 324 (18 × 18) total type relationships (Table 6.2), of which 204 (63%) are neutral. That leaves 120 type relations giving either attacker or defender an advantage, one that can easily decide a battle[1]. These relationships must also be memorized.

Eleven of the eighteen types are self-active. Of these, only Dragon and Ghost are self-effective. Dark, Electric, Fire, Grass, Ice, Poison, Psychic, Steel, and Water are all self-ineffective.

[1]It has been said that Pokémon GO PvP is "essentially Rock, Paper, Scissors."

						-1	1	1		-1	-1					1		
	1	-1			1	1			-1						-2			
			1	-1	1		-1			-1		1						-1
				-1				-1			1						-1	
	-1	-1	-2			-1								1			1	
	-1	-1			1			1							1	-1		
	-1				-1		-1			-1	1	-1				1	-1	1
	-1			1		-1				-1	-2	1				1		
	-1	1				-2			1				-2	-1				
	1			-1			1	1		-1	-1	1		1				-1
				-2						1		1		-1		-1		1
						1	1					-1				1	1	
						1			-2									
	-1				-1	-1				-1	1			-1	1			
	1	1				-1			1						-1			
						1	-1	-1		1	1		-1	-1			1	1
	-1		-1		-1	1	1	-1		-1	1	-1	-1	-2	-1	-1	-1	
				1			-1			1		-1					-1	-1

Table 6.2: Type relations. Rows defend, columns attack.

Only eight relationships are very ineffective: Normal → Ghost, Ghost → Normal, Fighting → Ghost, Poison → Steel, Ground → Flying, Electric → Ground, Psychic → Dark, and Dragon → Fairy.

6.1 Memorizing the type relations

I memorized the type system fairly easily after developing the following seven graphs. Other people use different methods. Whenever possible, remember two relationships as a single bidirectional relation; this reduces sixty-two facts to thirty-one. No types are mutually effective. Only one pair of types is mutually ineffective (Bug↔Fighting), and only one pair is mutually very ineffective (Ghost↔Normal). When one type V is ineffective against type K, but K is strong against V, I say K "kills" V, or (if V is very ineffective against K) "slaughters" V. There are only three slaughter relations: Fairy → Dragon[2], Dark → Psychic, and Ground → Electric.

[2]Fairy was introduced in Generation VI in large part to balance Dragon.

Poison kills Grass, which kills Ground, which kills Poison. Rock is effective against Bug, which kills Grass, which is effective against Rock. Ground kills Rock, but is ineffective against Bug. Bug is ineffective against Poison, which is ineffective against Rock (Figure 6.1).

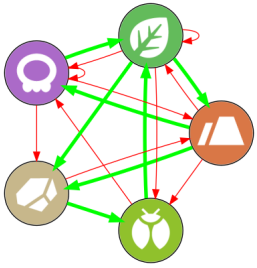

Figure 6.1: 17 natural relations

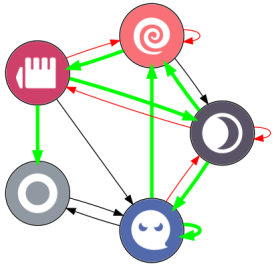

Figure 6.2: 16 rational relations

Psychic kills Fighting, which kills Dark, which slaughters Psychic. Dark kills Ghost, which is effective against Psychic. Fighting (unique among all types) is effective against Normal, but very ineffective against Ghost. Normal and Ghost are very ineffective against one another (Figure 6.2).

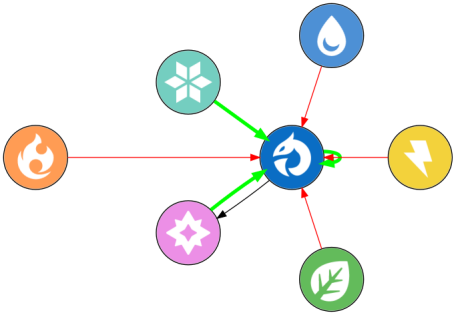

Figure 6.3: The 8 Dragon relations

Dragon (Figure 6.3) is strong against the four original elemental types (Electric, Water, Grass, and Fire). Fairy famously slaughters Dragon, and Ice is effective against Dragon. Dragon is strong against only itself, and ineffective against Steel (as we'll see momentarily). Looking at Figure 6.4, Rock kills Flying, and Normal is ineffective against Rock. Rock and Water kill Fire, which kills Ice, which kills nothing on this graph nor any other. Electric is effective against Water, which is effective against Rock, which is effective against Ice, which on Figure 6.4 is effective against nothing.

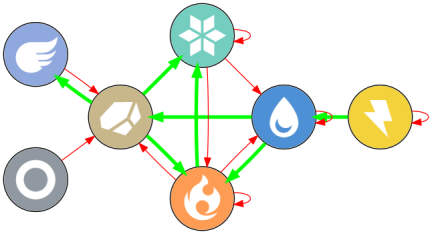

Figure 6.4: The 17 elemental relations

Ground and Fighting are effective against Steel, which is killed by Fire. Most everything else is ineffective against Steel, especially Poison, which is very ineffective against it. Steel kills Ice, Rock, and Fairy—if Steel is effective against something, it kills it. Steel is ineffective against Water and Electric. Only two types have no relationship with Steel: Dark and Ghost (Figure 6.5). As Josef Stalin said, "it's good to be Steel".

Figure 6.5: The 20 Steel relations

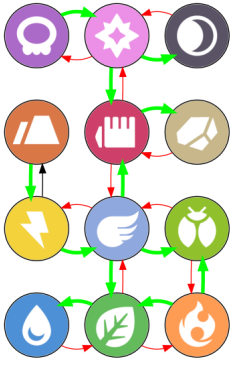

Figure 6.6: The 24 relations of death

The Graph of Death (Figure 6.6). Poison kills Fairy, which kills Dark. Fairy also kills Fighting, which kills Rock. Ground slaughters Electric, which kills Flying. Flying strikes back, raining death from above and killing Fighting, Bug, and Grass. Fire likewise kills Bug and Grass. Grass kills Water (it is the only type strong against Water besides Electric).

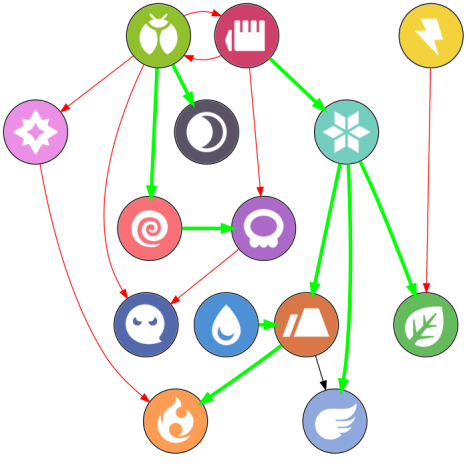

Figure 6.7: The 18 remaining interactions

The remaining interactions don't have any real structure, and must simply be memorized as they are (Figure 6.7).

Every type except Normal is killed by at least one other type. Bug is killed by two types (Fire and Flying), as is Fire (Water and Rock). Rock is killed by Steel, Fighting, and Ground. Grass is killed by Fire, Flying, Bug, and Poison. The killing is more concentrated: Ghost, Ice, and Normal

don't kill any other type, while mighty Fire kills four. It is important to remember that an opponent of some type might employ attacks of some other type, in which case the bidirectional relationship doesn't apply. Still, recognizing kill situations can get you far in both life and Pokémon GO.

6.2 Typing

Every Pokémon form has a monadic or dyadic typing. For dyadic types, ordering has no impact on function.

$$C(18, 2) = \binom{18}{2} = \frac{18!}{2! \cdot 16!} = 153$$

There are thus *functionally* 153 dyadic types in addition to the 18 base types, for a total of 171. We could also simply sum 1 through 18:

$$\sum_{i=1}^{18} i = \frac{18 \cdot 19}{2} = 171$$

16 typings are currently unpopulated (Table 6.3), leaving 155 defender

Bug/Dragon	Bug/Normal	Bug/Psychic	Dragon/Fairy
Fairy/Fighting	Fairy/Fire	Fairy/Ghost	Fairy/Ground
Fighting/Ground	Fire/Grass	Fire/Ice	Ghost/Rock
Ice/Normal	Ice/Poison	Normal/Rock	Normal/Steel

Table 6.3: The 16 unpopulated typings

typings to consider. Dyadic typing widens the type relation range, adding the possibilities of -3 and 2 (-4 is not possible, because no type is very ineffective against two different types). It furthermore vastly expands the type effectiveness matrix, with 3,078 (18 × 171) relations of which only 1,490 (48.4%) are neutral. Thankfully, these needn't be memorized; calculate them on the fly using the base relations matrix.

	1	-1			1		1	1	-1	-1	-1				-2	1		
			1	-1	1	-1		1		-2	-1	1				1		-1
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	-1	-1	-2			-2	1	1		-1	-1			1		1	1	
	-1	-1			1	-1	1	2		-1	-1				1			
	-1				-1	-1		1		-2		-1				2	-1	1

-1			1		-2	1	1		-2	-3	1				2			
-1	1				-3	1	1	1	-1	-1		-2	-1		1			
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			-2		-1	1	1			-1	1		-1				1	
						2	1		-1	-1	-1				2	1		
						1	1	-2	-1	-1					1			
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		1	-2	1		-1	-1		-1	1	1					-1	-1	
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-1		1		1	-1	-1			-2	-2	2				1		-1	
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1		1	-2	1			1		-2	-1	2		1				-2	
		1	-3	1		-1					2		-1		-1			
		1	-1	1	1				-1						1	1	-1	
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		1		1		-2										-1	-2	

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1			-2			1			-1		1		1			-1	-1	
			-3				-1		1	1	1		-1		-1	-1	1	
			-1		1	1	-1			1	-1				1			
			-1		1		-1	-2		1						-1		
-1			-1	-1	-1		-1		-1	2			-1	1		-1		
1	1		-1		-1		-1	1		1				-1		-1		
			-1		1	-1	-2		1	2		-1	-1				1	
-1		-1	-1	-1	1	1	-2		-1	2	-1	-1	-2	-1	-1	-2		
						-1	-1		1	1	-1					-2	-1	
-2	-2	-2		1	-1		1						1	1	-1	1		
-2	-1	-2		-1	-1	-1			-1	1	-1		1		1		1	
-2	-1	-2	1		-2				-1	-2	1		1		1	1		
-2		-2			-3			1				-2				1		
	-1	-2	-1		-1	1	1		-1	-1	1		2			1	-1	
-1	-1	-2	-2		-1				1		1				-1	1	1	
-1	-1	-2				1					-1		1		1	2		
-1	-1	-2						-2					1			1		
-2	-1	-2		-1	-2				-1	1				1		1		
		-2			-2			1					1	-1		1		
-1	-1	-2				-1	-1		1	1		-1				2	1	
-2	-1	-3		-1		1	-1		-1	1	-1	-1	-1	-1	-1			
-1	-1	-2	1		-1	-1			1		-1		1				-1	
-2	-1					-1	1		-1	1	-1			1		-1	1	
-2	-1		1	1	-1		1		-1	-2	1			1				
-2				1	-2		1	1				-2	-1	1	-1			
	-1		-1	1		1	2		-1	-1	1		1	1	-1		-1	
-1	-1		-2	1			1		1		1		-1	1	-2		1	
-1	-1			1	1	1	1				-1			1		1		
-1	-1			1	1		1	-2						1	-1			
-2	-1				-1		1		-1	1			-1	2	-1			
				1	-1		1	1							-1			
-1	-1			1	1	-1			1	1		-1	-1	1	-1	1	1	
-2	-1	-1			1	1			-1	1	-1	-1	-2		-2	-1		
-1	-1		1	1		-1	1		1		-1			1	-1	-1	-1	
-2			1	-1	-1	-1			-2	-1					2	-1	1	
-2	1			-1	-2	-1		1	-1	1	-1	-2	-1		1	-1	1	
			-1	-1			1		-2				1		1	-1		

-1			-2	-1		-1				1			-1			-1	2	
-1				-1	1				-1	1	-2				2		1	
-1				-1	1	-1		-2	-1	1	-1				1	-1	1	
-2				-2	-1	-1			-2	2	-1		-1	1	1	-1	1	
	1			-1	-1	-1		1	-1	1	-1			-1	1	-1	1	
-1				-1	1	-2	-1			2	-1	-1	-1		1		2	
-2		-1		-2	1		-1		-2	2	-2	-1	-2	-1		-2	1	
-1			1	-1		-2				1	-2				1	-2		
-2	1		1		-3			1	-1	-2	1	-2	-1		1			
					-1	1	1		-2	-3	2		1		1		-1	
-1			-1		-1					-2	2		-1				1	
-1			1			1			-1	-2					2	1		
-1			1					-2	-1	-2	1				1			
-2			1	-1	-2				-2	-1	1		-1	1	1			
	1		1		-2			1	-1	-2	1			-1	1			
-1			1			-1	-1			-1	1	-1	-1		1	1	1	
-2		-1	1	-1		1	-1		-2	-1		-1	-2	-1		-1		
-1			2		-1	-1				-2					1	-1	-1	
	1		-1		-2	1	1	1	-1	-1	1	-2					-1	
-1	1		-2		-2			1	1		1	-2	-2		-1		1	
-1	1				-1	1		1			-1	-2	-1		1	1		
-1	1				-1			-1				-2	-1					
-2	1			-1	-3			1	-1	1		-2	-2	1				
	2				-3			2				-2	-1	-1				
-1	1				-1	-1	-1	1	1	1		-3	-2			1	1	
-2	1	-1		-1	-1	1	-1	1	-1	1	-1	-3	-3	-1	-1	-1		
-1	1		1		-2	-1		1	1		-1	-2	-1			-1	-1	
1			-3			1	1			-1	2				-1			
1			-1		1	2	1		-1	-1			1		1	1	-1	
1			-1		1	1	1	-2	-1	-1	1		1				-1	
			-1	-1	-1	1	1		-2		1			1			-1	
2	1		-1		-1	1	1	1	-1	-1	1		1	-1			-1	
1			-1		1						1	-1				1		
		-1	-1	-1	1	2			-2			-1	-1	-1	-1	-1	-1	
1							1			-1			1			-1	-2	
			-2		1	1			1				-1			1	1	
			-2		1			-2	1		1		-1		-1		1	
-1			-2	-1	-1					1	1		-2	1	-1		1	
1	1		-2		-1			1	1		1		-1	-1	-1		1	
			-2		1	-1	-1		2	1	1	-1	-2		-1	1	2	
-1		-1	-2	-1	1	1	-1			1		-1	-3	-1	-2	-1	1	
			-1			-1			2				-1		-1	-1		

					2	1		-2			-1				1	1	
-1				-1		1			-1	1	-1		-1	1	1	1	
1	1					1		1			-1			-1	1	1	
					2		-1		1	1	-1	-1	-1		1	2	1
-1		-1		-1	2	2	-1		-1	1	-2	-1	-2	-1			
			1		1				1		-2				1		-1
-1				-1				-2	-1	1			-1	1			
1	1							-1						-1			
					2	-1	-1	-2	1	1		-1	-1			1	1
-1		-1		-1	2	1	-1	-2	-1	1	-1	-1	-2	-1	-1	-1	
			1		1	-1		-2	1		-1					-1	-1
	1			-1	-2			1	-1	1			-1				
-1				-1		-1	-1			2		-1	-2	1		1	1
-2		-1		-2		1	-1		-2	2	-1	-1	-3		-1	-1	
-1			1	-1	-1	-1				1	-1		-1	1		-1	-1
1	1					-1	-1	1	1	1		-1	-1	-1		1	1
	1	-1		-1		1	-1	1	-1	1	-1	-1	-2	-2	-1	-1	
1	1		1		-1	-1		1	1		-1			-1		-1	-1
-1		-1		-1	2		-2			2	-1	-2	-3	-1	-1		1
			1		1	-2	-1		2	1	-1	-1	-1				
-1		-1	1	-1	1		-1			1	-2	-1	-2	-1	-1	-2	-1

Given $E_n, -3 \leq n \leq 2$ where E_n is the number of types with a net relation of n against a typing, we define DRA:

$$\text{DRA} = \sum_{n=-3}^{2} \frac{E_n 1.6^n}{18}$$

Completely unexpectedly, the defensive typings with highest DRA include Steel, with the top fifteen spots all making use of it. Don't be fooled by a metric like DRA, though; you will not be seeing randomly typed attacks. Opposing Trainers will build their teams and make substitutions based on expected and demonstrated typing. None of Steel's resistances matter when you're being hit by one of its weaknesses.

	-3	-2	-1	0	1	2	DRA	Pop	Page
	1	1	9	5	2		0.803	4 2	262 426
		3	7	6	2		0.819	1 2	295 427
	2	1	9	2	4		0.828	4	427

	-3	-2	-1	0	1	2	DRA	Pop	Page
		3	8	4	3		0.832	1	462
		2	8	6	2		0.832	1 2	241 425
	1	3	6	6	1	1	0.851	2	428
		1	10	4	3		0.858	8	423
		3	9	3	2	1	0.864	4	255
		6	4	5	2	1	0.867	1	293
		2	7	8		1	0.873	6	217
		3	6	6	3		0.873	2 1	274 426
	1	2	7	4	4		0.878	4 1	341 428
	1	1	9	4	2	1	0.890	3	231
		1	9	6	1	1	0.899	3	330
		2	8	4	4		0.899	2 6	409 429
		1	4	12	1		0.916	2	377
		2	2	13	1		0.924	1 1	227 299
		2	5	8	3		0.928	1	253
		1	5	10	2		0.929	2	250
			5	12	1		0.929	2 5	230 384
			8	7	3		0.933	3 3	390 459
		3	3	9	3		0.936	1	386
		3	6	4	5		0.940	5 3	289 300
		2	6	6	4		0.941	2	454
		1	6	8	3		0.941	4	451
			6	10	2		0.942	5	252
	1	3	2	8	4		0.948	3	305
		1	4	11	2		0.949	1	256
		1	4	11	2		0.949	2	389
		1	4	11	2		0.949	2	450
			8	8	1	1	0.953	2	255
		3	2	10	3		0.957	1	293
		2	2	12	2		0.957	16	295
		2	2	12	2		0.957	4	369
			5	11	2		0.963	16	380
		3	3	8	4		0.969	3	387

	-3	-2	-1	0	1	2	DRA	Pop	Page
		2	3	10	3		0.970	1 1	235 285
		1	3	12	2		0.970	2	254
		1	3	12	2		0.970	19	257
			3	14	1		0.971	33	242
	1	2	6	6	1	2	0.972	4 3	421 430
		1	7	7	2	1	0.974	1	251
		2	6	5	5		0.974	3 2	237 300
		1	6	7	4		0.974	2	225
		1	6	7	4		0.974	1	241
		1	6	7	4		0.974	1	285
		1	6	7	4		0.974	2	291
		1	6	7	4		0.974	2	385
			6	9	3		0.975	37	275
		3	1	11	3		0.978	3	224
		2	1	13	2		0.978	1 3	242 450
		3	5	6	3	1	0.981	2	386
	1	3	2	7	5		0.981	3	301
		2	5	8	2	1	0.981	6	287
		1	5	10	1	1	0.982	2	290
		1	5	10	1	1	0.982	7	453
		2	4	8	4		0.982	4	388
			5	12		1	0.982	9	456
		1	4	10	3		0.983	1	379
			4	12	2		0.983	4	205
			4	12	2		0.983	66	431
		4	2	7	5		0.990	3	261
		4	2	7	5		0.990	2 4	304 338
		3	2	9	4		0.990	2	272
		2	2	11	3		0.991	26	370
		2	7	6	1	2	0.993	2	349
		1	5	8	4		0.995	1	250
		1	5	8	4		0.995	1	235
		1	5	8	4		0.995	1 6	271 285
			5	10	3		0.996	3 2	219 448

	-3	-2	-1	0	1	2	DRA	Pop	Page
			5	10	3		0.996	2	251
		1		16	1		0.999	71	351
		1	4	11	1	1	1.003	4	337
		2	3	9	4		1.003	11	214
		2	3	9	4		1.003	6	226
								1	294
		2	3	9	4		1.003	1	384
		1	3	11	3		1.004	2	389
		1	3	11	3		1.004	4	293
	1	1	4	7	5		1.007	1	211
		1	6	6	5		1.008	5	448
	1		4	9	4		1.008	1	336
		2	1	12	3		1.011	8	403
		1	5	9	2	1	1.015	2	207
		1	5	9	2	1	1.015	2	273
		1	5	9	2	1	1.015	2	284
		1	5	9	2	1	1.015	2	386
		2	4	7	5		1.016	2	206
		2	4	7	5		1.016	11	302
								1	324
		1	4	9	4		1.016	1	368
		1	4	9	4		1.016	14	326
			4	11	3		1.017	13	231
			7	6	5		1.021	2	274
			7	6	5		1.021	2	291
								1	405
			7	6	5		1.021	3	452
		2	2	10	4		1.024	1	339
								1	378
		1	2	12	3		1.024	13	220
		1	2	12	3		1.024	3	455
		1	2	12	3		1.024	15	331
			2	14	2		1.025	4	378
								1	409
			5	9	4		1.029	1	255
		2	4	8	3	1	1.036	4	236
								2	295
		2	3	8	5		1.036	2	271
		1	3	10	4		1.037	2	213
		1	3	10	4		1.037	2	370
		1	3	10	4		1.037	3	253

	-3	-2	-1	0	1	2	DRA	Pop	Page
			3	12	3		1.037	21	200
			3	12	3		1.037	28	263
			6	7	5		1.042	5	459
			6	7	5		1.042	3	416
		1	5	8	3	1	1.049	2	415
		1	5	8	3	1	1.049	1	420
	1		3	11	2	1	1.049	6 2	238 336
		2	4	6	6		1.049	3	335
		1	4	8	5		1.049	1	205
		1	4	8	5		1.049	1	347
	1	1	2	12		2	1.056	3	408
	1	1	1	12	2	1	1.057	5	228
		1	3	11	2	1	1.057	2 2	225 271
		2	2	9	5		1.057	9	405
			2	13	3		1.058	2 1	273 405
			2	13	3		1.058	43	391
			2	13	3		1.058	4 2	216 413
		1	6	6	4	1	1.061	4	223
		1	6	6	4	1	1.061	5	320
		1	4	9	3	1	1.069	3	414
		1	4	9	3	1	1.069	6 4	422 461
			3	11	4		1.071	1	254
			7	6	4	1	1.074	2	235
			6	6	6		1.075	2	241
	1			15	1	1	1.078	2 1	230 403
		1	1	12	4		1.079	3 3	350 458
		1	6	7	2	2	1.081	3	292
			5	9	3	1	1.082	3	206
		1	4	7	6		1.083	2	339
		1	4	7	6		1.083	2	414
		1	4	7	6		1.083	3 2	325 377
			4	9	5		1.083	47	306
			4	9	5		1.083	14	409

	-3	-2	-1	0	1	2	DRA	Pop	Page
	1	2	1	9	4	1	1.089	13	208
		1	3	10	3	1	1.090	1	346
			2	12	4		1.092	2	417
	1	1	2	9	4	1	1.102	7	322
	1		2	11	3	1	1.103	3	324
			3	10	5		1.104	6	239
			6	5	7		1.108	1	416
		1	2	11	3	1	1.111	2	347
		1	1	11	5		1.112	3	347
			1	13	4		1.112	18	342
		1	6	4	6	1	1.128	1	227
		1	6	4	6	1	1.128	4	318
		1	6	4	6	1	1.128	1	413
			6	6	5	1	1.128	4	321
			5	6	7		1.129	2	420
		3	1	8	5	1	1.131	4	319
			3	9	6		1.138	1	272
		2	4	6	4	2	1.156	3	340
								6	418
		1	3	8	5	1	1.157	2	228
			2	10	6		1.158	4	348
			6	5	6	1	1.162	2	330
								1	408
		2	3	7	4	2	1.176	6	211
			3	11	2	2	1.178	2	213
			4	7	6	1	1.203	2	325
			4	8	4	2	1.223	1	349
								2	420

Table 6.5: Defender effectiveness summaries (lower is better)

There are twenty triple resistances, five of which are against Fighting attacks (Table 6.6). Ghost/Steel is unique in having two triple resistances (Normal and Poison). Ghost/Rock, triply resistant against Normal, is currently unpopulated. There are sixty double weaknesses, including eight typings with two such weaknesses (Table 6.7).

Ground → Bug/Flying	Butterfree, Scyther, Ledyba, Ledian, Yanma, Beautifly, Masquerain, Ninjask, Mothim, Combee, Vespiquen, Yanmega, Vivillon
Fighting → Bug/Ghost	Shedinja
Ghost → Dark/Normal	Alolan Rattata, Alolan Raticate, Galarian Zigzagoon, Galarian Linoone, Obstagoon
Psychic → Dark/Psychic	Inkay, Malamar, Hoopa Unbound
Psychic → Dark/Steel	Pawniard, Bisharp, Kingambit
Electric → Dragon/Ground	Vibrava, Flygon, Gible, Gabite, Garchomp, Zygarde 10%, Zygarde 50%, Zygarde Complete
Electric → Electric/Ground	Stunfisk
Fighting → Fairy/Ghost	Unpopulated
Dragon → Fairy/Steel	Mawile, Klefki, Crowned Sword Zacian, Tinkatink, Tinkatuff, Tinkaton
Fighting → Flying/Ghost	Drifloon, Drifblim, Oricorio (Sensu)
Ground → Flying/Grass	Hoppip, Skiploom, Jumpluff, Tropius, Sky Shaymin, Rowlet, Dartrix
Fighting → Ghost/Poison	Gastly, Haunter, Gengar
Fighting → Ghost/Psychic	Hoopa Confined, Lunala, Necrozma Dawn Wings
Normal → Ghost/Rock	Unpopulated
Normal → Ghost/Steel	Honedge, Doublade, Aegislash, Gholdengo
Poison → Ghost/Steel	Honedge, Doublade, Aegislash, Gholdengo
Electric → Grass/Ground	Torterra, Toedscool, Toedscruel
Poison → Ground/Steel	Alolan Diglett, Alolan Dugtrio, Steelix, Excadrill, Galarian Stunfisk
Poison → Poison/Steel	Varoom, Revavroom
Poison → Rock/Steel	Aron, Lairon, Aggron, Shieldon, Bastiodon, Probopass, Stakataka

Table 6.6: The twenty triple resistances

Fire, Flying → Bug/Grass	Paras, Parasect, Plant Wormadam, Sewaddle, Swadloon, Leavanny
Fire, Rock → Bug/Ice	Snom, Frosmoth
Ground, Water → Fire/Rock	Hisuian Growlithe, Hisuian Arcanine, Magcargo
Dark, Ghost → Ghost/Psychic	Hoopa Confined, Lunala, Necrozma Dawn Wings
Grass, Water → Ground/Rock	Geodude, Graveler, Golem, Onix, Rhyhorn, Rhydon, Larvitar, Pupitar, Rhyperior
Fighting, Steel → Ice/Rock	Amaura, Aurorus, Hisuian Avalugg
Fighting, Fire → Ice/Steel	Alolan Sandshrew, Alolan Sandslash
Fighting, Ground → Rock/Steel	Aron, Lairon, Aggron, Shieldon, Bastiodon, Probopass, Stakataka

Table 6.7: The eight bidoubly weak typings

7 Attacks

A Pokémon deals damage in battle via two types of attacks. "Fast" attacks generate the energy required by powerful "charged" attacks. Energy is per-Pokémon and preserved across substitution (but not across battles). Every attack has a (single) type, which may or may not be a type of the attacker. Attacks having a type in common with the attacker enjoy a 1.2x multiplier, the Same Type Attack Bonus (STAB). A single attack usually has different stats for Nx1 (section 10.6) and 3x3 (section 10.5) battles. Unless otherwise stated, we're working with the values for 3x3.

As developed in section 6.2, an attack's type effectiveness against a given opponent ranges from -3 to 2, inclusive. See section 10.1 for the quantitative impact of type effectiveness. Using Table 6.2, we assign each attacking type A four values $R_{-2} \cdots R_1$, where R_n is the number of types against which A has a relation of n. To calculate the number of typings E_n against which A has some effectiveness n, use the following relations (Table 7.1):

$$
\begin{aligned}
E_{-3} &= R_{-2}R_{-1} \\
E_{-2} &= R_{-2}(R_0 + 1) + \binom{R_{-1}}{2} \\
E_{-1} &= R_{-1}(R_0 + 1) + R_{-2}R_1 \\
E_0 &= R_0 + \binom{R_0}{2} + R_1R_{-1} \\
E_1 &= R_1(R_0 + 1) \\
E_2 &= \binom{R_1}{2} \\
\text{ARA} &= \sum_{n=-3}^{2} \frac{E_n 1.6^n}{171}
\end{aligned}
$$

under the invariants:

$$
\begin{aligned}
\sum_{i=-2}^{1} R_i &= 18 \\
\sum_{i=-3}^{2} E_i + 18 &= \binom{18}{2} + 18 = 171
\end{aligned}
$$

	Type → Type				Type → Typing						
A	-2	-1	0	1	-3	-2	-1	0	1	2	ARA
	1	2	10	5	2	12	27	65	55	10	1.173
	0	3	11	4	0	3	36	78	48	6	1.134
	0	4	10	4	0	6	44	71	44	6	1.091
	0	4	10	4	0	6	44	71	44	6	1.091
	0	3	12	3	0	3	39	87	39	3	1.068
	0	3	12	3	0	3	39	87	39	3	1.068
	0	3	12	3	0	3	39	87	39	3	1.068
	1	5	7	5	5	18	45	53	40	10	1.047
	0	4	11	3	0	6	48	78	36	3	1.027
	1	1	14	2	1	15	17	107	30	1	1.019
	0	3	13	2	0	3	42	97	28	1	1.005
	1	2	13	2	2	15	30	95	28	1	0.979
	1	1	15	1	1	16	17	121	16	0	0.957
	1	3	12	2	3	16	41	84	26	1	0.94
	0	7	8	3	0	21	63	57	27	3	0.909
	0	7	8	3	0	21	63	57	27	3	0.909
	1	4	11	2	4	18	50	74	24	1	0.902
	1	2	15	0	2	17	32	120	0	0	0.86

Table 7.1: Attack type effectiveness summaries (higher is better)

7.1 Fast attacks

Each Pokémon species (chapter 8) is capable of learning some set of fast attacks, and every Pokémon knows exactly one at a time (except Smeargle—see section 8.6). A fast attack is defined by its duration, its power, and the energy built up with each use (Table 7.2), and these values can be different between 3x3 and Nx1 battles. If fast attack A is stronger than fast attack B in Nx1 mode, it will not be weaker than B in 3x3 mode, and vice versa (i.e. partial ordering is maintained). Furthermore, no fast attack's Nx1 power is less than its 3x3 power. Each Pokémon can store up to 100 units of energy, which is preserved across substitutions. PPT and EPT are power and energy, respectively, normalized per turn. Incinerate is thus the most powerful fast attack in both modes. It is also the only five turn attack, and the only one to hit 4 with both EPT and PPT. Razor Leaf stands alone with a PPT of 4.5, with Charm and Force Palm coming in behind it at 4.33. Lock On manages 5 EPT, with Psycho Cut, Poison Sting, Fairy Wind, Karate Chop, and Thunder Shock at 4.5. Fast attack counts are broken down by type

in Table 7.3, and Appendix C provides lists of Pokémon which can use each attack.

Attack	T	E	EPT	P	$\cdot\frac{6}{5}$	PPT	$\cdot\frac{6}{5}$	Pop
Lock On	1	5	5	1	1.2	1	1.2	7
Sand Attack	1	4	4	2	2.4	2	2.4	26
Cut	1	2	2	3	3.6	3	3.6	4
Lick	1	3	3	3	3.6	3	3.6	20
Tackle	1	3	3	3	3.6	3	3.6	138
Water Gun	1	3	3	3	3.6	3	3.6	83
Dragon Breath	1	4	4	3	3.6	3	3.6	31
Fury Cutter	1	4	4	3	3.6	3	3.6	35
Psywave	1	4	4	3	3.6	3	3.6	11
Bite	1	2	2	4	4.8	4	4.8	90
Scratch	1	2	2	4	4.8	4	4.8	45
Bug Bite	1	3	3	4	4.8	4	4.8	56
Psycho Cut	2	9	4.5	3	3.6	1.5	1.8	19
Pound	2	4	2	4	4.8	2	2.4	40
Low Kick	2	5	2.5	4	4.8	2	2.4	34
Mud Shot	2	8	4	4	4.8	2	2.4	54
Ember	2	9	4.5	4	4.8	2	2.4	49
Fairy Wind	2	9	4.5	4	4.8	2	2.4	15
Poison Sting	2	9	4.5	4	4.8	2	2.4	31
Thunder Shock	2	9	4.5	4	4.8	2	2.4	37
Metal Claw	2	7	3.5	5	6	2.5	3	36
Spark	2	7	3.5	5	6	2.5	3	34
Wing Attack	2	7	3.5	5	6	2.5	3	25
Metal Sound	2	8	4	5	6	2.5	3	18
Powder Snow	2	8	4	5	6	2.5	3	25
Quick Attack	2	8	4	5	6	2.5	3	50
Vine Whip	2	8	4	5	6	2.5	3	23
Karate Chop	2	9	4.5	5	6	2.5	3	9
Feint Attack	2	6	3	6	7.2	3	3.6	32
Acid	2	8	4	6	7.2	3	3.6	22
Leafage	2	8	4	6	7.2	3	3.6	10
Peck	2	8	4	6	7.2	3	3.6	33
Shadow Claw	2	8	4	6	7.2	3	3.6	30
Frost Breath	2	5	2.5	7	8.4	3.5	4.2	16
Steel Wing	2	5	2.5	7	8.4	3.5	4.2	23
Poison Jab	2	7	3.5	7	8.4	3.5	4.2	48
Rock Throw	2	5	2.5	8	9.6	4	4.8	32
Counter	2	6	3	8	9.6	4	4.8	42
Fire Fang	2	6	3	8	9.6	4	4.8	16
Ice Fang	2	6	3	8	9.6	4	4.8	16
Thunder Fang	2	6	3	8	9.6	4	4.8	5
Bullet Punch	2	7	3.5	8	9.6	4	4.8	7
Sucker Punch	2	7	3.5	8	9.6	4	4.8	32
Razor Leaf	2	4	2	9	10.8	4.5	5.4	57
Present	3	12	4	3	3.6	1	1.2	2
Geomancy	3	13	4.33	4	4.8	1.33	1.6	1
Take Down	3	8	2.67	5	6	1.67	2	30
Charge Beam	3	11	3.67	5	6	1.67	2	35

Attack	T	E	EPT	P	$\cdot\frac{6}{5}$	PPT	$\cdot\frac{6}{5}$	Pop
Bullet Seed	3	13	4.33	5	6	1.67	2	36
Snarl	3	13	4.33	5	6	1.67	2	37
Infestation	3	12	4	6	7.2	2	2.4	22
Water Shuriken	3	14	4.67	6	7.2	2	2.4	2
Hex	3	13	4.33	7	8.4	2.33	2.8	26
Rollout	3	13	4.33	7	8.4	2.33	2.8	11
Zen Headbutt	3	6	2	8	9.6	2.67	3.2	71
Extrasensory	3	10	3.33	8	9.6	2.67	3.2	16
Bubble	3	11	3.67	8	9.6	2.67	3.2	32
Double Kick	3	12	4	8	9.6	2.67	3.2	12
Rock Smash	3	7	2.33	9	10.8	3	3.6	57
Hidden Power	3	8	2.67	9	10.8	3	3.6	26
Struggle Bug	3	8	2.67	9	10.8	3	3.6	27
Air Slash	3	9	3	9	10.8	3	3.6	39
Ice Shard	3	10	3.33	9	10.8	3	3.6	16
Dragon Tail	3	12	4	9	10.8	3	3.6	35
Iron Tail	3	7	2.33	10	12	3.33	4	17
Magical Leaf	3	10	3.33	10	12	3.33	4	22
Fire Spin	3	10	3.33	11	13.2	3.67	4.4	24
Smack Down	3	8	2.67	12	14.4	4	4.8	15
Waterfall	3	8	2.67	12	14.4	4	4.8	20
Astonish	3	10	3.33	12	14.4	4	4.8	67
Mud Slap	3	10	3.33	12	14.4	4	4.8	42
Charm	3	8	2.67	13	15.6	4.33	5.2	42
Force Palm	3	10	3.33	13	15.6	4.33	5.2	4
Splash	4	12	3	0	0	0	0	11
Yawn	4	12	3	0	0	0	0	5
Volt Switch	4	16	4	14	16.8	3.5	4.2	24
Gust	4	12	3	16	19.2	4	4.8	5
Confusion	4	14	3.5	16	19.2	4	4.8	68
Incinerate	5	20	4	20	24	4	4.8	20

Table 7.2: Fast attacks, PPT, and EPT (3x3 stats. Attacks with EPT·PPT≥ 9 are highlighted in green)

Hidden Power is of some random type that is neither Normal nor Fairy. The type is persisted across trades, but not across evolution, and cannot be changed via TMs.

7.2 Charged attacks

Every Pokémon knows at least one charged attack, and most can be taught a second charged attack at a cost of Stardust and Candy[1]. The

[1]Caterpie, Metapod, Weedle, Kakuna, Magikarp, Ditto, Unown, Wobbuffet, Smeargle, Wurmple, Silcoon, Cascoon, Taillow, Feebas, Wynaut, Beldum, Kricketot, Burmy, Combee, Happiny, Tynamo, Scatterbug, Spewpa, Wimpod, Cosmog, Cosmoem, Applin, Toxel, Dreepy, and Gimmighoul are exceptions, lacking second charged attacks to learn.

Type	1	2	3	4	5	PPT>3	EPT>3
Bug	2		2			3	3
Dark	1	2	1			3	3
Dragon	1		1			2	2
Electric		3	1	1		2	5
Fairy		1	2			1	2
Fighting		3	3			3	4
Fire		2	1		1	3	4
Flying		2	1	1		3	4
Ghost	1	1	2			3	4
Grass		3	2			3	4
Ground	1	1	1			1	3
Ice		3	1			3	3
Normal	5	2	2	1		3	5
Poison		3				2	3
Psychic	1	1	2	1		2	4
Rock		1	2			2	1
Steel		4	1			3	3
Water	1		3	1		2	4

Table 7.3: Fast attacks by duration by type

Dragon Ascent attack of Rayquaza cannot be learned via any method other than a rare Meteorite[2]. A charged attack is defined by its power and the energy it consumes (Table 7.4). Energy generated by the fast attack goes into a pool from which either charged attack can draw. Unlike fast attacks, partial ordering is not generally preserved between Nx1 and 3x3 mode: Sunsteel Strike is the most powerful charged attack in Nx1, whereas Aeroblast tops the list in 3x3. No, I don't know why they spelled "Spacial" Rend like that.

Attack	P	$\cdot\frac{6}{5}$	E	$\frac{P}{E}$	$\cdot\frac{6}{5}$	Buff	Pop
Frustration	10	12	70	0.14	0.171		*[3]
Struggle	35	42	100	0.35	0.42		20
Obstruct	15	18	40	0.38	0.45	D↑OD↓	1
Acid Spray	20	24	45	0.44	0.533	OD↓2	23
Drain Punch	20	24	40	0.50	0.6	D↑	11
Power-Up Punch	20	24	35	0.57	0.686	A↑	15
Fell Stinger	20	24	35	0.57	0.686	A↑	8

[2]Meteorites were available in Research/events of yesteryear, and (rarely) from Mega Rayquaza raids.

[3]Frustration is known by default to all Shadow Pokémon (unfortunately).

Attack	P	$\cdot\frac{6}{5}$	E	$\frac{P}{E}$	$\cdot\frac{6}{5}$	Buff	Pop
Sand Tomb	25	30	40	0.62	0.75	OD↓	15
Bubble Beam	25	30	40	0.62	0.75	OA↓	28
Feather Dance	35	42	50	0.70	0.84	OA↓2	1
Flower Trick	30	36	35	0.86	1.03	A↑	1
Razor Shell	35	42	35	1.00	1.2	50%OD↓	11
Muddy Water	35	42	35	1.00	1.2	30%OA↓	9
Mirror Shot	35	42	35	1.00	1.2	30%OA↓	4
Vise Grip	40	48	40	1.00	1.2		9
Low Sweep	40	48	40	1.00	1.2		20
Brick Break	40	48	40	1.00	1.2	OD↓	44
Twister	45	54	45	1.00	1.2		11
Ominous Wind	45	54	45	1.00	1.2	10%A+D↑	17
Bulldoze	45	54	45	1.00	1.2	50%OD↓	34
Octazooka	50	60	50	1.00	1.2	50%OA↓2	2
Breaking Swipe	50	60	50	1.00	1.2	OA↓	11
Mirror Coat	60	72	55	1.09	1.31		11
Draining Kiss	60	72	55	1.09	1.31		18
Shadow Sneak	50	60	45	1.11	1.33		16
Poison Fang	45	54	40	1.12	1.35	OD↓	18
Leaf Tornado	45	54	40	1.12	1.35	50%OA↓2	4
Psychic Fangs	40	48	35	1.14	1.37	OD↓	15
Horn Attack	40	48	35	1.14	1.37		6
Psybeam	70	84	60	1.17	1.4		27
Submission	60	72	50	1.20	1.44		4
Brine	60	72	50	1.20	1.44		4
Spirit Shackle	50	60	40	1.25	1.5	33%OD↓	1
Rock Blast	50	60	40	1.25	1.5		19
Heat Wave	95	114	75	1.27	1.52		26
Flame Burst	70	84	55	1.27	1.53		8
Air Cutter	45	54	35	1.29	1.54	30%A↑	20
Tri Attack	65	78	50	1.30	1.56	50%OA+D↓	2
Flame Charge	65	78	50	1.30	1.56	A↑	39
Wrap	60	72	45	1.33	1.6	D↑	13
Wildbolt Storm	60	72	45	1.33	1.6	OA↓	1
Triple Axel	60	72	45	1.33	1.6	A↑	14
Silver Wind	60	72	45	1.33	1.6	10%A+D↑	13
Sandsear Storm	60	72	45	1.33	1.6	OA↓	1
Mystical Fire	60	72	45	1.33	1.6	OA↓	4
Lunge	60	72	45	1.33	1.6	OA↓	8
Icy Wind	60	72	45	1.33	1.6	OA↓	31
Chilling Water	60	72	45	1.33	1.6	OA↓	1
Bleakwind Storm	60	72	45	1.33	1.6	OA↓	1
Ancient Power	60	72	45	1.33	1.6	10%A↑	41
Aerial Ace	60	72	45	1.33	1.6		80
Aurora Beam	80	96	60	1.33	1.6		11
Shadow Force	120	144	90	1.33	1.6		2
Signal Beam	75	90	55	1.36	1.64	20%OA+D↓	19
Psychic	75	90	55	1.36	1.64	10%OD↓	85
Stomp	55	66	40	1.38	1.65		22
Seed Bomb	55	66	40	1.38	1.65		45
Discharge	55	66	40	1.38	1.65		32
Aqua Step	55	66	40	1.38	1.65	A↑	1

Attack	P	$\cdot\frac{6}{5}$	E	$\frac{P}{E}$	$\cdot\frac{6}{5}$	Buff	Pop
Parabolic Charge	70	84	50	1.40	1.68	66%D↑	5
Iron Head	70	84	50	1.40	1.68		37
Heavy Slam	70	84	50	1.40	1.68		22
Dig	70	84	50	1.40	1.68		51
Rage Fist	50	60	35	1.43	1.71	A↑	2
Night Slash	50	60	35	1.43	1.71		33
Cross Poison	50	60	35	1.43	1.71	12.5%A↑2	10
Trailblaze	65	78	45	1.44	1.73	A↑	51
Thunder Punch	60	72	40	1.50	1.8		25
Mud Bomb	60	72	40	1.50	1.8		16
Ice Punch	60	72	40	1.50	1.8		26
Glaciate	60	72	40	1.50	1.8	OA↓	1
Foul Play	60	72	40	1.50	1.8		42
Blaze Kick	60	72	40	1.50	1.8		6
Fire Punch	60	72	40	1.50	1.8		17
Sky Attack	75	90	50	1.50	1.8		18
Play Rough	90	108	60	1.50	1.8		46
Torch Song	70	84	45	1.56	1.87	A↑	1
Magnet Bomb	70	84	45	1.56	1.87		4
Liquidation	70	84	45	1.56	1.87	30%OD↓	17
Disarming Voice	70	84	45	1.56	1.87		19
Crunch	70	84	45	1.56	1.87	20%OD↓	92
Swift	55	66	35	1.57	1.89		39
Shadow Punch	55	66	35	1.57	1.89		10
Double Iron Bash	55	66	35	1.57	1.89		1
Cross Chop	55	66	35	1.57	1.89		13
Brutal Swing	55	66	35	1.57	1.89		16
Bone Club	55	66	35	1.57	1.89		3
Body Slam	55	66	35	1.57	1.89		73
Aqua Tail	55	66	35	1.57	1.89		32
Flash Cannon	110	132	70	1.57	1.89		30
Water Pulse	80	96	50	1.60	1.92		57
Synchronoise	80	96	50	1.60	1.92		3
Sludge Bomb	80	96	50	1.60	1.92		61
Scorching Sands	80	96	50	1.60	1.92	10%OA↓	16
Rock Tomb	80	96	50	1.60	1.92	OA↓	40
Nature's Madness	80	96	50	1.60	1.92	OD↓	4
Hyper Fang	80	96	50	1.60	1.92		11
Gyro Ball	80	96	50	1.60	1.92		28
Dragon Claw	80	96	50	1.60	1.92		26
Dark Pulse	80	96	50	1.60	1.92		59
X-Scissor	65	78	40	1.62	1.95		35
Magma Storm	65	78	40	1.62	1.95		1
Icicle Spear	65	78	40	1.62	1.95		3
Thunderbolt	90	108	55	1.64	1.96		67
Last Resort	90	108	55	1.64	1.96		9
Ice Beam	90	108	55	1.64	1.96		51
Flamethrower	90	108	55	1.64	1.96		63
Energy Ball	90	108	55	1.64	1.96	10%OD↓	65
Earth Power	90	108	55	1.64	1.96	10%OD↓	23
Dragon Pulse	90	108	55	1.64	1.96		32
Dazzling Gleam	90	108	55	1.64	1.96		48

Attack	P	$\cdot\frac{6}{5}$	E	$\frac{P}{E}$	$\cdot\frac{6}{5}$	Buff	Pop
Surf	75	90	45	1.67	2		41
Rock Slide	75	90	45	1.67	2		52
Thunder	100	120	60	1.67	2		44
High Horsepower	100	120	60	1.67	2		4
Bug Buzz	100	120	60	1.67	2	30%OD↓	38
Sludge Wave	110	132	65	1.69	2.03		21
Petal Blizzard	110	132	65	1.69	2.03		15
Hurricane	110	132	65	1.69	2.03		21
Future Sight	110	132	65	1.69	2.03		23
Earthquake	110	132	65	1.69	2.03		62
Scald	85	102	50	1.70	2.04	30%OA↓	20
Power Gem	85	102	50	1.70	2.04		13
Oblivion Wing	85	102	50	1.70	2.04		1
Crabhammer	85	102	50	1.70	2.04	12.5%A↑2	6
Weather Ball (Water)	60	72	35	1.71	2.06		3
Weather Ball (Normal)	60	72	35	1.71	2.06		1
Weather Ball (Rock)	60	72	35	1.71	2.06		2
Weather Ball (Ice)	60	72	35	1.71	2.06		6
Weather Ball (Fire)	60	72	35	1.71	2.06		5
Sacred Sword	60	72	35	1.71	2.06		4
Skull Bash	130	156	75	1.73	2.08	D↑	7
Seed Flare	130	156	75	1.73	2.08	40%OD↓2	2
Hydro Pump	130	156	75	1.73	2.08		43
Gunk Shot	130	156	75	1.73	2.08		20
Upper Hand	70	84	40	1.75	2.1	30%OD↓	6
Sludge	70	84	40	1.75	2.1		9
Psyshock	70	84	40	1.75	2.1		46
Drill Peck	70	84	40	1.75	2.1		12
Aqua Jet	70	84	40	1.75	2.1		24
Fire Blast	140	168	80	1.75	2.1		34
Sparkling Aria	80	96	45	1.78	2.13		2
Shadow Bone	80	96	45	1.78	2.13	20%OD↓	1
Night Shade	80	96	45	1.78	2.13	12.5%A↑2	20
Fly	80	96	45	1.78	2.13		23
Flame Wheel	80	96	45	1.78	2.13		7
Dynamax Cannon	80	96	45	1.78	2.13		1
Drill Run	80	96	45	1.78	2.13		12
Behemoth Bash	80	96	45	1.78	2.13		1
Volt Tackle	90	108	50	1.80	2.16	D↓	1
Power Whip	90	108	50	1.80	2.16		14
Grass Knot	90	108	50	1.80	2.16		65
Stone Edge	100	120	55	1.82	2.18		51
Shadow Ball	100	120	55	1.82	2.18		76
Behemoth Blade	100	120	55	1.82	2.18		1
Payback	110	132	60	1.83	2.2		21
Outrage	110	132	60	1.83	2.2		35
Moonblast	110	132	60	1.83	2.2	10%OA↓	22
Return	130	156	70	1.86	2.23		*[4]
Blizzard	140	168	75	1.87	2.24		38
Zap Cannon	150	180	80	1.88	2.25	33%OA↓	18

[4]Return is known by default to all Purified Pokémon (it's mid at best).

Attack	P	$\cdot\frac{6}{5}$	E	$\frac{P}{E}$	$\cdot\frac{6}{5}$	Buff	Pop
Solar Beam	150	180	80	1.88	2.25		48
Hyper Beam	150	180	80	1.88	2.25		54
Giga Impact	150	180	80	1.88	2.25		4
Spacial Rend	95	114	50	1.90	2.28		1
Psycho Boost	70	84	35	2.00	2.4	A↓2	4
Leaf Blade	70	84	35	2.00	2.4		18
Hydro Cannon	80	96	40	2.00	2.4		8
Doom Desire	80	96	40	2.00	2.4		1
Aura Sphere	80	96	40	2.00	2.4		8
Psystrike	90	108	45	2.00	2.4		2
Fusion Flare	90	108	45	2.00	2.4		2
Fusion Bolt	90	108	45	2.00	2.4		2
Dynamic Punch	90	108	45	2.00	2.4		17
Avalanche	90	108	45	2.00	2.4		18
Meteor Mash	100	120	50	2.00	2.4		2
Megahorn	110	132	55	2.00	2.4		18
High Jump Kick	110	132	55	2.00	2.4	10%D↓4	2
Acrobatics	110	132	55	2.00	2.4	12.5%A↑2	3
Mist Ball	120	144	60	2.00	2.4	50%OA↓	1
Meteor Beam	120	144	60	2.00	2.4	A↑	5
Luster Purge	120	144	60	2.00	2.4	50%OD↓	1
Ice Burn	120	144	60	2.00	2.4	30%OD↓	1
Freeze Shock	120	144	60	2.00	2.4	30%OA↓	1
Darkest Lariat	120	144	60	2.00	2.4		1
Sacred Fire	130	156	65	2.00	2.4	50%OA↓	1
Poltergeist	150	180	75	2.00	2.4		8
Focus Blast	150	180	75	2.00	2.4		36
Sunsteel Strike	135	162	65	2.08	2.49		1
Moongeist Beam	135	162	65	2.08	2.49		1
Superpower	85	102	40	2.12	2.55	A+D↓	19
Dragon Ascent	150	180	70	2.14	2.57	D↓	1
Boomburst	150	180	70	2.14	2.57		4
Precipice Blades	130	156	60	2.17	2.6		1
Origin Pulse	130	156	60	2.17	2.6		1
Techno Blast	120	144	55	2.18	2.62		1
Rock Wrecker	110	132	50	2.20	2.64		2
Blast Burn	110	132	50	2.20	2.64		8
Wild Charge	100	120	45	2.22	2.67	D↓2	36
Frenzy Plant	100	120	45	2.22	2.67		8
Dragon Energy	100	120	45	2.22	2.67		1
Close Combat	100	120	45	2.22	2.67	D↓2	43
Aura Wheel	100	120	45	2.22	2.67	A↑	1
Flying Press	90	108	40	2.25	2.7		1
Aeroblast	170	204	75	2.27	2.72		1
Roar of Time	150	180	65	2.31	2.77		1
Draco Meteor	150	180	65	2.31	2.77	A↓2	11
Overheat	130	156	55	2.36	2.84	A↓2	26
Leaf Storm	130	156	55	2.36	2.84	A↓2	6
Brave Bird	130	156	55	2.36	2.84	D↓3	25
V-Create	95	114	40	2.38	2.85	D↓3	1
Clanging Scales	120	144	45	2.67	3.2	D↓	1

Table 7.4: Charged attacks and power-per-energy (3x3 stats)

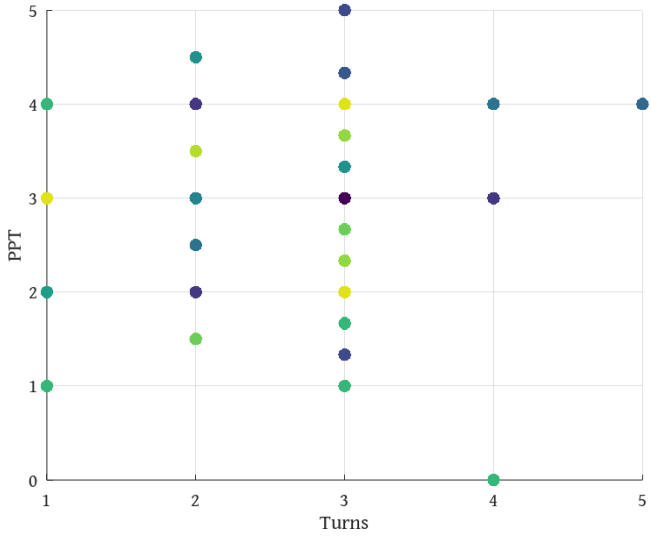


Figure 7.1: PPT vs turns for fast attacks

In 3x3, each side starts with two Damage Shields. The Trainer can deploy a shield whenever the opponent prepares a charged attack, and the decision must be made before the particular attack is revealed. Shields reduce the incoming damage to a single point, and each can be used only once.

Figure 7.3 plots Power-per-Energy (PPE) against energy for charged attacks. A higher PPE makes more efficient use of the energy built up by fast attacks. A lower energy requires fewer fast attacks to build up its charge. Note that many of the best PPEs do not require extreme energy; these make for excellent charged attacks.

Did you notice?

Every charged attack's power is a multiple of five, and thus multiplying it by 1.2 or 1.6 always results in an integer.

Adventure Effects

Certain charged attacks can be employed outside of battle. Some Pokémon must know the attack, and that Pokémon cannot be fainted. Ad-

venture effects cost Stardust and Candy appropriate to the Pokémon per duration (Table 7.5). Dynamax Cannon's effect does not affect the Max Moves of Zacian nor Zamazenta, and costs a painful 30 Eternatus Candy.

Buffs and debuffs

Certain charged attacks have a chance of semi-persistent effects on the attack or defense of the user or opponent. These effects can be positive ("buffs") or negative ("debuffs"[5]) (no attacks buff opponents at this time). They occur only in 3x3 battles, and are affected by neither shields nor typing. Several attacks (Ancient Power, Obstruct, Ominous Wind, Signal Beam, Silver Wind, Superpower, Tri Attack) can have multiple effects; in this case, any probabilistic check is done once for all effects—either all of them occur, or none of them do. The effects apply only to the active Pokémon, and do not persist across substitution. Stat changes stack, but the absolute value will not exceed four. See section 10.2 for a quantitative treatment.

[5] I am unenamored of the term "debuff", suggesting only that it can undo a buff. But this is not just community lingo—it's in the game's interfaces.

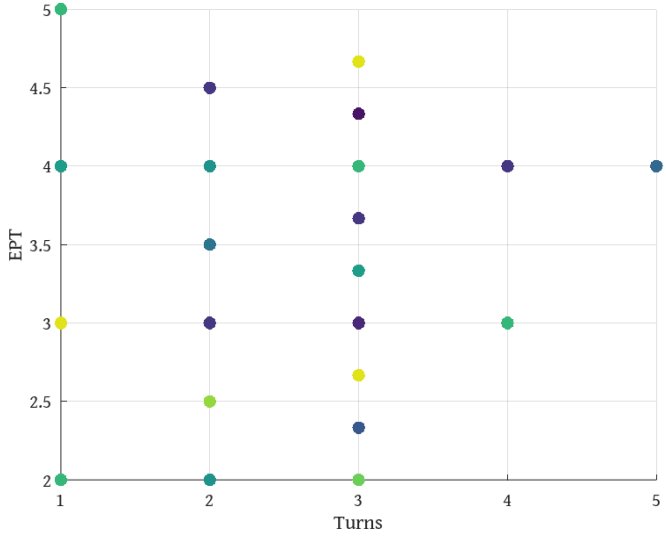


Figure 7.2: EPT vs turns for fast attacks

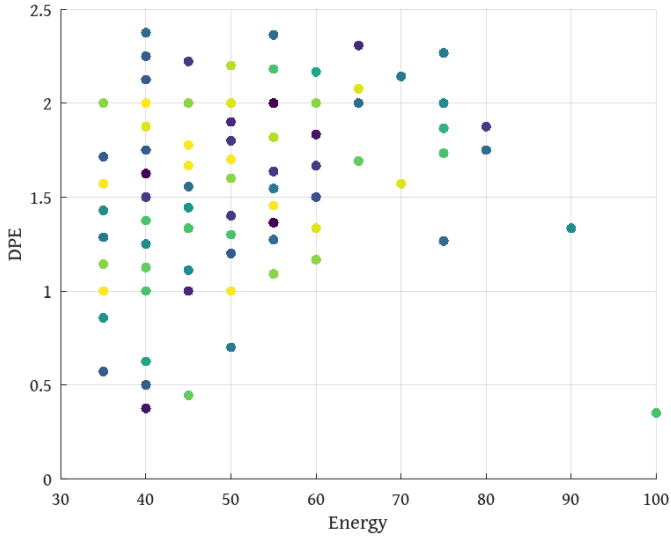


Figure 7.3: PPE vs energy for charged attacks

The type advantages of two charged attacks

Two charged attacks can yield tremendous improvements in type effectiveness. Unlike typing with regard to defense, where we must take the sum of each type's weaknesses and strengths, we choose a single charged attack. For each target typing, we can apply the better of the two type relations. Two charged attacks of different type have coverage at least as good as, and usually much better than, one of their types. There is no pair of distinct attack types forced into a -3 relation. Recall that our best ARA was Ground with 1.173. More than 72% of dual charged attack setups beat this coverage, with Ground+Ice posting an outstanding 1.468. Only one pair can be forced into a dreaded effectiveness of -3: Normal with Poison, when matched against Steel+Ghost.

	-3	-2	-1	0	1	2	ARA	Pop
			2	60	93	16	1.468	16
			2	65	88	16	1.450	52
			4	65	86	16	1.439	21
			3	63	92	13	1.435	11
			3	67	88	13	1.421	8
			9	70	76	16	1.393	37
			12	68	75	16	1.383	23
			6	74	78	13	1.379	28
			7	78	73	13	1.359	18
			12	69	78	12	1.357	16

	-3	-2	-1	0	1	2	ARA	Pop
			7	76	77	11	1.355	22
		4	21	58	69	19	1.355	22
		1	5	79	75	11	1.349	11
		3	15	62	78	13	1.349	12
			1	89	70	11	1.344	18
			16	72	68	15	1.340	31
			12	69	81	9	1.340	10
			14	69	77	11	1.340	17
			9	78	73	11	1.337	25
			6	83	71	11	1.336	23
			13	72	77	9	1.324	14
		1	6	85	68	11	1.322	15
		1	20	64	74	12	1.322	15
			6	84	72	9	1.322	21
		1	3	90	67	10	1.316	21
		1	20	61	80	9	1.315	6
			16	76	67	12	1.309	28
			14	78	68	11	1.308	43
			14	75	73	9	1.308	23
			4	87	74	6	1.306	19
			4	87	74	6	1.306	9
			17	78	63	13	1.302	22
			12	80	70	9	1.301	60
			14	77	71	9	1.301	19
			13	82	65	11	1.300	28
			18	78	62	13	1.297	16
			6	88	70	7	1.296	8
			16	81	62	12	1.292	23
			16	78	68	9	1.286	27
			15	77	72	7	1.284	18
		4	30	55	69	13	1.281	36
		1	20	71	70	9	1.280	26
			8	90	66	7	1.278	20
			8	90	66	7	1.278	20
			8	90	66	7	1.278	19
		1	4	101	55	10	1.272	48
			18	79	65	9	1.271	14
		1	23	69	69	9	1.270	12
			3	101	60	7	1.268	18
			16	80	68	7	1.267	29
		1	20	78	61	11	1.267	30
		3	27	60	72	9	1.265	13
			12	88	64	7	1.262	35
			12	88	64	7	1.262	23
			17	80	67	7	1.262	21
		1	23	72	66	9	1.260	9
			3	99	65	4	1.258	29
			3	99	65	4	1.258	12
			4	101	60	6	1.256	20
		1	24	73	64	9	1.250	14
			18	82	64	7	1.249	22
			16	87	60	8	1.248	23

	-3	-2	-1	0	1	2	ARA	Pop
		2	27	70	61	11	1.248	14
			12	91	62	6	1.246	17
		1	22	73	69	6	1.245	5
			6	98	63	4	1.244	24
			6	98	63	4	1.244	16
			6	98	63	4	1.244	7
			16	85	64	6	1.244	26
		1	24	75	62	9	1.243	12
			7	98	62	4	1.239	30
		5	9	95	52	10	1.236	15
			15	90	60	6	1.232	19
			17	87	61	6	1.231	11
			17	87	61	6	1.231	7
			9	97	61	4	1.231	28
			9	97	61	4	1.231	19
			9	97	61	4	1.231	18
		1	24	74	66	6	1.230	15
			27	76	59	9	1.230	4
			8	99	60	4	1.229	23
			8	99	60	4	1.229	6
		2	18	85	59	7	1.224	20
		2	26	72	64	7	1.224	7
		1	30	73	58	9	1.216	11
			17	89	61	4	1.213	9
		3	37	65	53	13	1.213	30
			22	86	56	7	1.212	10
			5	108	55	3	1.209	24
		3	20	85	56	7	1.206	9
		8	36	59	55	13	1.204	15
		1	24	79	63	4	1.201	15
			13	99	55	4	1.201	14
			20	88	59	4	1.200	21
			19	90	58	4	1.198	15
			23	87	55	6	1.197	25
			15	98	54	4	1.193	37
			7	112	48	4	1.190	4
		3	30	72	60	6	1.189	39
		1	30	77	57	6	1.185	13
			14	102	51	4	1.185	18
			18	99	48	6	1.184	25
			17	101	47	6	1.182	11
		1	7	109	52	2	1.182	15
		1	8	108	52	2	1.180	13
			18	97	52	4	1.179	16
			9	109	51	2	1.177	31
			16	100	52	3	1.175	15
		13	5	103	40	10	1.174	39
		1	17	95	56	2	1.174	36
			19	97	51	4	1.174	14
		1	16	97	55	2	1.173	29
			14	104	50	3	1.172	15
			17	104	44	6	1.172	25

	-3	-2	-1	0	1	2	ARA	Pop
		1	29	83	52	6	1.170	17
		2	28	80	57	4	1.168	9
			12	107	50	2	1.167	26
			24	91	52	4	1.166	26
		1	11	107	50	2	1.166	27
			20	101	44	6	1.165	28
			21	97	49	4	1.162	50
		3	33	76	53	6	1.158	6
		1	26	91	48	5	1.153	12
		1	3	122	44	1	1.153	5
		3	21	94	49	4	1.152	7
			6	123	39	3	1.151	37
		2	21	96	50	2	1.141	5
		1	6	121	42	1	1.140	12
		2	29	87	49	4	1.138	6
		5	26	86	50	4	1.137	29
			20	105	43	3	1.134	11
			17	110	41	3	1.134	2
		1	26	95	45	4	1.134	17
		4	21	96	48	2	1.126	12
			19	110	39	3	1.123	31
		1	30	92	44	4	1.122	29
		1	16	111	42	1	1.118	9
		2	16	110	42	1	1.114	29
			18	114	36	3	1.114	28
		6	42	69	48	6	1.110	24
			17	114	39	1	1.109	11
			5	135	30	1	1.103	8
		6	22	100	40	3	1.098	2
		1	29	99	39	3	1.097	15
			6	136	28	1	1.094	40
			18	120	32	1	1.082	40
			21	120	27	3	1.076	55
		6	40	79	42	4	1.075	21
		1	11	132	26	1	1.073	44
		1	19	122	28	1	1.062	28
		6	28	107	27	3	1.039	14
		1	18	136	16		1.013	23
	1	4	42	99	24	1	0.983	13

Table 7.6: Type efficiency summaries for charged attack sets

7.3 Cover sets

With one fast and two charged attacks per Pokémon, a team of three can boast nine distinct attack types. Can we achieve coverage of the defenders' typing with this limited repertoire? Were we working against only monotyped Pokémon, nine types would be more than sufficient. The smallest cover of all eighteen types is achieved with seven attacking types in ten different collections (Table 7.7). Fighting is always

Attack	Pokémon	Cost	Time
Roar of Time	Origin Forme Dialga	5	6
	Pause incense, Lucky Egg, and Star Piece timers		
Spacial Rend	Origin Forme Palkia	5	10
	Encounter wild Pokémon at greater distance		
Ice Burn	White Kyurem	5	10
	Slow down catch circles, +50% to catch rate		
Freeze Shock	Black Kyurem	5	10
	Stops movement in encounters, +25% to catch rate		
Sunsteel Strike	Dusk Mane Necrozma	3	10
	Spawn and evolve daytime Pokémon		
Moongeist Beam	Dawn Wings Necrozma	3	10
	Spawn and evolve evening Pokémon		
Behemoth Blade	Crowned Sword Zacian	5	6
	+10% to ATK in raids, +5% in Max Battles		
Behemoth Bash	Crowned Shield Zamazenta	5	6
	10% to DEF in raids, +5% in Max Battles		
Dynamax Cannon	Eternatus	5/30	10
	Boosts Max Move levels by 1 for true Max Pokémon		

Table 7.5: Adventure effects of charged attacks. Cost is expressed in units of 1,000 Stardust and Candy.

Dark, Electric, Fighting, Flying, Ground, Ice, Poison
Dark, Electric, Fighting, Flying, Ground, Ice, Steel
Dark, Fairy, Fighting, Grass, Ground, Poison, Rock
Dark, Fighting, Flying, Grass, Ground, Ice, Poison
Dark, Fighting, Flying, Grass, Ground, Ice, Steel
Electric, Fighting, Flying, Ghost, Ground, Ice, Poison
Electric, Fighting, Flying, Ghost, Ground, Ice, Steel
Fairy, Fighting, Ghost, Grass, Ground, Poison, Rock
Fighting, Flying, Ghost, Grass, Ground, Ice, Poison
Fighting, Flying, Ghost, Grass, Ground, Ice, Steel

Table 7.7: Monotypes are minimally covered by 10 sets of 7

necessary to gain advantage over Normal, and Ground is required for Electric. No other types show up in all covering sets.

It's interesting to look at how these sets change if we ignore one target type. Dropping Fairy, Normal, or Water results in coverage using only six attacking types, and can thus be handled with only charged attacks. Dropping Dark, Fire, Ice, Poison, Psychic, Rock, or Steel doesn't

Ignored type	Cover size	Sets	Ignored type	Cover size	Sets
Bug	7	30	Dragon	7	24
Electric	7	22	Fairy	6	4
Fighting	7	28	Flying	7	22
Ghost	7	16	Grass	7	12
Ground	7	24	Normal	6	2
Water	6	4			

Table 7.8: Partial covers are comparable in size to a full cover

Dark, Fairy, Fighting, Fire, Grass, Ground, Poison, Rock, Steel, Water
Dark, Fairy, Fighting, Fire, Grass, Ground, Ice, Poison, Rock, Steel
Dark, Fairy, Fighting, Fire, Ghost, Grass, Ground, Poison, Rock, Water
Dark, Fairy, Fighting, Fire, Ghost, Grass, Ground, Ice, Poison, Rock
Dark, Fairy, Fighting, Fire, Flying, Grass, Ground, Rock, Steel, Water
Dark, Fairy, Fighting, Fire, Flying, Grass, Ground, Ice, Rock, Steel
Dark, Electric, Fairy, Fighting, Fire, Flying, Grass, Ground, Ice, Steel
Bug, Dark, Fairy, Fighting, Fire, Grass, Ground, Rock, Steel, Water
Bug, Dark, Fairy, Fighting, Fire, Grass, Ground, Ice, Rock, Steel

Table 7.9: Full typing is minimally covered by 9 sets of 10

change the solution space at all. The remaining eight elisions merely enable more septuples (Table 7.8).

Of course, what we're really interested in covering is the full set of possible target typings, including all dualtypes. Unfortunately, this requires no fewer than ten attacking types, which can be selected in nine different ways (Table 7.9). Even assuming unlimited substitution, this demonstrates the impossibility of assembling a team which can effectively hit every possible opposing Pokémon with some attack. However, section 14.4 explores situations where typing is restricted. In such cases, the minimum set concept is extremely powerful. It can furthermore be put to good use analyzing your own teams. Every typing is weak to at least one attack type, so the minimum cover will never be greater than three. A number below that indicates types that are effective against multiple members of your team. That's not necessarily a bad thing, but you'll want to know about it.

7.4 Relative strength of fast and charged attacks

It's sometimes useful to delay use of a charged attack, but is it ever wise to forgo charged attacks entirely? Fast attack power ranges from

1 (Locked On) to 20 (Incinerate), but we need look at the power per turn (charged attacks operate in a single turn in Trainer Battles). Using normalized power, Razor Leaf takes the lead with 4.5 PPT. Assume STAB and type effectiveness of 2, boosting it to 13.824 PPT. This is the best case for fast attacks.

Charged attack power ranges from 10 (Frustration) to 170 (Sunsteel Strike). Assuming no STAB and type effectiveness of −1 for Frustration, it is reduced to 6.25, and in this pathological case will inflict less damage per turn than the fast attack. At even the meager 20 of Acid Spray and friends, however, the −1 type relation only drives power down to 12.5. Unless you're making use of Frustration or Obstruct, or in a situation of at least double ineffectiveness or effectiveness, charged attacks are always more efficient dealers of damage than fast attacks *so long as they aren't shielded.* Fast attacks are subject to more floor functions, and hit harder by them. An implication is that STAB and type effectiveness will have more impact on charged attacks than fast attacks.

This *does not* imply that charged attacks ought always be used as soon as sufficient energy has been built up. There are numerous tactical reasons to hold off on a charged attack (chapter 12). Due to charged attacks immediately concluding opponents' fast attacks, it is even possible to lose by throwing a shielded charged attack, when a fast attack might have knocked out the opponent.

It is true that a charged attack requires energy built up over a number of turns. Were these considered, and used to calculate PPT for the charged attack, it might well fall below that of the fast attack. Such a comparison is invalid; the energy is built up as a result of the fast attack. The question is whether the charged attack ought be used, presuming sufficient energy present. At that point, the time cost of the charged attack is one turn.

None of this analysis holds for Nx1 battles, where charged attacks can have much more lengthy durations. In Gigantamax battles, it can be beneficial to eschew charged attacks completely; more total power is delivered by filling up the Max Meter as quickly as possible, and throwing Max attacks more frequently (section 10.6).

7.5 Minimal attack cycles

9,569 combinations of fast and charged attack are currently in play. For each combination of fast attack and charged attack, there is some minimum number F of fast attacks sufficient to launch the charged attack. The shortest attack cycles require nine turns (Table 7.10), while the longest take forty-three—time for the fastest opponents to throw four

full cycles, with headway on the fifth. The "%c" column in Table 7.10 indicates the percentage of total power delivered by the charged attack. The minimum is 15.62%, when Victreebel employs Razor Leaf together with Acid Spray. Outside of fast attacks which deal no damage (Yawn and Splash), %c is maximized (91.84%) by Regieleki when Lock On is followed by Zap Cannon (in fact, all pairs with %c over 90% are Lock On with some heavy charged attack). Nothing with %c below 27% manages to achieve even 7 PPT, while those with %c above 90% all exceed 9.75 PPT; this shouldn't surprise us, given the results of section 7.4. PPT of 5 or below is a wasteland of fast attacks like Tackle, Take Down, Pound, and Bug Bite, and charged attacks like Struggle, Acid Spray, Fell Stinger, and of course the dreadful Frustration. Most of these combinations aren't even fast; they're just pathologically bad attacks. The maximum PPT is 14.4 (Table 7.11), achieved by **FIXME** together with Clanging Scales, all with STAB. Clanging Scales has a deleterious debuff on the user's defense. This is a trend: among the 1,188 pairs (∼12.7%) with PPT of at least ten, many come with a mandatory negative status effect. The exceptions on the high end—Poltergeist, Solar Beam, Fire Blast, Zap Cannon—tend towards twenty turns per cycle. Blast Burn is faster; Frenzy Plant is faster than Blast Burn; Dynamic Punch is faster than Frenzy Plant. But fastest of them all is Morpeko wielding Thunder Shock and Aura Wheel, pumping out 13.09 PPT in eleven turns, *while getting a buff to attack*. If Electric and Dark had better type coverage, Morpeko would be unstoppable. A few of the fastest cycles achieve a PPT of 10, all of them employing **FIXME** or Karate Chop with Cross Chop. Primeape can switch this combo up with the equally speedy Rage Fist (sadly without STAB) when Fighting is ineffective.

Pokémon	Attacks	Turns	Power	*e*	PPT	%c
Kommo-o	Dragon Tail + **Clanging Scales D↓**	13	187.20	3	14.40	76.92
Turtonator	Incinerate + Overheat A↓2	16	228.00	5	14.25	68.42
Typhlosion	Incinerate + Overheat A↓2	16	228.00	5	14.25	68.42
Blacephalon	Incinerate + Overheat A↓2	16	228.00	5	14.25	68.42
Magcargo	Incinerate + Overheat A↓2	16	228.00	5	14.25	68.42
Talonflame	**Incinerate** + Brave Bird D↓3	16	228.00	5	14.25	68.42
Volcanion	Incinerate + Overheat A↓2	16	228.00	5	14.25	68.42
Pyroar	Incinerate + Overheat A↓2	16	228.00	5	14.25	68.42
Camerupt	Incinerate + Overheat A↓2	16	228.00	5	14.25	68.42
Darmanitan	Incinerate + Overheat A↓2	16	228.00	5	14.25	68.42
Ho-Oh	Incinerate + Brave Bird D↓3	16	228.00	5	14.25	68.42
Chandelure	Incinerate + Overheat A↓2	16	228.00	5	14.25	68.42
Dartrix	Leafage + Brave Bird D↓3	15	206.40	1	13.76	75.58
Reshiram	Dragon Breath + Overheat A↓2	15	206.40	1	13.76	75.58
Rufflet	Peck + Brave Bird D↓3	15	206.40	1	13.76	75.58
Talonflame	Peck + Brave Bird D↓3	15	206.40	1	13.76	75.58
Dodrio	Peck + Brave Bird D↓3	15	206.40	1	13.76	75.58

Honchkrow	Peck + Brave Bird D↓3	15	206.40	1	13.76	75.58
Doduo	Peck + Brave Bird D↓3	15	206.40	1	13.76	75.58
Lurantis	Leafage + Leaf Storm A↓2	15	206.40	1	13.76	75.58
Dartrix	Peck + Brave Bird D↓3	15	206.40	1	13.76	75.58
Galarian Moltres	Sucker Punch + Brave Bird D↓3	17	232.80	1	13.69	67.01
Victini	Confusion + Overheat A↓2	17	232.80	1	13.69	67.01
Celebi	Confusion + Leaf Storm A↓2	17	232.80	1	13.69	67.01
Galarian Articuno	Confusion + Brave Bird D↓3	17	232.80	1	13.69	67.01
Pangoro	Karate Chop + Close Combat D↓2	11	150.00		13.64	80.00
Primeape	**Karate Chop** + Close Combat D↓2	11	150.00		13.64	80.00
Machamp	**Karate Chop** + Close Combat D↓2	11	150.00		13.64	80.00
Origin Forme Palkia	Dragon Breath + Draco Meteor A↓2	18	241.20	3	13.40	74.63
Origin Forme Dialga	Dragon Breath + Draco Meteor A↓2	18	241.20	3	13.40	74.63
Palkia	Dragon Breath + Draco Meteor A↓2	18	241.20	3	13.40	74.63
Dialga	Dragon Breath + Draco Meteor A↓2	18	241.20	3	13.40	74.63
Goodra	Dragon Breath + Draco Meteor A↓2	18	241.20	3	13.40	74.63
Origin Forme Dialga	Dragon Breath + **Roar of Time**	18	241.20	3	13.40	74.63
Kyurem	Dragon Breath + Draco Meteor A↓2	18	241.20	3	13.40	74.63
Reshiram	Dragon Breath + Draco Meteor A↓2	18	241.20	3	13.40	74.63
Dragonite	Dragon Breath + **Draco Meteor A↓2**	18	241.20	3	13.40	74.63
Kommo-o	*Metal Sound* + **Clanging Scales D↓**	13	174.00	3	13.38	82.76
Victini	Confusion + V-Create D↓3	13	171.60	2	13.20	66.43
Lurantis	*Fury Cutter* + Leaf Storm A↓2	15	198.00	1	13.20	78.79
Starly	Quick Attack + Brave Bird D↓3	15	198.00	1	13.20	78.79
Staraptor	Quick Attack + Brave Bird D↓3	15	198.00	1	13.20	78.79
Staravia	Quick Attack + Brave Bird D↓3	15	198.00	1	13.20	78.79
Typhlosion	*Shadow Claw* + Overheat A↓2	15	198.00	1	13.20	78.79
Doduo	Quick Attack + Brave Bird D↓3	15	198.00	1	13.20	78.79
Charizard	***Dragon Breath*** + Overheat A↓2	15	198.00	1	13.20	78.79
Leavanny	***Shadow Claw*** + Leaf Storm A↓2	15	198.00	1	13.20	78.79
Chandelure	Incinerate + **Poltergeist**	21	276.00	5	13.14	65.22
Roserade	Poison Jab + Leaf Storm A↓2	17	223.20	1	13.13	69.89
Alolan Exeggutor	Bullet Seed + **Draco Meteor A↓2**	16	210.00		13.12	85.71
Magnezone	Volt Switch + Wild Charge D↓2	13	170.40	3	13.11	70.42
Alolan Golem	Volt Switch + Wild Charge D↓2	13	170.40	3	13.11	70.42
Raichu	Volt Switch + Wild Charge D↓2	13	170.40	3	13.11	70.42
Alolan Raichu	Volt Switch + Wild Charge D↓2	13	170.40	3	13.11	70.42
Raikou	Volt Switch + Wild Charge D↓2	13	170.40	3	13.11	70.42
Pawmot	Thunder Shock + Wild Charge D↓2	11	144.00		13.09	83.33
Togedemaru	Thunder Shock + Wild Charge D↓2	11	144.00		13.09	83.33
Pikachu	Thunder Shock + Wild Charge D↓2	11	144.00		13.09	83.33
Raikou	Thunder Shock + Wild Charge D↓2	11	144.00		13.09	83.33
Alolan Raichu	Thunder Shock + Wild Charge D↓2	11	144.00		13.09	83.33
Pawmot	Thunder Shock + Close Combat D↓2	11	144.00		13.09	83.33
Hisuian Electrode	Thunder Shock + Wild Charge D↓2	11	144.00		13.09	83.33
Electivire	Thunder Shock + Wild Charge D↓2	11	144.00		13.09	83.33
Morpeko	Thunder Shock + Aura Wheel A↑	11	144.00		13.09	83.33
Pawmo	Thunder Shock + Wild Charge D↓2	11	144.00		13.09	83.33
Raichu	Thunder Shock + Wild Charge D↓2	11	144.00		13.09	83.33
Pawmi	Thunder Shock + Wild Charge D↓2	11	144.00		13.09	83.33

Table 7.11: Attack cycles with highest PPT

Pokémon	Attacks	Power	PPT	%c
Castform (Sunny)	Ember + Weather Ball (Fire)	91.20	10.13	78.95
Ninetales	**Ember** + Weather Ball (Fire)	91.20	10.13	78.95
Vulpix	Ember + Weather Ball (Fire)	91.20	10.13	78.95
Machamp	**Karate Chop** + Cross Chop	90.00	10.00	73.33
Machoke	Karate Chop + **Cross Chop**	90.00	10.00	73.33
Machop	Karate Chop + Cross Chop	90.00	10.00	73.33
Mankey	Karate Chop + Cross Chop	90.00	10.00	73.33
Primeape	**Karate Chop** + **Cross Chop**	90.00	10.00	73.33
Qwilfish	Poison Sting + Aqua Tail	85.20	9.47	77.46
Gallade	Psycho Cut + *Leaf Blade*	84.40	9.38	82.94
Pangoro	Karate Chop + Night Slash	84.00	9.33	71.43
Melmetal	*Thunder Shock* + **Double Iron Bash**	82.00	9.11	80.49
Ariados	Poison Sting + Cross Poison 12.5%A↑2	79.20	8.80	75.76
Roserade	Poison Sting + ***Weather Ball (Fire)***	79.20	8.80	75.76
Skorupi	Poison Sting + Cross Poison 12.5%A↑2	79.20	8.80	75.76
Spinarak	Poison Sting + Cross Poison 12.5%A↑2	79.20	8.80	75.76
Absol	*Psycho Cut* + **Brutal Swing**	78.00	8.67	84.62
Clefable	Fairy Wind + *Swift*	74.20	8.24	74.12
Cyndaquil	Ember + *Swift*	74.20	8.24	74.12
Drapion	Poison Sting + *Aqua Tail*	74.20	8.24	74.12
Galarian Rapidash	Fairy Wind + *Body Slam*	74.20	8.24	74.12
Galarian Weezing	Fairy Wind + *Brutal Swing*	74.20	8.24	74.12
Growlithe	Ember + *Body Slam*	74.20	8.24	74.12
Hisuian Electrode	Thunder Shock + *Swift*	74.20	8.24	74.12
Hisuian Qwilfish	Poison Sting + *Aqua Tail*	74.20	8.24	74.12
Mareep	Thunder Shock + *Body Slam*	74.20	8.24	74.12
Nidoran♀	Poison Sting + *Body Slam*	74.20	8.24	74.12
Nidoran♂	Poison Sting + *Body Slam*	74.20	8.24	74.12
Overqwil	Poison Sting + *Aqua Tail*	74.20	8.24	74.12
Skorupi	Poison Sting + *Aqua Tail*	74.20	8.24	74.12
Tepig	Ember + *Body Slam*	74.20	8.24	74.12
Turtonator	Ember + *Brutal Swing*	74.20	8.24	74.12
Vulpix	Ember + *Body Slam*	74.20	8.24	74.12
Primeape	**Karate Chop** + ***Rage Fist A***↑	74.00	8.22	67.57
	Karate Chop + *Night Slash*	74.00	8.22	67.57
Charizard	**Ember** + Air Cutter 30%A↑	73.20	8.13	73.77
Galarian Ponyta	Psycho Cut + *Swift*	69.40	7.71	79.25
Galarian Rapidash	Psycho Cut + *Body Slam*	69.40	7.71	79.25
Spinarak	Poison Sting + *Night Slash*	69.20	7.69	72.25
Morpeko	Thunder Shock + *Psychic Fangs OD*↓	59.20	6.58	67.57
Nidoran♂	Poison Sting + *Horn Attack*	59.20	6.58	67.57
Nidorino	Poison Sting + *Horn Attack*	59.20	6.58	67.57
Klinklang	*Thunder Shock* + Mirror Shot 30%OA↓	58.00	6.44	72.41
Stunfisk	Thunder Shock + *Muddy Water 30%OA*↓	54.20	6.02	64.58
Beedrill	Poison Sting + Fell Stinger A↑	43.20	4.80	55.56
Vespiquen	*Poison Sting* + Fell Stinger A↑	40.00	4.44	60.00
Drapion	Poison Sting + *Fell Stinger A*↑	39.20	4.36	51.02
Mawile	Fairy Wind + *Power-Up Punch A*↑	39.20	4.36	51.02
Qwilfish	Poison Sting + *Fell Stinger A*↑	39.20	4.36	51.02
Togedemaru	Thunder Shock + *Fell Stinger A*↑	39.20	4.36	51.02
Medicham	Psycho Cut + Power-Up Punch A↑	38.40	4.27	62.50

Table 7.10: Fastest (9 turn) attack cycles

7.6 Technical Machines

Four kinds of Technical Machines (TMs) allow a Pokémon to change its attacks outside of battle. There are fast and charged TMs, and Elite variants of each. The normal version of TMs select a random new move from the Pokémon's attack set (though a charged TM will not replace a charged attack with one the Pokémon already knows). If the Pokémon knows two charged attacks, the Trainer can choose which attack is replaced. The Elite variants allow the new attack to be chosen, and allow learning (most) exclusive moves. Exclusive attacks can otherwise be acquired only during special events. Some exclusive attacks (Table 7.12) cannot be acquired even with an Elite TM; the Pokémon must either be captured with the attack, receive it during evolution, or receive it during form change. Such attacks do not show up as options in the Pokédex battle info section. Outside of Team GO Rocket "Taken Over" events, the Frustration charged attack cannot be changed, even with an Elite TM. During these events, a regular charged TM will suffice to replace Frustration. Purified Pokémon can change Return at any time, but it can never be learned again.

Pokémon	Attack
Chansey	Psybeam
Lugia	Aeroblast+
Ho-Oh	Sacred Fire+
Tapu Koko	Zap Cannon
Palkia	Spacial Rend
Dialga	Roar of Time
Rayquaza	Dragon Ascent
White Kyurem	Ice Burn
Black Kyurem	Freeze Shock
Dawn Wings Necrozma	Moongeist Beam
Dusk Mane Necrozma	Sunsteel Strike
Crowned Sword Zacian	Behemoth Blade
Crowned Shield Zamazenta	Behemoth Bash

Table 7.12: Exclusive attacks beyond Elite TMs

Pokémon	Attack	Pokémon	Attack
Charmeleon	Scratch	Charizard	Wing Attack
Charizard	Ember	Charizard	Dragon Breath
Butterfree	Bug Bite	Beedrill	Bug Bite
Pidgeot	Wing Attack	Pidgeot	Gust
Pikachu	Present	Alolan Sandslash	Shadow Claw
Nidoking	Fury Cutter	Clefable	Pound
Ninetales	Ember	Parasect	Bug Bite
Venomoth	Bug Bite	Primeape	Karate Chop
Arcanine	Bite	Poliwrath	Counter
Alakazam	Counter	Machop	Low Kick
Machamp	Karate Chop	Weepinbell	Razor Leaf
Victreebel	Magical Leaf	Alolan Golem	Rollout
Rapidash	Ember	Farfetch'd	Cut
Seel	Water Gun	Dewgong	Ice Shard
Muk	Lick	Gastly	Sucker Punch
Haunter	Lick	Gengar	Lick
Kingler	Mud Shot	Electrode	Tackle
Exeggutor	Zen Headbutt	Hitmonchan	Rock Smash
Seaking	Poison Jab	Starmie	Tackle
Scyther	Steel Wing	Jynx	Pound
Gyarados	Dragon Tail	Lapras	Ice Shard
Omastar	Rock Throw	Kabutops	Fury Cutter
Snorlax	Yawn	Zapdos	Thunder Shock
Feraligatr	Water Gun	Togepi	Zen Headbutt
Togetic	Zen Headbutt	Togetic	Steel Wing
Kingdra	Water Gun	Smoochum	Frost Breath
Suicune	Hidden Power	Tyranitar	Smack Down
Celebi	Magical Leaf	Shiftry	Bullet Seed
Shedinja	Struggle Bug	Walrein	Powder Snow
Staraptor	Gust	Roserade	Bullet Seed
Lucario	Force Palm	Leafeon	Bullet Seed
Leavanny	Shadow Claw	Eelektross	Volt Switch
Talonflame	Incinerate	Xerneas	Geomancy
Charjabug	Volt Switch	Vikavolt	Volt Switch

Table 7.13: Exclusive fast moves

8 Species and forms

Pokémon are partitioned into species. Each species is identified by its own Pokédex number. We will see that this number is the only thing guaranteed to be shared among all the population of a species.

Appendix B has instructions for interpreting form cards.

8.1 Forms

Some species boast multiple forms and genders, all sharing one common Pokédex entry. Form can be a mere visual distinction, but it is sometimes reflected in different stats, attacks, and/or typing. All Pokémon of a form share Attack (ATK), Defense (DEF), and Stamina (STA) base statistics. These statistics are always positive integers.

Mysterious energies power temporary and persistent changes of form. Dynamax and Gigantamax forms operate on the scale of attacks (section 8.1). Mega and Primal forms are assumed for hours (section 8.1). Fused and Crowned forms persist until explicitly undone. Regional variants are also seen: Alolan, Galarian, Hisuian, and Paldean. Gender differentiation is typically small changes to appearance or call, but it affects a few evolutionary paths (Table 8.1). Meowstic and Indeedee have different possible attacks based on their gender, Oinkologne genders have different stats, and Nidoran two entirely different species: "Nidoran♂" and "Nidoran♀" (I have Questions about Nidoran biology).

Base	Requirements	Result
Female Combee	50 Combee	Vespiquen
Female Salandit	50 Salandit	Salazzle
Female Snorunt	100 Snorunt +	Froslass
Male Snorunt	100 Snorunt	Glalie
Female Kirlia	100 Ralts	Gardevoir
Male Kirlia	100 Ralts +	Gallade
Female Burmy	50 Burmy	Wormadam
Male Burmy	50 Burmy	Mothim

Table 8.1: Certain evolution paths depend on gender. Note that male Combees and male Salandits cannot evolve.

Level	Evols	Rest days	Cost	Bonuses
0	0	14	100%	1 Candy
1	1	7	20%	1 Candy
2	7	5	10%	1 Candy 10% Candy XL chance 50 XP
3	30	3	5%	2 Candy 35% Candy XL chance 100 XP

Table 8.2: Mega evolution and Primal reversion levels

Mega and Primal forms

Mega Evolution and Primal Reversion are almost equivalent; where I write Mega, read "Mega (evolution) or Primal (reversion)" unless otherwise noted. Species with corresponding Mega or Primal Energy (no species has both) can take on the relevant form for eight hours. Only one of a Trainer's Pokémon can be in its Mega form at any given time—Mega evolving Pokémon will cause any existing Mega forms to revert. Mega evolution revives and fully heals the evolved Pokémon, and persists across fainting (i.e. the evolved Pokémon can be revived into the Mega form). Fainting does not stop the eight hour counter. When the evolution expires, the Pokémon has a rest period before it can Mega evolve again. Mega Pokémon cannot be used in Max Battles, cannot defend gyms, and cannot be traded while in Mega form. The first evolution of a Pokémon per calendar day counts towards its Mega level, which affects the cost to evolve, the downtime, and bonuses (Table 8.2). Mega levels are reset upon a trade. When actively battling in a raid, Mega Pokémon provide a 30% boost to attacks of aligned type by *other Trainers' Pokémon*, and 10% to unaligned attacks, *except for* Mega Rayquaza and Primal forms, which provide the boost just by being in the raiding party (i.e. they needn't be active)[1]. This boost is never applied to the Trainer's own Pokémon, and they do not stack. Mega forms typically have higher ATK and DEF than their base forms. All three base stats are higher for Primal forms. Only Rayquaza that know Dragon Ascent can Mega evolve.

[1]Just for fun, Mega Rayquaza provides this bonus to Psychic attacks in addition to Flying and Dragon; Primal Groudon adds Grass to its Ground and Fire; Primal Kyogre gives a bonus to Water, Bug, and Electric. Don't blame me, man; I didn't do it.

#0460 Mega Abomasnow — 240 191 207 212.67 211.71

Razor Leaf	2	10.8	4	5.40	2.00
Powder Snow	2	6	8	3.00	4.00
Leafage	2	7.2	8	3.60	4.00
Blizzard		168	-75	2.24	
Icy Wind		72	-45	1.60	OA↓
Energy Ball		108	-55	1.96	10%OD↓
Outrage		*110*	*-60*	*1.83*	
Weather Ball (Ice)		72	-35	2.06	

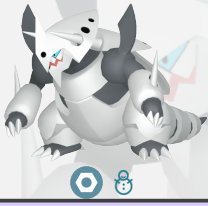
#0359 Mega Absol — 314 130 163 202.33 188.08

Psycho Cut	*2*	*3*	*9*	*1.50*	*4.50*
Snarl	3	6	13	2.00	4.33
Dark Pulse		96	-50	1.92	
Megahorn		*110*	*-55*	*2.00*	
Thunder		*100*	*-60*	*1.67*	
Payback		132	-60	2.20	
Brutal Swing		**66**	**-35**	**1.89**	

#0142 Mega Aerodactyl — 292 210 190 230.67 226.70

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Rock Throw	2	9.6	5	4.80	2.50
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Hyper Beam		*150*	*-80*	*1.88*	
Ancient Power		72	-45	1.60	10%A↑
Rock Slide		90	-45	2.00	
Iron Head		*70*	*-50*	*1.40*	
Earth Power		*90*	*-55*	*1.64*	*10%OD↓*

#0306 Mega Aggron — 247 331 172 250.00 241.37

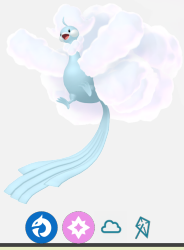


Dragon Tail	*3*	*9*	*12*	*3.00*	*4.00*
Iron Tail	3	12	7	4.00	2.33
Smack Down	*3*	*12*	*8*	*4.00*	*2.67*
Stone Edge		*100*	*-55*	*1.82*	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Thunder		*100*	*-60*	*1.67*	
Heavy Slam		84	-50	1.68	
Meteor Beam		*120*	*-60*	*2.00*	*A↑*

#0065 Mega Alakazam — 367 207 146 240.00 223.01

Psycho Cut	2	3.6	9	1.80	4.50
Confusion	4	19.2	14	4.80	3.50
Counter	**2**	**8**	**6**	**4.00**	**3.00**
Shadow Ball		*100*	*-55*	*1.82*	
Dazzling Gleam		***90***	***-55***	***1.64***	
Psychic		**90**	**-55**	**1.64**	**10%OD↓**
Fire Punch		*60*	*-40*	*1.50*	
Focus Blast		*150*	*-75*	*2.00*	
Future Sight		132	-65	2.03	

#0334 Mega Altaria — 222 218 181 207.00 206.14

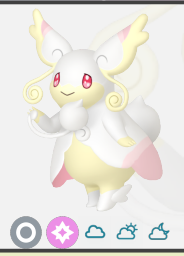


Dragon Breath	1	3.6	4	3.60	4.00
Peck	*2*	*6*	*8*	*3.00*	*4.00*
Flamethrower		*90*	*-55*	*1.64*	
Dragon Pulse		108	-55	1.96	
Dazzling Gleam		108	-55	1.96	
Moonblast		**132**	**-60**	**2.20**	**10%OA↓**
Sky Attack		*75*	*-50*	*1.50*	

#0181 Mega Ampharos — 294 203 207 234.67 231.17

Charge Beam	3	6	11	2.00	3.67
Volt Switch	4	16.8	16	4.20	4.00
Power Gem		*85*	*-50*	*1.70*	
Thunder Punch		72	-40	1.80	
Thunder		120	-60	2.00	
Dragon Pulse		**108**	**-55**	**1.96**	
Focus Blast		*150*	*-75*	*2.00*	
Zap Cannon		180	-80	2.25	33%OA↓
Brutal Swing		*55*	*-35*	*1.57*	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

#0531 Mega Audino — 147 239 230 205.33 200.67



Pound	2	4.8	4	2.40	2.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Hyper Beam		180	-80	2.25	
Disarming Voice		84	-45	1.87	
Dazzling Gleam		108	-55	1.96	
Body Slam		66	-35	1.89	

#0354 Mega Banette — 312 160 162 211.33 200.72

Shadow Claw	2	7.2	8	3.60	4.00
Hex	3	8.4	13	2.80	4.33
Shadow Ball		120	-55	2.18	
Thunder		*100*	*-60*	*1.67*	
Dazzling Gleam		*90*	*-55*	*1.64*	

#0015 Mega Beedrill — 303 148 163 204.67 194.07

Bug Bite	**1**	**4.8**	**3**	**4.80**	**3.00**
Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Infestation	3	7.2	12	2.40	4.00
Aerial Ace		*60*	*-45*	*1.33*	
Drill Run		***80***	***-45***	***1.78***	
Sludge Bomb		96	-50	1.92	
X-Scissor		78	-40	1.95	
Fell Stinger		24	-35	0.69	A↑

#0009 Mega Blastoise — 264 237 188 229.67 227.42

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Flash Cannon		*110*	*-70*	*1.57*	
Ice Beam		*90*	*-55*	*1.64*	
Hydro Pump		156	-75	2.08	
Hydro Cannon		**96**	**-40**	**2.40**	
Skull Bash		*130*	*-75*	*1.73*	D↑

#0257 Mega Blaziken — 329 168 190 229.00 218.99

Counter	2	9.6	6	4.80	3.00
Fire Spin	3	13.2	10	4.40	3.33
Stone Edge		***100***	***-55***	***1.82***	
Focus Blast		180	-75	2.40	
Brave Bird		*130*	*-55*	*2.36*	*D↓3*
Overheat		156	-55	2.84	A↓2
Blast Burn		**132**	**-50**	**2.64**	
Blaze Kick		72	-40	1.80	

#0323 Mega Camerupt ✧ — 253 183 172 202.67 199.69

Ember	2	4.8	9	2.40	4.50
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Incinerate	5	24	20	4.80	4.00
Earthquake		132	-65	2.03	
Solar Beam		*150*	*-80*	*1.88*	
Overheat		156	-55	2.84	A↓2
Earth Power		108	-55	1.96	10%OD↓

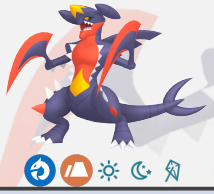
#0719 Mega Diancie ✧ — 342 235 137 238.00 222.47

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Rock Throw	2	9.6	5	4.80	2.50
Rock Slide		90	-45	2.00	
Power Gem		102	-50	2.04	
Moonblast		132	-60	2.20	10%OA↓

#0475 Mega Gallade ✧ — 326 230 169 241.67 233.14

Low Kick	2	4.8	5	2.40	2.50
Psycho Cut	2	3.6	9	1.80	4.50
Confusion	4	19.2	14	4.80	3.50
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Psychic		90	-55	1.64	10%OD↓
Leaf Blade		*70*	*-35*	*2.00*	
Close Combat		120	-45	2.67	D↓2
Synchronoise		**96**	**-50**	**1.92**	

#0445 Mega Garchomp ✧ — 339 222 239 266.67 262.01



Mud Shot	2	4.8	8	2.40	4.00
Dragon Tail	3	10.8	12	3.60	4.00
Earthquake		132	-65	2.03	
Breaking Swipe		60	-50	1.20	OA↓
Fire Blast		*140*	*-80*	*1.75*	
Sand Tomb		30	-40	0.75	OD↓
Outrage		132	-60	2.20	
Earth Power		**108**	**-55**	**1.96**	**10%OD↓**

#0282 Mega Gardevoir — 326 229 169 241.33 232.80

Confusion	4	19.2	14	4.80	3.50
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Charm	3	15.6	8	5.20	2.67
Magical Leaf	*3*	*10*	*10*	*3.33*	*3.33*
Shadow Ball		*100*	*-55*	*1.82*	
Dazzling Gleam		108	-55	1.96	
Psychic		90	-55	1.64	10%OD↓
Synchronoise		**96**	**-50**	**1.92**	
Triple Axel		*60*	*-45*	*1.33*	A↑

#0094 Mega Gengar — 349 199 155 234.33 220.80

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Lick	**1**	**3.6**	**3**	**3.60**	**3.00**
Shadow Claw	2	7.2	8	3.60	4.00
Hex	3	8.4	13	2.80	4.33
Drain Punch		*20*	*-40*	*0.50*	D↑
Dark Pulse		***80***	***-50***	***1.60***	
Shadow Punch		**66**	**-35**	**1.89**	
Shadow Ball		120	-55	2.18	
Sludge Bomb		96	-50	1.92	
Sludge Wave		**132**	**-65**	**2.03**	
Psychic		***75***	***-55***	***1.36***	***10%OD↓***
Focus Blast		*150*	*-75*	*2.00*	

#0362 Mega Glalie — 252 168 190 203.33 200.36

Ice Shard	3	10.8	10	3.60	3.33
Frost Breath	2	8.4	5	4.20	2.50
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Shadow Ball		*100*	*-55*	*1.82*	
Avalanche		108	-45	2.40	
Gyro Ball		*80*	*-50*	*1.60*	

#0130 Mega Gyarados — 292 247 216 251.67 249.75

Bite	1	4.8	2	4.80	2.00
Dragon Breath	*1*	*3*	*4*	*3.00*	*4.00*
Dragon Tail	**3**	**9**	**12**	**3.00**	**4.00**
Waterfall	3	14.4	8	4.80	2.67
Aqua Tail		**66**	**-35**	**1.89**	
Twister		*45*	*-45*	*1.00*	
Dragon Pulse		***90***	***-55***	***1.64***	
Hydro Pump		156	-75	2.08	
Outrage		*110*	*-60*	*1.83*	
Crunch		84	-45	1.87	20%OD↓

#0214 Mega Heracross ✧ — 334 223 190 249.00 241.88

Counter	2	9.6	6	4.80	3.00
Struggle Bug	3	10.8	8	3.60	2.67
Megahorn		132	-55	2.40	
Earthquake		*110*	*-65*	*1.69*	
Close Combat		120	-45	2.67	D↓2
Rock Blast		*50*	*-40*	*1.25*	
Upper Hand		84	-40	2.10	30%OD↓

#0229 Mega Houndoom ✧ — 289 194 181 221.33 216.50

Fire Fang	2	9.6	6	4.80	3.00
Snarl	3	6	13	2.00	4.33
Flamethrower		108	-55	1.96	
Fire Blast		168	-80	2.10	
Crunch		84	-45	1.87	20%OD↓
Foul Play		72	-40	1.80	

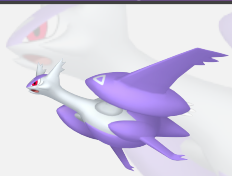
#0115 Mega Kangaskhan ✧ — 246 210 233 229.67 229.18

Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Earthquake		*110*	*-65*	*1.69*	
Brick Break		***40***	***-40***	***1.00***	***OD↓***
Stomp		**66**	**-40**	**1.65**	
Outrage		*110*	*-60*	*1.83*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Power-Up Punch		*20*	*-35*	*0.57*	*A↑*

#0380 Mega Latias ✧ — 289 297 190 258.67 253.59

Dragon Breath	1	3.6	4	3.60	4.00
Zen Headbutt	3	9.6	6	3.20	2.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Aura Sphere		*80*	*-40*	*2.00*	
Thunder		*100*	*-60*	*1.67*	
Psychic		90	-55	1.64	10%OD↓
Outrage		132	-60	2.20	
Mist Ball		**144**	**-60**	**2.40**	**50%OA↓**

#0381 Mega Latios ✧ — 335 241 190 255.33 248.47



Dragon Breath	1	3.6	4	3.60	4.00
Zen Headbutt	3	9.6	6	3.20	2.00
Dragon Claw		96	-50	1.92	
Aura Sphere		*80*	*-40*	*2.00*	
Psychic		90	-55	1.64	10%OD↓
Solar Beam		*150*	*-80*	*1.88*	
Luster Purge		**144**	**-60**	**2.40**	**50%OD↓**

#0428 Mega Lopunny ✧ — 282 214 163 219.67 214.26

Low Kick	2	4.8	5	2.40	2.50
Pound	2	4.8	4	2.40	2.00
Double Kick	3	9.6	12	3.20	4.00
Hyper Beam		180	-80	2.25	
Fire Punch		*60*	*-40*	*1.50*	
Focus Blast		180	-75	2.40	
Triple Axel		*60*	*-45*	*1.33*	A↑

#0448 Mega Lucario ✧ — 310 175 172 219.00 210.53

Bullet Punch	2	9.6	7	4.80	3.50
Counter	2	9.6	6	4.80	3.00
Force Palm	**3**	**15.6**	**10**	**5.20**	**3.33**
Flash Cannon		132	-70	1.89	
Shadow Ball		*100*	*-55*	*1.82*	
Thunder Punch		*60*	*-40*	*1.50*	
Close Combat		120	-45	2.67	D↓2
Blaze Kick		*60*	*-40*	*1.50*	
Power-Up Punch		24	-35	0.69	A↑
Aura Sphere		96	-40	2.40	

#0310 Mega Manectric ✧ — 286 179 172 212.33 206.50

Charge Beam	3	6	11	2.00	3.67
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Thunder Fang	2	9.6	6	4.80	3.00
Thunder		120	-60	2.00	
Flame Burst		*70*	*-55*	*1.27*	
Wild Charge		120	-45	2.67	D↓2
Overheat		*130*	*-55*	*2.36*	A↓2
Psychic Fangs		*40*	*-35*	*1.14*	OD↓

#0303 Mega Mawile — 188 217 137 180.67 177.46

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Fire Fang	*2*	*8*	*6*	*4.00*	*3.00*
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Ice Fang	*2*	*8*	*6*	*4.00*	*3.00*
Fairy Wind	2	4.8	9	2.40	4.50
Vise Grip		*40*	*-40*	*1.00*	
Iron Head		84	-50	1.68	
Play Rough		108	-60	1.80	
Power-Up Punch		*20*	*-35*	*0.57*	*A↑*

#0308 Mega Medicham — 205 179 155 179.67 178.50

Psycho Cut	2	3.6	9	1.80	4.50
Counter	2	9.6	6	4.80	3.00
Ice Punch		*60*	*-40*	*1.50*	
Psychic		90	-55	1.64	10%OD↓
Dynamic Punch		108	-45	2.40	
Power-Up Punch		24	-35	0.69	A↑

#0376 Mega Metagross — 300 289 190 259.67 254.44

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Bullet Punch	2	9.6	7	4.80	3.50
Zen Headbutt	3	9.6	6	3.20	2.00
Earthquake		*110*	*-65*	*1.69*	
Flash Cannon		132	-70	1.89	
Psychic		90	-55	1.64	10%OD↓
Meteor Mash		**120**	**-50**	**2.40**	

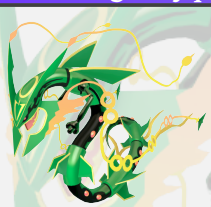
#0018 Mega Pidgeot — 280 175 195 216.67 212.20

Air Slash	3	10.8	9	3.60	3.00
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Wing Attack	**2**	**6**	**7**	**3.00**	**3.50**
Gust	**4**	**19.2**	**12**	**4.80**	**3.00**
Hurricane		132	-65	2.03	
Aerial Ace		72	-45	1.60	
Brave Bird		156	-55	2.84	D↓3
Feather Dance		42	-50	0.84	OA↓2
Air Cutter		**54**	**-35**	**1.54**	**30%A↑**

#0127 Mega Pinsir — 305 231 163 233.00 225.61

Fury Cutter	1	3.6	4	3.60	4.00
Bug Bite	1	4.8	3	4.80	3.00
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Vise Grip		*40*	*-40*	*1.00*	
Submission		***60***	***-50***	***1.20***	
X-Scissor		78	-40	1.95	
Close Combat		*100*	*-45*	*2.22*	*D↓2*
Superpower		*85*	*-40*	*2.12*	*A+D↓*

#0384 Mega Rayquaza — 377 210 227 271.33 261.94



Dragon Tail	3	10.8	12	3.60	4.00
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Hurricane		**132**	**-65**	**2.03**	
Outrage		132	-60	2.20	
Breaking Swipe		**60**	**-50**	**1.20**	**OA↓**
Dragon Ascent		**180**	**-70**	**2.57**	**D↓**

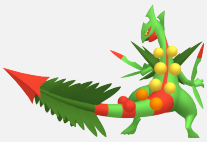
#0302 Mega Sableye — 151 216 137 168.00 164.71

Shadow Claw	2	7.2	8	3.60	4.00
Feint Attack	2	7.2	6	3.60	3.00
Drain Punch		*20*	*-40*	*0.50*	*D↑*
Power Gem		*85*	*-50*	*1.70*	
Shadow Sneak		60	-45	1.33	
Dazzling Gleam		*90*	*-55*	*1.64*	
Foul Play		72	-40	1.80	

#0373 Mega Salamence — 310 251 216 259.00 256.15

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Fire Fang	*2*	*8*	*6*	*4.00*	*3.00*
Dragon Tail	3	10.8	12	3.60	4.00
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Fire Blast		*140*	*-80*	*1.75*	
Brutal Swing		*55*	*-35*	*1.57*	
Hydro Pump		*130*	*-75*	*1.73*	
Outrage		**132**	**-60**	**2.20**	
Draco Meteor		180	-65	2.77	A↓2
Fly		96	-45	2.13	

#0254 Mega Sceptile — 320 186 172 226.00 217.14



Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Bullet Seed	3	6	13	2.00	4.33
Earthquake		*110*	*-65*	*1.69*	
Aerial Ace		*60*	*-45*	*1.33*	
Dragon Claw		96	-50	1.92	
Leaf Blade		84	-35	2.40	
Frenzy Plant		**120**	**-45**	**2.67**	
Breaking Swipe		60	-50	1.20	OA↓

#0212 Mega Scizor — 279 250 172 233.67 228.92

Fury Cutter	1	3.6	4	3.60	4.00
Bullet Punch	2	9.6	7	4.80	3.50
Night Slash		*50*	*-35*	*1.43*	
Iron Head		84	-50	1.68	
X-Scissor		78	-40	1.95	
Trailblaze		*65*	*-45*	*1.44*	A↑

#0319 Mega Sharpedo — 289 144 172 201.67 192.72

Bite	1	4.8	2	4.80	2.00
Waterfall	3	14.4	8	4.80	2.67
Poison Fang		*45*	*-40*	*1.12*	OD↓
Hydro Pump		156	-75	2.08	
Crunch		84	-45	1.87	20%OD↓

#0080 Mega Slowbro — 224 259 216 233.00 232.27

Water Gun	1	3.6	3	3.60	3.00
Confusion	4	19.2	14	4.80	3.50
Drain Punch		*20*	*-40*	*0.50*	D↑
Ice Beam		*90*	*-55*	*1.64*	
Water Pulse		96	-50	1.92	
Scald		102	-50	2.04	30%OA↓
Psychic		90	-55	1.64	10%OD↓
Surf		**90**	**-45**	**2.00**	

#0208 Mega Steelix ✧ — 212 327 181 240.00 232.37

Dragon Tail	*3*	*9*	*12*	*3.00*	*4.00*
Iron Tail	3	12	7	4.00	2.33
Thunder Fang	*2*	*8*	*6*	*4.00*	*3.00*
Earthquake		132	-65	2.03	
Heavy Slam		84	-50	1.68	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Psychic Fangs		*40*	*-35*	*1.14*	*OD↓*
Breaking Swipe		*50*	*-50*	*1.00*	*OA↓*

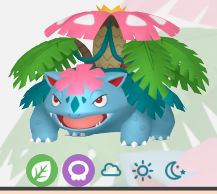
#0260 Mega Swampert ✧ — 283 218 225 242.00 240.33

Mud Shot	2	4.8	8	2.40	4.00
Water Gun	1	3.6	3	3.60	3.00
Sludge		*70*	*-40*	*1.75*	
Earthquake		132	-65	2.03	
Sludge Wave		*110*	*-65*	*1.69*	
Surf		90	-45	2.00	
Hydro Cannon		**96**	**-40**	**2.40**	
Muddy Water		42	-35	1.20	30%OA↓

#0248 Mega Tyranitar ✧ — 309 276 225 270.00 267.72

Bite	1	4.8	2	4.80	2.00
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Smack Down	**3**	**14.4**	**8**	**4.80**	**2.67**
Stone Edge		120	-55	2.18	
Fire Blast		*140*	*-80*	*1.75*	
Crunch		84	-45	1.87	20%OD↓
Brutal Swing		66	-35	1.89	

#0003 Mega Venusaur ✧ — 241 246 190 225.67 224.17



Vine Whip	2	6	8	3.00	4.00
Razor Leaf	2	10.8	4	5.40	2.00
Petal Blizzard		132	-65	2.03	
Sludge		84	-40	2.10	
Sludge Bomb		96	-50	1.92	
Solar Beam		180	-80	2.25	
Frenzy Plant		**120**	**-45**	**2.67**	

#0006 Mega X Charizard — 273 213 186 224.00 221.15

Air Slash	*3*	*9*	*9*	*3.00*	*3.00*
Fire Spin	3	13.2	10	4.40	3.33
Wing Attack	**2**	**5**	**7**	**2.50**	**3.50**
Ember	**2**	**4.8**	**9**	**2.40**	**4.50**
Dragon Breath	**1**	**3.6**	**4**	**3.60**	**4.00**
Air Cutter		*45*	*-35*	*1.29*	*30%A↑*
Fire Blast		168	-80	2.10	
Overheat		156	-55	2.84	A↓2
Dragon Claw		96	-50	1.92	
Blast Burn		**132**	**-50**	**2.64**	
Flamethrower		**108**	**-55**	**1.96**	

#0006 Mega Y Charizard — 319 212 186 239.00 232.57

Air Slash	3	10.8	9	3.60	3.00
Fire Spin	3	13.2	10	4.40	3.33
Wing Attack	**2**	**6**	**7**	**3.00**	**3.50**
Ember	**2**	**4.8**	**9**	**2.40**	**4.50**
Dragon Breath	**1**	**3**	**4**	**3.00**	**4.00**
Air Cutter		54	-35	1.54	30%A↑
Fire Blast		168	-80	2.10	
Overheat		156	-55	2.84	A↓2
Dragon Claw		*80*	*-50*	*1.60*	
Blast Burn		**132**	**-50**	**2.64**	
Flamethrower		**108**	**-55**	**1.96**	

#0383 Primal Groudon — 353 268 218 279.67 274.23

Mud Shot	2	4.8	8	2.40	4.00
Dragon Tail	*3*	*9*	*12*	*3.00*	*4.00*
Earthquake		132	-65	2.03	
Fire Blast		168	-80	2.10	
Fire Punch		**72**	**-40**	**1.80**	
Solar Beam		*150*	*-80*	*1.88*	
Precipice Blades		**156**	**-60**	**2.60**	

#0382 Primal Kyogre — 353 268 218 279.67 274.23

Waterfall	3	14.4	8	4.80	2.67
Blizzard		*140*	*-75*	*1.87*	
Thunder		*100*	*-60*	*1.67*	
Hydro Pump		156	-75	2.08	
Surf		90	-45	2.00	
Origin Pulse		**156**	**-60**	**2.60**	

#0009 Gmax Blastoise — 171 207 188 188.67 188.09

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Flash Cannon		*110*	*-70*	*1.57*	
Ice Beam		*90*	*-55*	*1.64*	
Hydro Pump		156	-75	2.08	
Hydro Cannon		**96**	**-40**	**2.40**	
Skull Bash		*130*	*-75*	*1.73*	*D↑*

G-Max Cannonade

#0012 Gmax Butterfree — 167 137 155 153.00 152.50

Bug Bite	**1**	**4.8**	**3**	**4.80**	**3.00**
Confusion	*4*	*16*	*14*	*4.00*	*3.50*
Struggle Bug	3	10.8	8	3.60	2.67
Bug Buzz		120	-60	2.00	30%OD↓
Signal Beam		90	-55	1.64	20%OA+D↓
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

G-Max Befuddle

#0006 Gmax Charizard — 223 173 186 194.00 192.88

Air Slash	3	10.8	9	3.60	3.00
Fire Spin	3	13.2	10	4.40	3.33
Wing Attack	**2**	**6**	**7**	**3.00**	**3.50**
Ember	**2**	**4.8**	**9**	**2.40**	**4.50**
Dragon Breath	**1**	**3**	**4**	**3.00**	**4.00**
Air Cutter		54	-35	1.54	30%A↑
Fire Blast		168	-80	2.10	
Overheat		156	-55	2.84	A↓2
Dragon Claw		*80*	*-50*	*1.60*	
Blast Burn		**132**	**-50**	**2.64**	
Flamethrower		**108**	**-55**	**1.96**	

G-Max Wildfire

#0815 Gmax Cinderace — 238 163 190 197.00 194.61

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑
Focus Blast		*150*	*-75*	*2.00*	

G-Max Fireball

#0133 Gmax Eevee — 104 114 146 121.33 120.07

Quick Attack	2	6	8	3.00	4.00
Tackle	1	3.6	3	3.60	3.00
Dig		*70*	*-50*	*1.40*	
Swift		66	-35	1.89	
Body Slam		**66**	**-35**	**1.89**	
Last Resort		**108**	**-55**	**1.96**	

G-Max Cuddle

#0569 Gmax Garbodor — 181 164 190 178.33 178.00

Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Seed Bomb		*55*	*-40*	*1.38*	
Gunk Shot		156	-75	2.08	
Body Slam		*55*	*-35*	*1.57*	
Acid Spray		24	-45	0.53	OD↓2

G-Max Malodor

#0094 Gmax Gengar — 261 149 155 188.33 181.99

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Lick	**1**	**3.6**	**3**	**3.60**	**3.00**
Shadow Claw	2	7.2	8	3.60	4.00
Hex	3	8.4	13	2.80	4.33
Drain Punch		*20*	*-40*	*0.50*	*D↑*
Dark Pulse		***80***	***-50***	***1.60***	
Shadow Punch		**66**	**-35**	**1.89**	
Shadow Ball		120	-55	2.18	
Sludge Bomb		96	-50	1.92	
Sludge Wave		**132**	**-65**	**2.03**	
Psychic		***75***	***-55***	***1.36***	***10%OD↓***
Focus Blast		*150*	*-75*	*2.00*	

G-Max Terror

#0858 Gmax Hatterene — 237 182 149 189.33 185.92

Psycho Cut	2	3.6	9	1.80	4.50
Confusion	4	19.2	14	4.80	3.50
Charm	3	15.6	8	5.20	2.67
Psyshock		84	-40	2.10	
Dazzling Gleam		108	-55	1.96	
Psychic		90	-55	1.64	10%OD↓
Power Whip		*90*	*-50*	*1.80*	

G-Max Smite

#0818 Gmax Inteleon — 262 142 172 192.00 185.65

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Shadow Ball		*100*	*-55*	*1.82*	
Water Pulse		96	-50	1.92	
Surf		90	-45	2.00	

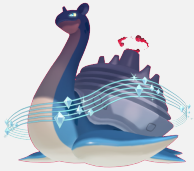
G-Max Hydrosnipe

#0099 Gmax Kingler — 240 181 146 189.00 185.10

Mud Shot	**2**	**4**	**8**	**2.00**	**4.00**
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Bubble	3	9.6	11	3.20	3.67
Vise Grip		*40*	*-40*	*1.00*	
X-Scissor		*65*	*-40*	*1.62*	
Water Pulse		96	-50	1.92	
Crabhammer		102	-50	2.04	12.5%A↑2
Razor Shell		42	-35	1.20	50%OD↓

G-Max Foam Burst

#0131 Gmax Lapras — 165 174 277 205.33 199.60



Ice Shard	**3**	**10.8**	**10**	**3.60**	**3.33**
Frost Breath	2	8.4	5	4.20	2.50
Water Gun	1	3.6	3	3.60	3.00
Psywave	*1*	*3*	*4*	*3.00*	*4.00*
Ice Beam		**108**	**-55**	**1.96**	
Blizzard		168	-75	2.24	
Dragon Pulse		***90***	***-55***	***1.64***	
Hydro Pump		156	-75	2.08	
Surf		90	-45	2.00	
Skull Bash		*130*	*-75*	*1.73*	D↑
Sparkling Aria		96	-45	2.13	

G-Max Resonance

#0068 Gmax Machamp — 234 159 207 200.00 197.48

Karate Chop	**2**	**6**	**9**	**3.00**	**4.50**
Bullet Punch	*2*	*8*	*7*	*4.00*	*3.50*
Counter	2	9.6	6	4.80	3.00
Cross Chop		66	-35	1.89	
Stone Edge		***100***	***-55***	***1.82***	
Submission		**72**	**-50**	**1.44**	
Rock Slide		*75*	*-45*	*1.67*	
Close Combat		120	-45	2.67	D↓2
Dynamic Punch		108	-45	2.40	
Heavy Slam		*70*	*-50*	*1.40*	
Payback		***110***	***-60***	***1.83***	

G-Max Chi Strike

#0812 Gmax Rillaboom — 239 168 225 210.67 208.27

Razor Leaf	2	10.8	4	5.40	2.00
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓
Earth Power		*90*	*-55*	*1.64*	*10%OD↓*

G-Max Drum Solo

#0143 Gmax Snorlax — 190 169 330 229.67 219.64

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Yawn	**4**	**0**	**12**	**0.00**	**3.00**
Hyper Beam		180	-80	2.25	
Earthquake		*110*	*-65*	*1.69*	
Body Slam		66	-35	1.89	
Heavy Slam		*70*	*-50*	*1.40*	
Outrage		*110*	*-60*	*1.83*	
Skull Bash		156	-75	2.08	D↑
Superpower		*85*	*-40*	*2.12*	*A+D↓*

G-Max Replenish

#0849 Gmax Toxtricity — 224 140 181 181.67 178.38

Spark	2	6	7	3.00	3.50
Poison Jab	2	8.4	7	4.20	3.50
Acid	2	7.2	8	3.60	4.00
Discharge		66	-40	1.65	
Wild Charge		120	-45	2.67	D↓2
Acid Spray		24	-45	0.53	OD↓2
Power-Up Punch		*20*	*-35*	*0.57*	*A↑*

G-Max Stun Shock

#0003 Gmax Venusaur — 198 189 190 192.33 192.29

Vine Whip	2	6	8	3.00	4.00
Razor Leaf	2	10.8	4	5.40	2.00
Petal Blizzard		132	-65	2.03	
Sludge		84	-40	2.10	
Sludge Bomb		96	-50	1.92	
Solar Beam		180	-80	2.25	
Frenzy Plant		**120**	**-45**	**2.67**	

G-Max Vine Lash

Dynamax and Gigantamax forms

Dynamax and Gigantamax Pokémon can participate in Max Battles (section 10.6), as can Eternatus, and—when Crowned—Zacian and Zamazenta. There are no stat or type changes. Normally acquired in Research, Max Battles, or via trade, Dynamax Pokémon also spawn around Power Stops with installed Gigantamax Pokémon. They have access to three Max Moves: Max Attack, Max Guard, and Max Spirit. Max Moves have four levels: Locked, 1, 2, and 3. A freshly acquired Maxable Pokémon has Max Attack at level 1, while Max Guard and Max Spirit are both locked. Unlocking and upgrading moves costs Max Particles and Candy (or Candy XL, for Level 3) of the Pokémon's family (Table 10.10); the amount of Candy depends on the Pokémon's cost group (section 8.1). The Crowned forms require Stardust instead of Max Particles. Eternatus has its own cost schedule, requiring the same numbers of Max Particles, but unlocking costs 400 Candy, Level 2 runs 1200 Candy, and Level 3 is an absolutely punishing 1200 Candy plus 320 Candy XL. There are eighteen Max Attacks, one for each type, and the Max Attack known by a Dynamax Pokémon matches its fast attack (Hidden Power always matches up with Max Strike). Max Attacks of level 1, 2, and 3 have power 250, 300, and 350 respectively. Gigantamax Pokémon instead know a species-specific G-Max attack which cannot change. Max Move levels persist across evolution and use of Fast TMs, but are reset in a trade. G-Max attacks have power of 350, 400, and 450, 100 more than Dynamax attacks of the same level. Max Guard bestows a protective shield (the Guard) on all active Pokémon with fewer than three Guards. This Guard will absorb 20, 40, or 60 points of damage, depending on Max Guard's level. Max Spirit restores HP to active Pokémon. The amount restored is a percentage of each affected Pokémon's MHP; the percentage (8%, 12%, or 16%) is based on Max Spirit's level.

Crowned forms

Crowning is a reversible, persistent evolution available to Zacian and Zamazenta so long as they know the charged attack Iron Head. Upon coronation, stats are modified, and Iron Head is replaced with Behemoth Blade (Zacian) or Behemoth Bash (Zamazenta). This new attack cannot be changed with even an Elite Charged TM. A Crowned form can fight in Max Battles (though it *cannot* be left at Power Stops), with Behemoth Blade/Bash as its Max Attack. This Max Attack follows the same rules for leveling, power, and other Dynamax attacks, except leveling consumes Stardust (25k, 50k, and 100k) rather than Max Particles. Crowning consumes 1,000 Crown Energy, but once a Pokémon has

been crowned, that Pokémon can freely change between the base and crowned forms[2], even if traded. Crowned Shield Zamazenta can stack four Guards rather than the typical three. If it has Max Guard unlocked, it starts Max Battles with one Guard already in place.

Fused forms

Certain Pokémon can be reversibly fused, yielding a new form. The fusion process requires 1,000 units of Fusion Energy particular to the output[3], and 30 Candy of each input species (Table 8.3). There is no cost to undo the fusion, but subsequent fusions cost the same amount as the initial fusion. Any powering up performed on the fused form will apply only to the primary Pokémon if the fusion is undone, the fused form's IV is taken from the primary Pokémon, and fusion replaces the first charged attack of the primary Pokémon.

Primary	Secondary	Energy	Output	Attack
Kyurem	Zekrom	Volt	Black Kyurem	Freeze Shock
Kyurem	Reshiram	Blaze	White Kyurem	Ice Burn
Necrozma	Solgaleo	Solar	Dusk Mane Necrozma	Sunsteel Strike
Necrozma	Lunala	Lunar	Dawn Wings Necrozma	Moongeist Beam

Table 8.3: Fusion paths and special charged attacks

Zygarde

Zygarde is received from research in its "10%" form. "Zygarde Cells" are found on Routes, and can be stored in the Zygarde Cube (received at the same time as Zygarde 10%). The Cube can hold up to 300 cells, and cannot be removed from the bag. Neither the Cube nor Cells count against bag limits. Up to three cells can be collected per calendar day (more than three can spawn). A route will not necessarily present a cell. Cells are only generated the first time a route is taken each day, and more than one per route is very rare. Cells usually show up near the end of a route, and disappear if the route is marked complete. It can change to a "50%" form for 50 Cells, and a subsequent "Complete" form for 200 more Cells, all with different stats (but the same attacks). Both forms are reversible, at the cost of 10 Zygarde Candy and 2,000 Stardust each.

[2] I'm not sure why one would uncrown. Perhaps to change charged attacks? Eliminate Steel typing? Drop CP under a limit? Most likely to trade the Pokémon.

[3] They all kinda sound like Mountain Dew flavors.

Hoopa

The Mythical Pokémon Hoopa has two forms: Confined and Unbound. They have different typing (Ghost+Psychic and Dark+Psychic) and stats, and Hoopa Unbound can learn Dark Pulse in place of Hoopa Confined's Psybeam. Unbinding costs 50 Hoopa Candy and 10,000 Stardust. Confining is a relative bargain at 10 Hoopa Candy and 2,000 Stardust.

Shaymin

Shaymin's Sky form has the same attacks as its Land form, but adds Flying to its typing. Conversion between forms is 25 Shaymin Candy and 10,000 Stardust either way.

Palkia, Dialga, and Giratina

Each Pokémon of Myth has an "Origin" form with different stats and attacks, including (in the cases of Palkia and Dialga) a signature attack with an Adventure Effect (section 7.2). Origin Forme Giratina and Altered Forme Giratina can both learn the signature elite attack Shadow Force. Origin Forme Palkia can know Spacial Rend, and Origin Forme Dialga Roar of Time, but these attacks are not yet available via Elite Charged TM—the Pokémon must know these attacks when caught.

Cherrim

Cherrim's Sunshine form normally spawns only in sunlight. Its Overcast form spawns otherwise. Only the Sunshine form knows the Weather Ball attack. Both forms, incidentally, are boosted by clear weather. Cherubi's evolution is random.

Rotom

Rotom is Electric+Ghost, but its Heat, Wash, Fan, Frost, and Mow forms combine Electric with Fire, Water, Flying, Ice, and Grass respectively. The five variants all have 204 ATK and 219 DEF, compared to Rotom's 185 and 159 (all share 137 STA). Rotom and Mow Rotom have the same attacks, but Heat, Wash, and Frost trade Overheat, Hydro Pump, and Blizzard for Ominous Wind, while Fan Rotom can learn Air Slash instead of Thunder Shock.

Burmy

Burmy has three "cloaks", varying only in appearance: Plant, Sandy, and Trash. The corresponding Wormadam evolutions have different typing, different attacks, and—in the case of Trash—different stats.

Castform

Castform has four weather-specific forms. Under sunshine, it spawns its Sunny form. Rain favors its Rain form, and I'll give you three guesses as to its Snowy form. These have Fire, Water, and Ice monotyping respectively. Otherwise, Castform spawns as its Normal type. All have the fast attack Tackle, and the appropriate variant of the charged attack Weather Ball. Each also has its own attacks.

Deoxys

Deoxys has three alternate forms: Defense, Attack, and Speed. The Defense and Attack forms are heavily weighted towards DEF and ATK, respectively. The normal form is also ATK-heavy, but not so much as Attack. The Speed form is the most balanced of the four. All can learn Zen Headbutt and Psycho Boost, but their attacks are otherwise somewhat distinct.

Rockruff and Lycanroc

Rockruff does not have distinguished forms in the Pokédex, but any given Rockruff can either evolve into Dusk Form Lycanroc, or (depending on time of day) either of Midday or Midnight Form Lycanroc. The three Lycanroc forms share typing, but have different stats and attacks.

Furfrou, Spinda, and Unown

Easily my most despised Pokémon, Furfrou has many forms. Some are event-specific. Some are region-specific. All are worthless. Should one for some reason wish to do so, a Trainer can change Furfrou's form at any time for 25 Furfrou Candy and 10,000 Stardust. Furfrou at least has the decency to be easily caught, unlike the contemptible Unown. Unown has 28 forms: one for each letter of the Latin alphabet, and two (supposedly '!' and '?') resembling deformed sperm. In a grim future Trainers hunt new Unown, trading Shiny Octothorpes and Crowned Interrobangs and Mega U+03CC GREEK SMALL LETTER OMICRON WITH TONOS.

Group	2nd move	Max 1	Max 2	Max 3	Km	Purify
1	10k + 25	50	100	40 XL	1	
Shadow	12k + 30				1	1k + 1
Purified	8k + 8				1	
2	50k + 50	60	110	45 XL	3	
Shadow	60k + 60				3	3k + 3
Purified	48k + 48				3	
3	75k + 75	70	120	50 XL	5	
Shadow	90k + 90				5	5k + 5
Purified	60k + 60				5	
4	100k + 100	80	130	55 XL	20	
Shadow	120k + 120				20	20k + 20
Purified	80k + 80				20	

Table 8.4: Costs for the four groups

Spinda has twenty visually distinct forms, but only nine have been released. With bated breath we await the other eleven.

Cost groups

Each species is in one of four cost groups. Group membership determines the cost of learning a second charged move, upgrading Max Moves (section 8.1), walk distance for Candy, and purification. All Legendary and Mythical Pokémon are in group 4 (the most expensive group). Evolution requirements are more complex.

8.2 Evolution

Under the correct conditions, some species can evolve into others. We call the set of Pokémon related by evolution operations a family. Change of form is not an evolution, since the species and Pokédex number remain the same. We call a Pokémon that has undergone N evolutions a Stage $N + 1$ Pokémon. No Pokémon of Stage 4 or higher exist. Evolution (unlike some form changes) is irreversible. Evolution does not necessarily preserve typing, i.e. typing is not always constant within a family (Table 8.5)[4].

Evolution	Evolution

[4]It is interesting that Sharpedo changes from Water+Dark to Mega Sharpedo's Dark+Water, a functionally equivalent typing. When this kind of thing happens, I assume it due to conformance with other Pokémon games, but never rule out simple fuckups.

Alolan Vulpix → Alolan Ninetales
Bidoof → Bibarel
Brionne → Primarina
Burmy → Plant Wormadam
Burmy → Trash Wormadam
Cacnea → Cacturne
Charcadet → Armarouge
Charmeleon → Charizard
Corphish → Crawdaunt
Cosmoem → Lunala
Crabrawler → Crabominable
Cubone → Alolan Marowak
Dragonair → Dragonite
Eevee → Umbreon
Eevee → Leafeon
Eevee → Jolteon
Eevee → Sylveon
Exeggcute → Alolan Exeggutor
Floragato → Meowscarada
Galarian Ponyta
→ Galarian Rapidash
Galarian Slowpoke
→ Galarian Slowbro
Gloom → Bellossom
Grubbin → Charjabug
Jangmo-o → Hakamo-o
Kirlia → Gallade
Kubfu → Single Strike Style Urshifu
Metapod → Butterfree
Necrozma → Necrozma Dawn Wings
Nidorina → Nidoqueen
Nincada → Ninjask
Nymble → Lokix
Pancham → Pangoro
Pineco → Forretress
Poliwhirl → Poliwrath
Prinplup → Empoleon
Quaxwell → Quaquaval
Riolu → Lucario
Seadra → Kingdra
Seel → Dewgong
Shellder → Cloyster
Shroomish → Breloom
Skorupi → Drapion
Slugma → Magcargo
Spewpa → Vivillon
Surskit → Masquerain
Tepig → Pignite
Torchic → Combusken
Tympole → Palpitoad
Zacian
→ Crowned Sword Zacian
Aggron → Mega Aggron
Ampharos → Mega Ampharos
Azurill → Marill
Braixen → Delphox
Bunnelby → Diggersby
Burmy → Mothim
Burmy → Sandy Wormadam
Cascoon → Dustox
Charcadet → Ceruledge
Chimchar → Monferno
Corvisquire → Corviknight
Cosmoem → Solgaleo
Crocalor → Skeledirge
Dartrix → Decidueye
Drilbur → Excadrill
Eevee → Flareon
Eevee → Glaceon
Eevee → Vaporeon
Eevee → Espeon
Fletchling → Fletchinder
Frogadier → Greninja
Galarian Slowpoke
→ Galarian Slowking
Gimmighoul → Gholdengo

Grotle → Torterra
Hattrem → Hatterene
Karrablast → Escavalier
Kubfu → Rapid Strike Style Urshifu
Magikarp → Gyarados
Mudkip → Marshtomp
Necrozma → Necrozma Dusk Mane
Nidorino → Nidoking
Nosepass → Probopass
Onix → Steelix
Pawmi → Pawmo
Poipole → Naganadel
Primeape → Annihilape
Pupitar → Tyranitar
Quilladin → Chesnaught
Scyther → Scizor
Seedot → Nuzleaf
Shelgon → Salamence
Shellos → Gastrodon
Silcoon → Beautifly
Skrelp → Dragalge
Snorunt → Froslass
Staryu → Starmie
Swablu → Altaria
Togepi → Togetic
Trapinch → Vibrava
Ursaring → Ursaluna
Zamazenta
→ Crowned Shield Zamazenta
Altaria → Mega Altaria
Audino → Mega Audino

Charizard → Mega X Charizard	Groudon → Primal Groudon
Gyarados → Mega Gyarados	Lopunny → Mega Lopunny
Pinsir → Mega Pinsir	Sceptile → Mega Sceptile

Table 8.5: Type-changing evolutions and form changes

Evolution infrequently changes the cost group—always in the more expensive direction[5] (Table 8.6). Almost all evolutions require Candy of that family (Gimmighoul is an exception), and some evolutions depend upon some condition (Table 8.7), or walking the Pokémon while your Buddy (Table 8.9), or a catalyzing item, which is consumed (Table 8.10). Some evolutions can be performed at no Candy cost if the Pokémon was received by trade (Table 8.8). Evolution usually improves base stats (though there are many exceptions to this rule), and typically makes available new, more powerful attacks. Evolution revives a Pokémon if it is fainted, and always fully restores HP.

Eevolution

Evolution within the Eevee family is a complicated and unique affair. Eevee (the species) can evolve eight different ways. Evolution can be driven by nicknames, deterministic across all eight targets, but this can be done only once per target per Trainer. Otherwise, five targets require some condition, and are deterministic. If none of the conditions are met, the evolution is nondeterministic, with three possible results. For the nickname-based mechanic, give the Eevee you wish to evolve the nickname specified for the desired target from Table 8.11. When multiple deterministic evolutions are possible, all will be shown, and

[5]Most cost-changing evolutions involve Baby Pokémon.

Evolution	Change	Evolution	Change
Tyrogue → Hitmonlee	1 → 3	Tyrogue → Hitmonchan	1 → 3
Happiny → Chansey	1 → 3	Mime Jr. → Mr. Mime	1 → 3
Smoochum → Jynx	1 → 3	Elekid → Electabuzz	1 → 3
Munchlax → Snorlax	1 → 3	Togepi → Togetic	1 → 2
Azurill → Marill	1 → 2	Bonsly → Sudowoodo	1 → 3
Wynaut → Wobbuffet	1 → 2	Mantyke → Mantine	1 → 3
Tyrogue → Hitmontop	1 → 3	Budew → Roselia	1 → 2
Chingling → Chimecho	1 → 3	Riolu → Lucario	1 → 3
Hisuian Sneasel → Sneasler	2 → 3	Hisuian Qwilfish → Overqwil	2 → 3

Table 8.6: Evolutions that change cost group

Base	Requirements	Result
Magneton	100 Magnemite + active	Magnezone
Nosepass	50 Nosepass + active	Probopass
Charjabug	100 Grubbin + active	Probopass
Sliggoo	100 Goomy + rain or active	Goodra
Bisharp	100 Pawniard + win 15 or raids	Kingambit
Primeape	100 Mankey + defeat 30 or	Annihilape
Floette	100 Flabébé + earn 20 ♥	Florges
Snom	400 Snom + earn 10 ♥, evolve at night	Frosmoth
Charcadet	50 Charcadet + defeat 30	Armarouge
Charcadet	50 Charcadet + defeat 30	Ceruledge
Poipole	200 Poipole + capture 20 Dragon-type	Naganadel
Hisuian Qwilfish	50 Qwilfish + win 10 raids	Overqwil
Kubfu	200 Kubfu + win 30 raids/Max battles	Rapid Strike Urshifu
Kubfu	200 Kubfu + win 30 raids/Max battles	Single Strike Urshifu
Inkay	50 Inkay + rotating the mobile device	Malamar
Amaura	50 Amaura + evolve at night	Aurorus
Tyrunt	50 Tyrunt + evolve during the day	Tyrantrum
Yungoos	50 Yungoos + evolve during the day	Gumshoos
Fomantis	50 Lomantis + evolve during the day	Lurantis
Cosmoem	100 Cosmog + evolve during the day	Solgaleo
Cosmoem	100 Cosmog + evolve at night	Lunala
Pancham	50 Pancham + capture 32	Pangoro
Ursaring	100 Teddiursa + evolve during full moon	Ursaluna
Galarian Farfetch'd	50 Farfetch'd + 10 Excellent throws	Sirfetch'd
Spritzee	50 Spritzee + use incense	Aromatisse
Swirlix	50 Swirlix + feed 25 treats	Slurpuff
Galarian Yamask	50 Yamask + win 10 raids	Runerigus
Galarian Slowpoke	50 Slowpoke + capture 30	Galarian Slowbro
Galarian Slowpoke	50 Slowpoke + capture 30	Galarian Slowking

Table 8.7: Evolutions dependent upon a condition

Base	Usual requirement	Result
Kadabra	100 Abra	Alakazam
Machoke	100 Machop	Machamp
Graveler	100 Geodude	Golem
Alolan Graveler	100 Geodude	Alolan Golem
Haunter	100 Gastly	Gengar
Boldore	200 Roggenrola	Gigalith
Gurdurr	200 Timburr	Conkeldurr
Karrablast	200 Karrablast	Escavalier
Shelmet	200 Shelmet	Accelgor
Phantump	200 Phantump	Trevenant
Pumpkaboo	200 Pumpkaboo	Gourgeist

Table 8.8: Trade-assisted evolutions

Base	Requirements	Result
Woobat	50 Woobat + 1 km	Swoobat
Hisuian Sneasel	100 Sneasel + 7 km, evolve during the day	Sneasler
Mime Jr.	50 Mime Jr. + 15 km	Mr. Mime
Bonsly	50 Bonsly + 15 km	Sudowoodo
Happiny	25 Chansey + 15 km	Chansey
Feebas	100 Feebas + 20 km	Milotic
Pawmo	100 Pawmi + 25 km	Pawmot

Table 8.9: Evolutions requiring walking of Buddy Pokémon

Base	Requirements	Result
Gloom	100 Oddish +	Bellossom
Sunkern	50 Sunkern +	Sunflora
Cottonee	50 Cottonee +	Whimsicott
Petilil	50 Petilil +	Lilligant
Helioptile	50 Helioptile +	Heliolisk
Poliwhirl	100 Poliwag +	Politoed
Slowpoke	50 Slowpoke +	Slowking
Onix	50 Onix +	Steelix
Scyther	50 Scyther +	Scizor
Seadra	100 Horsea +	Kingdra
Porygon	25 Porygon +	Porygon2
Poygon2	100 Porygon +	Porygon-Z
Lickitung	100 Lickitung +	Lickilicky
Tangela	100 Tangela +	Tangrowth
Electabuzz	100 Elekid +	Electivire
Magmar	100 Magby +	Magmortar
Sneasel	100 Sneasel +	Weavile
Togetic	100 Togepi +	Togekiss
Yanma	100 Yanma +	Yanmega
Gligar	100 Gligar +	Gliscor
Murkrow	100 Murkrow +	Honchkrow
Misdreavus	100 Misdreavus +	Mismagius
Piloswine	100 Swinub +	Mamoswine
Dusclops	100 Duskull +	Dusknoir
Aipom	100 Aipom +	Ambipom
Roselia	100 Budew +	Roserade
Applin	200 Applin + 20	Flapple
Applin	200 Applin + 20	Appletun
Zygarde 10%	50	Zygarde 50%
Zygarde 50%	200	Zygarde Complete
Gimmighoul	999	Gholdengo

Table 8.10: Evolutions and form changes dependent upon items

Target	Nickname	Condition
Vaporeon	Rainer	Random
Jolteon	Sparky	Random
Flareon	Pyro	Random
Sylveon	Kira	Earn 70 ♥
Espeon	Sakura	10 km, evolve during the day
Umbreon	Tamao	10 km, evolve at night
Leafeon	Linnea	Evolve near an active
Glacion	Rea	Evolve near an active

Table 8.11: Eevolution (all require 25 Eevee candy)

the Trainer can choose the target. It is impossible to execute nondeterministic evolution when conditions for deterministic evolution are met. When in doubt, check—if the evolution is deterministic, the "Evolve" button will show the target (or a silhouette thereof). It will otherwise show a question mark. Eevee's evolutions are strong Pokémon in the early game.

8.3 Shadow and Purified Pokémon

Team Rocket uses "Shadow" Pokémon modified for more attack and less defense capability than their base forms (for more details, see section 10.3). Shadow Pokémon cost 20% more Stardust than normal to teach second charged attacks or power up. When captured from Team Rocket, they enter their own Shadow Pokédex. Captured Shadow Pokémon always know the charged attack Frustration. Only during certain special events can this charged attack be replaced, at which time a Charged TM is required as normal. It's a pretty terrible Charged Attack, and this really degrades the Shadow Pokémon until it can be replaced. A Shadow Pokémon can be taught a second Charged Attack at any time. Frustration is preserved across evolution, as is Shadow status itself. Shadow Pokémon cannot be traded.

Purification of a Shadow Pokémon has a cost in Stardust and Candy. Purified Pokémon cost 10% less than normal to evolve, teach second charged attacks, or power up. Purification enters the Pokémon into its own Purified Pokédex, advances it to level 25 if not yet there, eliminates the attack bonus and defense penalty, replaces the primary charged attack with Return (exclusive to purified Pokémon), and increases each IV component by 2 (up to the usual max of 15). Return is preserved across evolution, as is Purified status itself. Purified Pokémon can be traded, but constitute a Special Trade (section 4.3).

Region	Generation	Start	End	Pop
Kanto	I	#0001	#0151	151/151
Johto	II	#0152	#0251	100/100
Hoenn	III	#0252	#0386	135/135
Sinnoh	IV	#0387	#0493	104/107
Unova	V	#0494	#0649	156/156
Kalos	VI	#0650	#0721	72/72
Alola	VII	#0722	#0807	78/86
Unknown	VII	#0808	#0809	2/2
Galar	VIII	#0810	#0898	61/89
Hisui	VIII	#0899	#0905	6/7
Paldea	IX	#0906	#1025	56/120

Table 8.12: Regions of the Pokémon world (ポケモンの世界). Populations do not count multiple forms.

It ought be obvious, but if you intend to purify a Shadow Pokémon, it is best to do so prior to any other development. Shadow Pokémon are more expensive than normal to develop, while Purified Pokémon are cheaper.

8.4 Regions, generations, myths, legends, and beasts

Each Pokémon is associated with one of eleven regions and one of nine generations. Both can be determined by their Pokédex index (Table 8.12). Whether Meltan and Melmetal (of the "Unknown" region) are Generation VII or Generation VIII is a raging and utterly inconsequential debate. I place them in Generation VII because doing so saves a keystroke when using Roman numerals. If you disagree, I encourage you to FAX your senator. Legendary (伝説のポケモン) and Mythical (幻のポケモン) Pokémon are not generally seen in the wild. They are members of the Pokémon mythos, heralds from times past and partly forgotten, some so rare that their existence is doubted. Ultra Beasts (ウルトラビースト) descend into our dimension from another via "Ultra Wormholes". Such Pokémon never hatch from eggs (section 5.3), and are not usually included in wild spawn groups (section 5.1). They are instead typically Research rewards, or captured in raids. They cannot be left in gyms (section 10.6). It is not usually possible to trade or accumulate arbitrary numbers of Mythical Pokémon[6], nor Legendaries Zygarde

[6]Marshadow, Hoopa, Celebi, Mew, Shaymin, Victini, Meloetta, Keldeo, Jirachi, Deoxys, Darkrai, Diancie, Zarude, and Volcanion.

Group	Members
Legendary Birds	Articuno, Zapdos, Moltres
Galarian Birds	Galarian Articuno, Galarian Zapdos, Galarian Moltres
Legendary Beasts	Raikou, Entei, Suicune
Tower Duo	Lugia, Ho-Oh
Giants of Legend	Regigigas, Registeel, Regice, Regirock, Regieleki, Regidrago
Eon Duo	Latias, Latios
Super-Ancients	Kyogre, Groudon, Rayquaza (also known as the Weather Trio)
Lake Guardians	Uxie, Mesprit, Azelf
Pokémon of Myth	Dialga, Palkia, Giratina (also known as the Creation Trio and Three Sinnoh Dragons)
Lunar Duo	Cresselia, Darkrai
Swords of Justice	Cobalion, Terrakion, Virizion, Keldeo
Forces of Nature	Tornadus, Thundurus, Landorus, Enamorus
Tao Trio	Reshiram, Zekrom, Kyurem
Aura Trio	Xerneas, Yveltal, Zygarde
Guardian Deities	Tapu Koko, Tapu Fini, Tapu Lele, Tapu Bulu
Light Trio	Solgaleo, Lunala, Necrozma
Hero Duo	Zacian, Zamazanta
Sea Guardians	Phione, Manaphy
Ultra Beasts	Nihilego, Buzzwole, Pheromosa, Xurkitree, Celesteela, Kartana, Guzzlord, Poipole, Naganadel, Stakataka, Blacephalon

Table 8.13: Named collections of Legendary Pokémon

and Eternatus, making them prime candidates for Bottle Caps. Many of these Pokémon have been collected into (often unofficial) named sets (Table 8.13).

Kanto Starters

The "Kanto Starters" refer to Bulbasaur, Charmander, and Squirtle, and sometimes also Pikachu and Eevee, initial partner Pokémon from various games. The "Galar First Partners" refer to Grookey, Scorbunny, and Sobble, initial partner Pokémon from *Sword and Shield*.

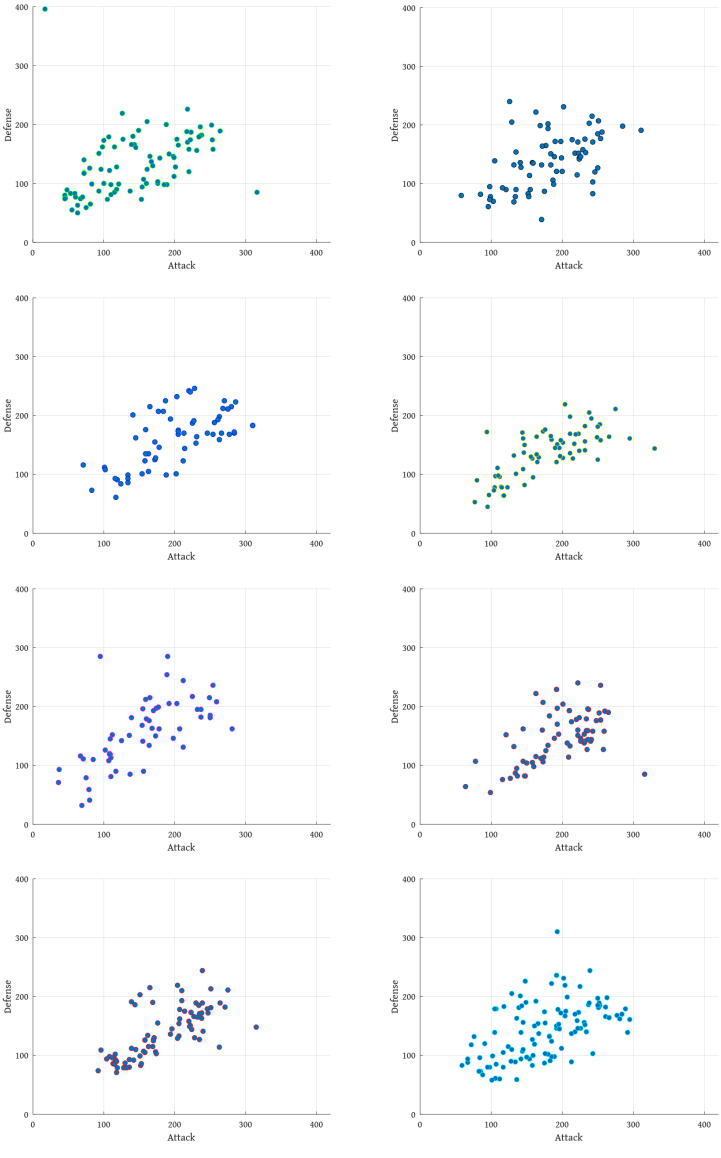
8.5 Trends among species

One thing to take away from Table 8.14 is that the largest typings by population are the monotypes, representing 485 forms. A majority of Pokédex have dual typing, but their diversity of typing means few dual types have much of a population. Only Ground+Water, Flying+Normal, Bug+Poison, Grass+Ghost, Grass+Poison, Rock+Water, and Bug+Flying have more than ten members. All monotypes have at least ten members except for Steel (9) and Flying (4). Scattering defense (max 400) against

Type	Pop	Dualtypes	Pop	Total
Bug	21	14	67	88
Dark	13	17	59	72
Dragon	13	15	53	66
Electric	33	17	37	70
Fairy	19	12	41	60
Fighting	28	15	45	73
Fire	37	14	45	82
Flying	4	17	109	113
Ghost	16	15	55	71
Grass	47	16	81	128
Ground	15	15	63	78
Ice	18	14	36	54
Normal	71	13	59	130
Poison	16	16	68	84
Psychic	43	16	63	106
Rock	14	15	55	69
Steel	8	16	61	69
Water	66	17	77	143

Table 8.14: Population of types

attack (max 420) for each type (including all species with that type in their typing) shows general balance.


Defense
Attack
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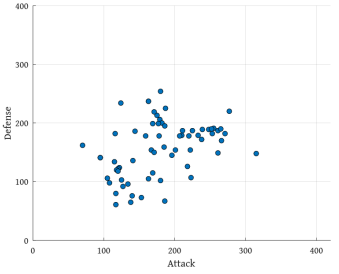
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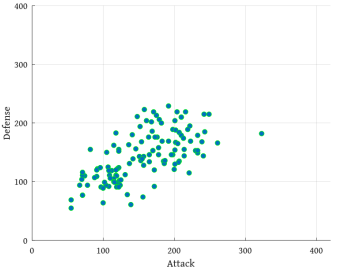
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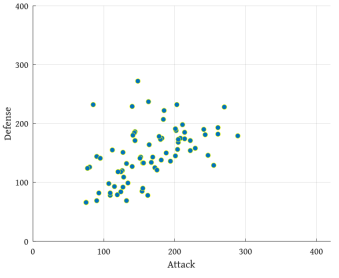
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Defense
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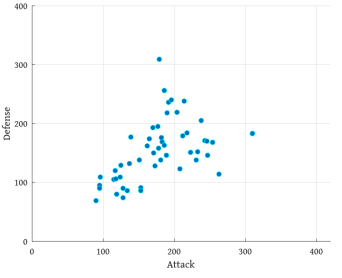
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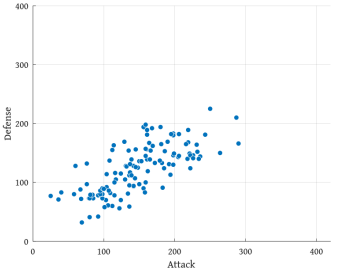
Attack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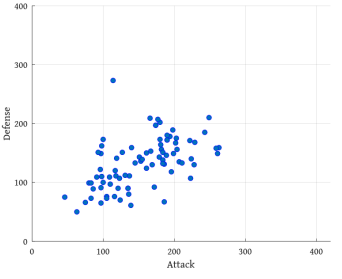
Attack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Defense
0
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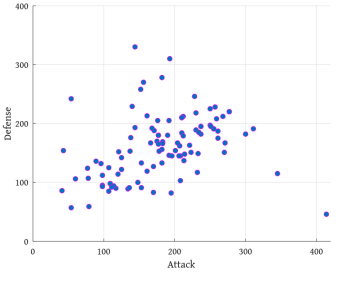
200
300
400
Attack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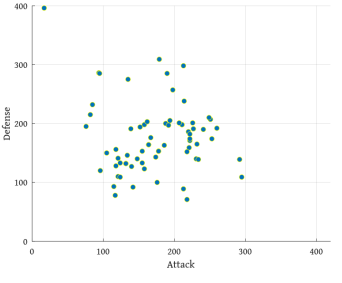
200
300
400
Attack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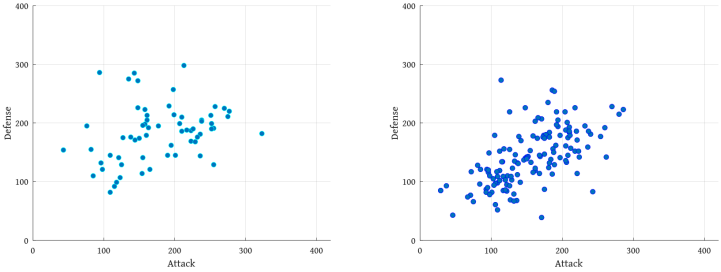
400
Attack



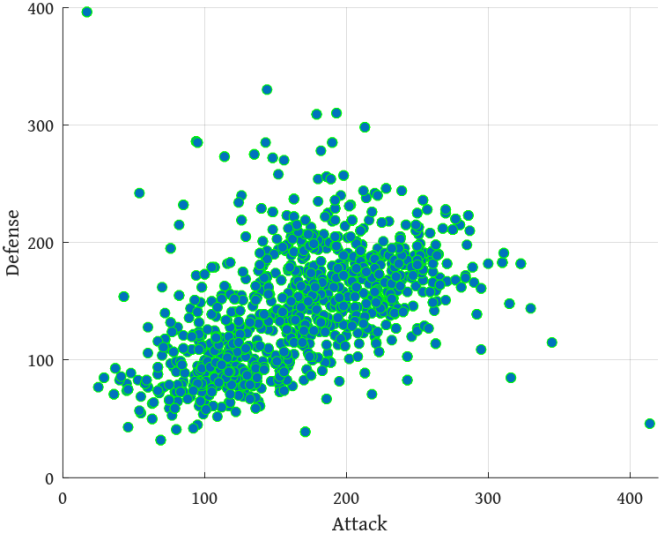
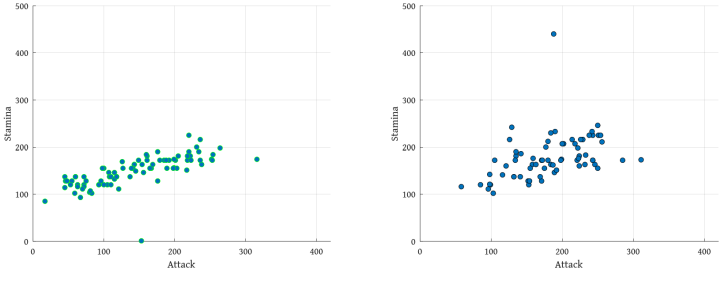
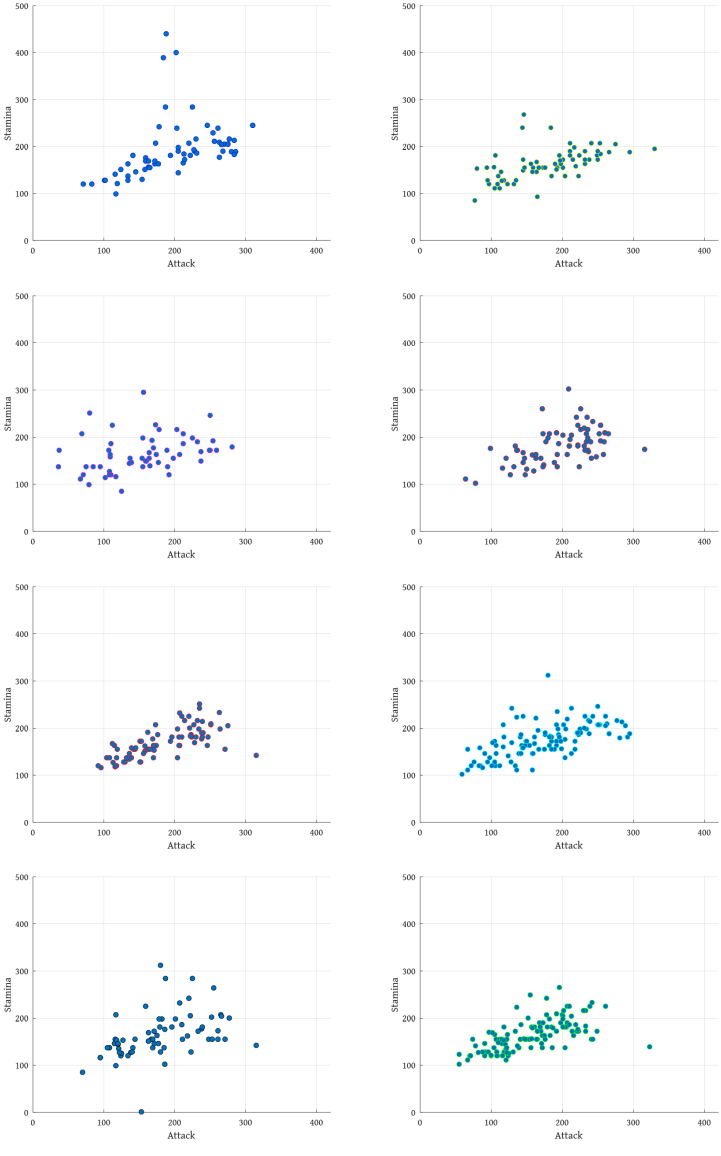


Figure 8.1: Defense vs Attack, all species

Now we scatter stamina (max 500) against attack (max 420):




Stamina
Attack
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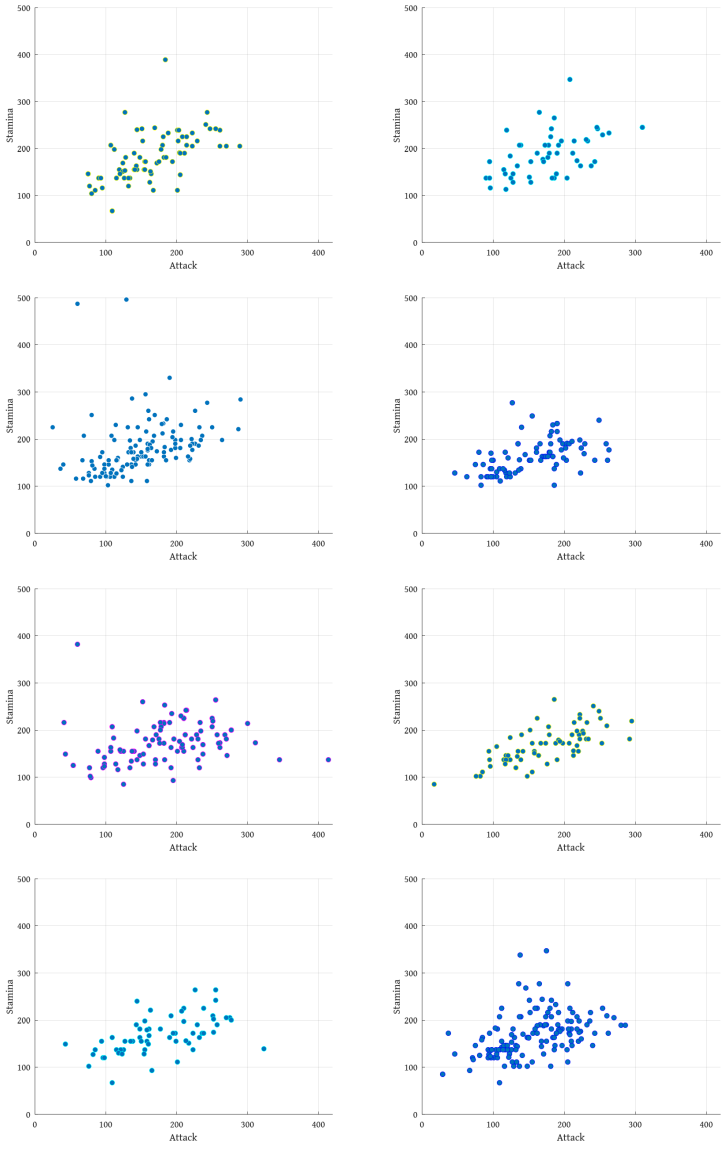
300
400
500



8.6 Freak Pokémon a/k/a Freakémonics

A few Pokémon have unique behaviors or mechanics, some requiring explicit support in any good simulator (chapter 16).

Morpeko

Morpeko changes its form between "Full Belly Mode" and "Hangry Mode" each time it uses a charged attack. Upon becoming active, Morpeko is in Full Belly Mode, and Aura Wheel is an Electric attack. In Hangry Mode, Aura Wheel is a Dark attack. Morpeko retains Dark/Electric typing (and thus Aura Wheel STAB) across modes. Morpeko cannot defend gyms, assault gyms, or participate in raids.

Smeargle

Smeargle is not generally available in the wild[7]. Instead, it sometimes photobombs pictures taken of your Buddy Pokémon. Smeargle will then spawn nearby, exclusive to the affected Trainer. If caught, this Smeargle knows the same moves as whatever Pokémon was being photographed. Smeargle will not appear more than once per day. Smeargle cannot be taught a second charged attack. Smeargle cannot copy certain fast attacks, which will be randomly replaced with a fast attack it can learn. Via this means, Smeargle can know combinations of fast and charged attacks available to no other Pokémon.

[7]When captured in the wild, it knows Splash and Struggle.

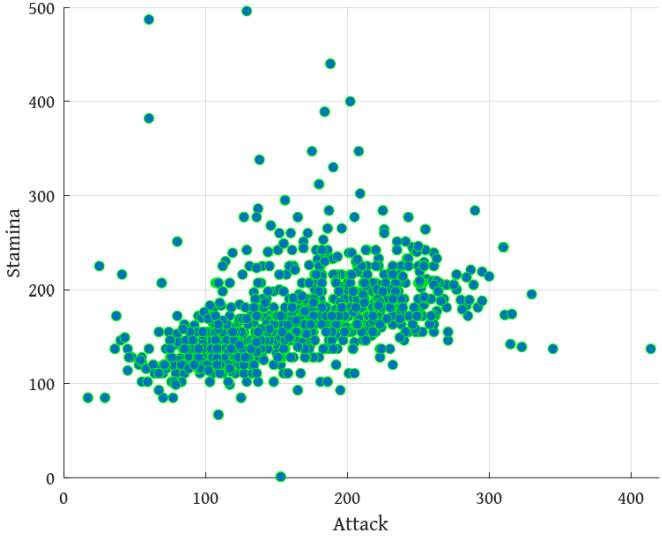


Figure 8.2: Stamina vs Attack, all species

Figure 8.3: Munda est omnis divisia in partes duodeviginti

Ditto and Zorua

At any time, there is a set of Pokémon which might actually be Ditto, a Pokémon impersonator (impokénator?). When captured, the Pokémon will be revealed as Ditto, and Ditto Candy will take the place of expected Candy. Ditto status is shared across Trainers, i.e. it is a property of the spawn, not the encounter. In battle, Ditto adopts the moves, typing, ATK, and DEF of its opponent, but not its MHP. The result is almost universally garbage, and Ditto can't be used in 3x3 anyway[8]. The spiteful fox Zorua copies your Buddy Pokémon when it spawns; if you have no Buddy Pokémon, it spawns as itself.

Vivillon

Remember postcards (section 2.3)? Each Gift received from another Trainer bears a postcard, indicating the Gift's origin. These postcards can be saved. The globe is partitioned into eighteen regions (Figure 8.3), and a different Vivillon form is associated with each. Upon pinning three, nine, or multiples of fifteen postcards from a region, that region's Vivillon Collector medal (section 2.7) increases by a tier, and the Trainer encounters Scatterbug. This does not happen more than thrice per calendar day. The Vivillon into which this Scatterbug evolves (via Spewpa) takes that region's form.

[8]It is one of two species banned from PvP, the other being Shedinja.

Gimmighoul and Gholdengo

Pairing with the Nintendo Switch games *Pokémon Scarlet* or *Pokémon Violet* allows sending postcards to the Switch. Doing so earns you the Coin Bag, which functions as a Gimmighoul-specific incense for half an hour. The Gimmighoul coins necessary to evolve into Gholdengo can be acquired by capturing Gimmighoul, or spinning Golden Pokéstops. Pokéstops become golden with active Golden Lures. Golden Lures are acquired by sending multiple postcards to these same games.

Meltan

Another one requiring interaction with the wider Pokémon empire. Meltan only appears when the Mystery Box is in use[9]. Charging the Mystery Box requires linking a Pokémon HOME account and transporting a Pokémon to it. Meltan evolves into the interesting Melmetal, and the Mystery Box spawns pretty continuously for an hour should you need harvest some Stardust the hard way.

Aegislash

Aegislash has Blade and Shield forms which switch the other's ATK and DEF stats. Outside of battle, it is always in the Shield form (97 ATK, 291 DEF). While in Shield form, its fast attacks have zero power (and thus inflict a single point of damage; see section 10.3). Immediately before throwing a charged move, it takes on its Blade form. Upon using a shield, or being substituted, it reverts to Shield form. Since its Shield form (considered for League CP bounds) has much lower CP, this allows a high ATK to be snuck under a CP bound (though it will only be effective for charged attacks). Aegislash cannot defend gyms, assault gyms, or participate in raids.

Tyrogue and the Hitmons

Tyrogue's evolution is based on its IV. If I_A has the highest value, it evolves into Hitmonlee. If I_D has the highest value, it evolves into Hitmonchan. Hitmontop completes the trio for I_S. If two components tie for the highest value, the evolution takes one or the other paths with equal probability. In the case of a three-way tie, all three evolutions are possible, but Hitmontop is believed to dominate[10].

[9] Though a Meltan encounter ends the "Let's GO, Meltan" Special Research.
[10] This is a Silph Road claim from 2018; I cannot corroborate it.

9 Pokémon

The `PokemonProto` protobuf defines an individual Pokémon. For purposes of battle[1], a Pokémon P is defined as having:

- A species and form (and thus a typing and base stats)
- Shadow status, or the absence thereof
- An Individual Vector (IV) (section 9.2) and level (section 9.1)
- A set of two or three attacks, one of which is a fast attack
- Modifiers due charged attacks' stat effects (section 7.2)
- Some number of hit points not exceeding MHP
- Some amount of energy not exceeding 100

Hit Points are carried across PvE battles (including encounters with Team GO Rocket and Gym battles), but Trainer Battles always start with full HP. A Pokémon with zero hit points has "fainted". Fainted Pokémon cannot be used in battles of any kind, nor can they be left in Power Stops (see section 10.6).

Each Pokémon has a height and weight, randomly generated according to a Gaussian parameterized for each form. Four or more standard deviations from the mean qualify a Pokémon as XXS or XXL, each with its own Pokédex and associated medal. Proportional deviation from the mean is maintained across evolution and trade. Size and height are the criteria for winning Showcases, have no effects otherwise.

9.1 Pokémon level

Each Pokémon has its own level, taking one of the 99 integer and half-integer values between 0–50, inclusive. A Trainer can "power up" their Pokémon in single level increments, not exceeding the Trainer's own level plus 10. Each increase has a cost in Stardust and the Candy of that family; beyond level 40, there is a further cost in Candy XL (Table 9.1). An increase in level improves the Pokémon's attack and defense, and will sometimes increase MHP. See section 9.5 for a quantitative treatment.

[1]Attributes not directly relevant to battle include height, weight, region, generation, Shiny status, Purified status, Lucky status, Legendary status, Mythological status, spawn reason, capture method, capture location, and capture time.

Level			Level			
1.5–3	200	1	31.5–33	6,000	6	
3.5–5	400	1	33.5–35	7,000	8	
5.5–7	600	1	35.5–37	8,000	10	
7.5–9	800	1	37.5–39	9,000	12	
9.5–11	1,000	1	39.5–40	10,000	15	
11.5–13	1,300	2	40.5–41	10,000		10
13.5–15	1,600	2	41.5–42	11,000		10
15.5–17	1,900	2	42.5–43	11,000		12
17.5–19	2,200	2	43.5–44	12,000		12
19.5–21	2,500	2	44.5–45	12,000		15
21.5–23	3,000	3	45.5–46	13,000		15
23.5–25	3,500	3	46.5–47	13,000		17
25.5–27	4,000	3	47.5–48	14,000		17
27.5–29	4,500	4	48.5–49	14,000		20
29.5–31	5,000	4	49.5–50	15,000		20

Table 9.1: Power-up costs for Pokémon levels

Powering up a fainted Pokémon will revive it, but with minimal HP:

$$\mathrm{HP} = \min 1, \mathrm{MHP}_{\mathrm{New}} - \mathrm{MHP}_{\mathrm{Old}}$$

Advancing a normal Pokémon from level 1 to level 50 is not a cheap endeavor (Table 9.2), though Shadow Pokémon of course have a minimum level of eight, purified Pokémon are always at least level 25, and most captures will be well above level 1. Note that pushing level 40 to 50 requires more Stardust than going from 1 to 40.

Type	Candy	Candy XL	Stardust
Normal	304	296	520,000
Shadow	406	360	624,000
Purified	294	272	468,000
Lucky	304	296	260,000
Lucky purified	294	272	234,000

Table 9.2: Total costs for powering up from level 1 to 50

9.2 Individual vectors

Each Pokémon has three associated integers, each ranging from 0–15. Once a Trainer has joined a team (section 2.1), the "Appraise" function

Appraisal	Minimum sum of IVs
4★	45
3★	37
2★	30
1★	23
0★	0

Table 9.3: Appraisals for various IVs

can be used to get a visual representation of these three numbers (this representation, while annoying, is sufficient to determine the actual numbers). Additionally, the Pokémon will be given a rating of 0–4 (Table 9.3), represented as zero, one, two, or three stars (4 shows three, albeit in a different color). A Pokémon rated 4 has an IV of 15/15/15, and is colloquially known as a "hundo" or "100%er". Such Pokémon have their own Pokédex (section 2.4)[2]. While 15/15/15 is generally the optimal IV, this is not always true in CP-bounded competition; see chapter 14 for more information, and Appendix A for tables of optimal IVs under different CP bounds.

Three things can change a Pokémon's IV, which is otherwise constant across its existence. Purification (section 8.3) raises each component by two, not to exceed fifteen. Trades (section 4.3) reroll the IV entirely. Finally, Gold Bottle Caps allow a Pokémon of at least Best Buddy status (section 4.4) to enter "hypertraining". The Trainer specifies a new, higher IV, and is assigned a set of Research-like tasks. If they are completed within the specified time, the Pokémon acquires the new IV. At the time of this writing, Gold Bottle Caps have been available only through paid Research.

9.3 Generation of IV and level

IVs and levels are generated when the Pokémon is "created", not when it is captured. It is thus possible to glean information from the CP displayed for a Pokémon; one can sometimes even uniquely determine the IV. The equation for CP is provided in chapter 13; reverse it and use Table 9.5 plus the base stats of the species to determine the set of IV+level pairs yielding that CP. Various applications and websites can perform this analysis automatically. Depending on the situation, there might be a floor for IVs. Beyond that, they are uniformly randomly

[2]A Pokémon with an IV of 0/0/0 is colloquially known as a "nundo" or "0%er". They have no unique Pokédex, because they are worthless pieces of shit, and don't let anyone tell you otherwise. Consult Appendix A to see that 0/0/0 is never an optimal IV.

Context	IV floors	Level
Wild catch	0 4 w/ weather boost	1–max(TL, 30) 1–max(TL, 30) + 5
Hatch	10	max(TL, 20)
Raid	6 (shadow) 10	25 w/ weather boost 20
Max Battle	10	20
Research	10	15
Team GO Rocket Grunts and Leaders	0 4 w/ weather boost	8 13 w/ weather boost
Giovanni	6	8 13 w/ weather boost
GBL	10	20
Trade	1 w/ Good Friend 2 w/ Great Friend 3 w/ Ultra Friend 5 w/ Best Friend 12 (lucky trade)	See section 4.3
Mighty Pokémon	13	35–40

Table 9.4: IV and level floors for acquired Pokémon

generated. The chance of any given IV for a catch in the wild (without weather boosting) is exactly the same—1 out of 4096. The probability of a random Pokémon being a hundo is actually greater than that of being a nundo, due to the existence of IV floors (e.g. the chance of a 15/15/15 for a lucky trade is 1 in 256, whereas a 0/0/0 is impossible).

9.4 Lucky Pokémon

Trades sometimes result in both Pokémon becoming "Lucky". Lucky Pokémon have an IV floor of 12/12/12, and enjoy a 50% discount on Stardust for power-ups (this does not extend to learning second charged attacks). This discount stacks with the 10% purification discount, so costs for powering up Lucky Purified Pokémon run 45% of normal.

9.5 Static stats

We'll define some statistics for each Pokémon. These values are used as inputs to battle mechanics. First, sum the Species's ATK, DEF, and STA

with the Pokémon's IVs to generate Mod_A, Mod_D, and Mod_S:

$$\begin{aligned}\text{Mod}_\text{A} &= \text{ATK} + \text{IV}_\text{A}\\ \text{Mod}_\text{D} &= \text{DEF} + \text{IV}_\text{D}\\ \text{Mod}_\text{S} &= \text{STA} + \text{IV}_\text{S}\end{aligned}$$

These are typically scaled by the Pokémon's Combat Power Multiplier.

9.6 Combat Power Multiplier

Recall that each Pokémon has its own level, ranging from 1.0 to 50.0, defined on half integers[3]. This level is used as an index into a table of positive rational constants. The value accessed is that Pokémon's Combat Power Multiplier (CPM). CPM maxes out at level 50 with a value of 0.8403, and takes its 0.094 minimum at level 1. At level 10, CPM is 0.4225, almost half of its maximum value. At level 34, CPM is 0.7557, about 90% of its maximum value. The extremal ratios are 0.1119 (L1 / L50) and 8.9394 (L50 / L1). The CPMs of integer levels are defined in the game master file; half-integer levels are synthesized on the fly by interpolating between the two surrounding levels.

That's the theory. In truth, no such level is present in the definition of a Pokémon. It can be synthesized from two real fields: `cpMultiplier` and `additionalCpMultiplier`. The first is constant across the Pokémon's existence, and is the CPM of the Pokémon when captured. It is always a value from the game master array; this implies that Pokémon can only be caught on integer levels, which is borne out by observation. To get the actual CPM used in calculations, `cpMultiplier` is added to `additionalCpMultiplier`; the latter changes each time the Pokémon is powered up. This sum would ideally map cleanly to ninety-nine floating point values. Unfortunately, the details of floating point math mean two pairs of "levels" A and B and C and D might not yield precisely the same sum, even though $A + B = C + D$. There is thus no true CPM table; Table 9.5 is a lie; somewhere in California, William Kahan is screaming. Accurately simulating the Pokémon GO CP calculation requires fifty tables, one for each possible capture level. This imprecision shows up only infrequently, and the naive CP calculation is never more than one point off.

[3] I would rather they simply be integer Levels 1–99, but this is settled terminology.

Level	CPM	%	Level	CPM	%	Level	CPM	%
1	0.094	11.19	17.5	0.5588	66.5	34	0.7557	89.93
1.5	0.1351	16.08	18	0.5668	67.45	34.5	0.7586	90.28
2	0.1664	19.8	18.5	0.5746	68.38	35	0.7616	90.63
2.5	0.1927	22.93	19	0.5823	69.29	35.5	0.7645	90.98
3	0.2157	25.67	19.5	0.5899	70.2	36	0.7674	91.32
3.5	0.2366	28.15	20	0.5974	71.09	36.5	0.7703	91.67
4	0.2557	30.43	20.5	0.6048	71.98	37	0.7732	92.01
4.5	0.2735	32.55	21	0.6122	72.85	37.5	0.7761	92.36
5	0.2903	34.54	21.5	0.6194	73.71	38	0.7789	92.7
5.5	0.3061	36.42	22	0.6266	74.56	38.5	0.7818	93.04
6	0.3211	38.21	22.5	0.6336	75.41	39	0.7846	93.38
6.5	0.3354	39.92	23	0.6407	76.24	39.5	0.7875	93.71
7	0.3492	41.56	23.5	0.6476	77.07	40	0.7903	94.05
7.5	0.3625	43.13	24	0.6544	77.88	40.5	0.7928	94.35
8	0.3752	44.66	24.5	0.6612	78.69	41	0.7953	94.64
8.5	0.3876	46.13	25	0.6679	79.49	41.5	0.7978	94.94
9	0.3996	47.55	25.5	0.6746	80.28	42	0.8003	95.24
9.5	0.4112	48.93	26	0.6812	81.06	42.5	0.8028	95.54
10	0.4225	50.28	26.5	0.6877	81.84	43	0.8053	95.83
10.5	0.4329	51.52	27	0.6941	82.61	43.5	0.8078	96.13
11	0.4431	52.73	27.5	0.7005	83.37	44	0.8103	96.43
11.5	0.4531	53.92	28	0.7069	84.12	44.5	0.8128	96.73
12	0.4628	55.08	28.5	0.7132	84.87	45	0.8153	97.02
12.5	0.4723	56.21	29	0.7194	85.61	45.5	0.8178	97.32
13	0.4817	57.32	29.5	0.7256	86.35	46	0.8203	97.62
13.5	0.4909	58.41	30	0.7317	87.08	46.5	0.8228	97.92
14	0.4999	59.49	30.5	0.7347	87.44	47	0.8253	98.21
14.5	0.5087	60.54	31	0.7378	87.8	47.5	0.8278	98.51
15	0.5174	61.57	31.5	0.7408	88.16	48	0.8303	98.81
15.5	0.5259	62.59	32	0.7438	88.51	48.5	0.8328	99.11
16	0.5344	63.59	32.5	0.7468	88.87	49	0.8353	99.4
16.5	0.5426	64.58	33	0.7498	89.23	49.5	0.8378	99.7
17	0.5508	65.55	33.5	0.7527	89.58	50	0.8403	100

Table 9.5: Idealized combat power multipliers

9.7 Effective stats

Multiplying Mod_S by CPM yields Eff_S, which determines a Pokémon's Maximum Hit Points (MHP). When a Pokémon's Hit Points are reduced to 0, it is knocked out, and cannot be used (nor made a Buddy) until revived. Hit Points are persistent across Raids, Max Battles, and Team Rocket encounters, and can be restored (up to MHP) with Potions[4]. MHP is defined such that it is always an integer not less than ten:

$$\begin{aligned}\text{Eff}_\text{S} &= \text{Mod}_\text{S} \cdot \text{CPM}\\ \text{MHP} &= \min 10, \lfloor \text{Eff}_\text{S} \rfloor\end{aligned}$$

Multiplying Mod_S by CPM yields Eff_ARaw, used to determine charged move priority (section 10.5). M_{Shadow} is $\frac{6}{5}$ if the Pokémon is a Shadow Pokémon, and 1 otherwise. Multiplying Eff_ARaw by M_{Shadow} yields Eff_A. Multiplying Mod_D by CPM and dividing by M_{Shadow} gives us Eff_D. This manifests a 20% bonus to Eff_A and a 16.7% penalty to Eff_D.

$$\begin{aligned}\text{Eff}_\text{ARaw} &= \text{Mod}_\text{A} \cdot \text{CPM}\\ \text{Eff}_\text{A} &= \text{Eff}_\text{ARaw} \cdot M_{Shadow}\\ \text{Eff}_\text{D} &= \frac{\text{Mod}_\text{D} \cdot \text{CPM}}{M_{Shadow}}\end{aligned}$$

Is a Shadow Pokémon superior to its unshadowed equivalent, all else being equal? Evaluating using a product function such as the geometric mean will show no difference; the two multipliers cancel one another.

$$\begin{aligned}P &= \text{Eff}_\text{A} \cdot \text{Eff}_\text{D}\\ &= \frac{6}{5}\text{Mod}_\text{A} \cdot \frac{5}{6}\text{Mod}_\text{D} \cdot \text{CPM}^2\end{aligned}$$

Using a sum function such as the arithmetic mean will usually show a difference. When $\text{Mod}_\text{A} < \frac{5}{6}\text{Mod}_\text{D}$, the average goes down. When $\text{Mod}_\text{A} = \frac{5}{6}\text{Mod}_\text{D}$, the average is unchanged, and the average increases if $\text{Mod}_\text{A} > \frac{5}{6}\text{Mod}_\text{D}$.

Let's compare the impact of levels and IVs on effective stats. A Pokémon has base ATK and DEF A and D, and level L with corresponding CPM C_0. Raising IV_A by one raises Eff_A by C. Raising IV_D by one raises Eff_D by C. Raising IV_S by one raises Eff_S by C, raising MHP by either zero or one. Raising L by 0.5 results in a new CPM $C_{0.5}$; define $C_\Delta = C_{0.5} - C_0$. At its maximum, C_Δ is 0.0411; it is 0.0025 from level 40 on. Leveling up thus raises Eff_A by $\text{Mod}_\text{A} \cdot C_\Delta$, Eff_D by $\text{Mod}_\text{D} \cdot C_\Delta$, and

[4]Trainer Battles (other than those with Team Rocket) always start with full HP.

Eff_S by $\mathrm{Mod}_S \cdot C_\Delta$. Note that C_Δ becomes smaller as C becomes larger, and the impact of leveling increases as the base stat increases. For typical base stats, leveling up improves the effective stat more through about level 30, at which point IVs have more impact. A base stat of 100 is improved more by IV at level 25.5.

9.8 Searching Pokémon storage

The search interface for Pokédexen and storage is surprisingly capable. Most strings are matched as substrings in both nicknames and species names, but there are a number of keywords (Table 9.6). Most are self-evident. Prefix a species with `+` to search for its family. Searching for a type will show any Pokémon with that type in their typing, `<type` matches Pokémon weak against `type`, and `>type` those strong against it. `x*` for `x` between 0 and 4 matches Pokémon with that appraisal. `buddy0` matches Pokémon which have never been your Buddy, `buddy1` those made your Buddy but having earned zero hearts, and `buddyx` for `x` between 2 and 5 to match buddy levels `x - 1`. `favorite` matches those marked "favorite" using a star system that seems like it could have handled in the general tagging system just fine but whatever. Speaking of, `#TAG` searches the tag space, and `#` by itself matches anything tagged. `@weather` shows Pokémon with at least one attack boosted by current weather, `@ATTACK` shows Pokémon who know `ATTACK`, and `@TYPE` any who know some attack of type `TYPE`. Be more specific with `@xTYPE` for `x` between 1 and 3 to check for a fast, first charged, or second charged attack of the specified type. Range suffixes take the form `NUM` for an exact match of `NUM`, `NUMX-NUMY` for an inclusive match between `NUMX` and `NUMY`, and `-NUM` for an inclusive ceiling. `cpRANGE` and `hpRANGE` match Combat Power and hit points. Use `distanceRANGE` and `ageRANGE` to match catch location distance in kilometers and catch age in days. `yearRANGE` matches the catch year. Union over searches is accomplished with the infix ';' operator (',' and ':' are synonyms), and intersection with '&'[5]. It does not seem possible to search for regional forms using substrings, e.g. a search for "alolan" does not bring up my Alolan Exeggutor, but each region is itself a search keyword.

I nickname everything with a suffix indicating their IV's distance from the ideal. If it's the ideal IV, the distance is zero.

[5] Oddly, '|' also seems to function as AND. I say "oddly" because it means OR everywhere else. Except the UNIX shell, where it means "pipe". And set theory (intensional comprehensions). And number theory ("divides"). And the bra-ket notation of quantum mechanics. OK, not everywhere, but that doesn't mean you use it for intersection.

Keyword	Matches
background	Special background
candyxl	Level 40 and above
costume	Costumed event form
defender	In a gym
dynamax	Can Dynamax
eggsonly	Baby Pokémon
evolve	Can evolve now
evolvenew	Evolution will fill a Pokédex entry
female	Females
gbl	Acquired via GO Battle League rewards
genderunknown	Ungendered
gigantamax	Can Gigantamax
hatched	Obtained from egg
item	Evolution requires an item (Table 8.10)
legendary	Legendary
lucky	Lucky Pokémon
male	Males
megaevolve	Can Mega or Primal evolve
megaraid	Caught in Mega raid
mythical	Mythical
primalraid	Caught in Primal raid
purified	Purified Pokémon
raid	Caught in any kind of raid
remoteraid	Caught in remote raid
research	Obtained in research
rocket	Rescued from Team GO Rocket
shadow	Unpurified Shadow Pokémon (section 8.3)
shiny	Shiny Pokémon
special	Exclusive move(s) (section 7.6)
tradeevolve	Evolution discount if traded (Table 8.8)
traded	Acquired via trade
ultrabeasts	Ultra Beasts (section 8.4)
xl/xs	Extra large / extra small
xxl/xxs	Extra extra large / extra extra small

Table 9.6: Search terms for Pokémon storage/Pokédex

A blue hue around a Pokémon indicates capture within the past twenty-four hours.

10 Battle mechanics

Pokémon GO features two major modes of battle: Nx1 and 3x3[1]. Nx1 is used for raids, Max Battles, and (in a series of 1x1 matches) assaults on Gyms. 3x3 is used for encounters with Team GO Rocket and Trainer Battles. All battles work on half-second quanta. Aside from Trainer Battles, Trainers can make use of items in the screen before battle is entered (called the "lobby", especially in an Nx1 context), and likewise engage Mega evolutions. Pokémon exchange fast attacks (and, when enough energy has been built up, charged attacks) until one side is entirely reduced to zero HP (or surrenders).

Remember that attacks typically have different power and energy stats depending on whether it's a 3x3 or Nx1 context (chapter 7). The fundamental "damage equation" is likewise calculated differently. Each attack reduces the opponent's Hit Points by some positive integer. This integer is called (inflicted) damage D, and calculated as a product of several factors.

10.1 The typing multiplier

Determine M_{C}, the common multiplier due typing:

$$M_{\mathrm{C}} = M_{\mathrm{STAB}} \cdot 1.6^{T}$$

M_{STAB} is the STAB bonus, equal to 1.2 when the attack's type matches any type of the attacker, and 1 otherwise. T is the number calculated in chapter 6 using the attack type and the defender's type. I have included a T of −4 in Table 10.1 for completeness, but remember that this is not currently realizable.

Leaving out the hideous −4 case, we see that M_{C} ranges from 0.2441 (a 75.59% reduction in damage) to 3.072 (a 207.2% increase). Considered another way, for an effectiveness of −3 with no STAB bonus, it takes about four times as many attacks to subdue an opponent than we would otherwise expect. With an effectiveness of 2 with STAB, it takes about one-third as many attacks.

Note that the change due to a T of 1 (60%) is similar in magnitude to the change when T is −2 (−60.94%). A T of −1 is a smaller loss (−37.5%). This does not mean that an attack ineffective against one of the defender's types and effective against the other enjoys a 22.5% gain (as

[1]These are commonly called PvE and PvP respectively. I don't like these terms, because Team GO Rocket encounters use the PvP format (despite involving a single Trainer), and Gyms use the PvE format (despite involving two Trainers).

T	1.6^T	Δ%	w/ STAB	Δ%
-4	0.1526	-84.74	0.1831	-81.69
-3	0.2441	-75.59	0.2930	-70.7
-2	0.3906	-60.94	0.4688	-53.12
-1	0.625	-37.5	0.75	-25
0	1	0	1.2	20
1	1.6	60	1.92	92
2	2.56	156	3.072	207.2

Table 10.1: Typing multipliers with and without STAB

one would see from $1.6^{-1} + 1.6^{1}$)! The multiplier is 1, and results in no change (1.6^{-1+1}). The two effectiveness relationships must be added, and this value used to calculate 1.6^T. Exponential functions are not linear functions, and must not be treated as such.

10.2 The context-specific multiplier

In Raids, Max battles, and Gym takeovers, a number of effects come into play:

$$M_{\mathrm{B}} = 0.5 \cdot M_{\mathrm{D}} \cdot M_{\mathrm{F}} \cdot M_{\mathrm{W}} \cdot M_{\mathrm{M}}$$

- M_{D} is 0.25 if the attack is dodged, and 1 otherwise.
- The friendship bonus M_{F}:

Situation	M_F
No friends present, *unless...*	1
Battling with at least one Good Friend, *unless...*	1.03
Battling with at least one Great Friend, *unless...*	1.05
Battling with at least one Ultra Friend, *unless...*	1.07
Battling with at least one Best Friend.	1.1

Table 10.2: Bonus due the presence of friends

- M_{W} is 1.2 if the attack is weather-boosted, and 1 otherwise.
- M_{M} from Mega Pokémon *actively* involved (i.e. they must be fighting, not just on the team), or Primal Pokémon *present* (even knocked out) at a Raid or gym assault. The Primal bonus is not awarded to the Trainer who brought that Primal Pokémon, but they can receive it from some other Trainer's Pokémon. Mega

Situation	M_{M}
No active Mega Pokémon, and no Primal Pokémon brought by other Trainers present, *unless...*	1
Battling with at least one Mega Pokémon, or another Trainer's Primal Pokémon present, *unless...*	1.1
Battling with at least one Mega Pokémon of the attack's type, or another Trainer's Primal Pokémon is present and of the attack's type.	1.3

Table 10.3: Bonus due the presence of Mega and Primal Pokémon

forms cannot participate in Max battles; there, M_{M} is instead based on the number of Pokémon left at that Power Stop (see section 10.6).

Pokémon present at Power Stop	M_{M}
0	1
1	1.1
2–3	1.15
4–14	1.188
15+	1.2

Table 10.4: Bonus in Max battles due Pokémon at Power Stop

The calculation for Trainer Battles is simpler:

$$M_B = 0.65 \cdot M_G \cdot M_E$$

Recall that the stat effect levels take the values -4–4, inclusive. Their effects are determined via Table 10.5. M_E is the ratio of the attacking Pokémon's offensive buff effect to that of the opponent's defensive one (section 7.2). The system behind the scheme of Table 10.5 is that negative levels $-n$ correspond to $\frac{4}{4-n}$, while positive levels n correspond to $\frac{4+n}{4}$. For fast attacks, M_{G} is 1. When throwing a charged attack, the attacking Trainer plays a short minigame. Performance on this minigame is summarized with "Excellent!", "Great!", "Nice!", or silence. This summary is a low-resolution signal of M_{G}, with a range over [0.25, 1]. "Excellent!" is necessary and sufficient for a 1, and should always be obtainable. Each Trainer gets two shields in a battle, each of which can be used to block a single charged attack. If a shield is used, M_{G} is 0, no matter the minigame performance. The effect is equivalent to raising the defender's DEF to infinity for the duration of the attack.

Level	Multiplier	Comment
−4	0.5 (−50%)	
−3	$\frac{4}{7} \approx 0.5715$ (−42.85%)	"Severely fell!"
−2	$0.\overline{6}$ (−33.$\overline{3}$%)	"Harshly fell!"
−1	0.8 (−20%)	"Fell!"
0	1	
1	1.25 (25%)	"Rose!"
2	1.5 (50%)	"Rose sharply!"
3	1.75 (75%)	"Rose drastically!"
4	2 (100%)	

Table 10.5: Mapping buff/nerf stages to effect

Summary	M_G range (no Shield)
"Excellent!"	1
"Great!"	[0.75, 1)
"Nice!"	[0.5, 0.75)
No summary	[0.25, 0.5)

Table 10.6: The minigame summary is an indication of M_{G}

10.3 The damage equation

D_{A} is what we can calculate using only the attacker's knowledge, i.e. it is that component of D which is independent of the defender.

$$D_{\mathrm{A}} = P \cdot \mathrm{Eff}_{\mathrm{A}} \cdot M_{\mathrm{STAB}} \cdot M_{\mathrm{B}}$$

Since this is a product, a proportional increase in any factor leads to the same change. Suppose a Level 12 Pokémon (CPM: 0.4628) with $\mathrm{Mod}_{\mathrm{A}}$ of 140 runs a fast attack with a power of 10 and no STAB bonus. The resulting D_{A} is 421.148. Increasing power to 12, increasing $\mathrm{Mod}_{\mathrm{A}}$ to 168, acquiring the STAB bonus, or increasing CPM 20% to 0.55536 (somewhere between Levels 17 and 17.5; this exact change is not possible) all yield a 20% increase in D_{A}, 505.3776. Note that this is all independent of the opponent.

D_{A} is divided by $\mathrm{Eff}_{\mathrm{D}}$ and scaled by 1.6^T:

$$D_{\mathrm{D}} = \frac{D_{\mathrm{A}}}{\mathrm{Eff}_{\mathrm{D}}} \cdot 1.6^T$$

We can recover our defined multipliers:

$$D_{\mathrm{D}} = P \cdot \frac{\mathrm{Eff_A}}{\mathrm{Eff_D}} \cdot M_{\mathrm{C}} \cdot M_{\mathrm{B}}$$

Using the definitions of $\mathrm{Eff_A}$ and $\mathrm{Eff_D}$, this can be rewritten as:

$$D_{\mathrm{D}} = P \cdot \frac{\mathrm{Mod_A} \cdot \mathrm{CPM_A}}{\mathrm{Mod_D} \cdot \mathrm{CPM_D}} \cdot M_{\mathrm{C}} \cdot M_{\mathrm{B}}$$

which can of course be rewritten as:

$$D_{\mathrm{D}} = P \cdot \frac{\mathrm{Mod_A}}{\mathrm{Mod_D}} \cdot \frac{\mathrm{CPM_A}}{\mathrm{CPM_D}} \cdot M_{\mathrm{C}} \cdot M_{\mathrm{B}}$$

This is always a positive rational. A floor function is applied (ensuring a non-negative integer), and one is added (ensuring a positive integer):

$$D = \left\lfloor P \cdot \frac{\mathrm{Eff_A}}{\mathrm{Eff_D}} \cdot M_C \cdot M_B \right\rfloor + 1$$

If D equals or exceeds the opponent's HP, it will fight no more.

10.4 Opponent-independent damage

We can break the damage equation into those parts dependent upon opponents, and those which are independent. Looking at the damage equation, power, $\mathrm{Eff_A}$, and STAB do not depend upon an attacker's opponent. Likewise $\mathrm{Eff_D}$ and MHP for the defender. The attacker knows neither $\mathrm{Eff_D}$ nor MHP, while the defender doesn't know $\mathrm{Eff_A}$. Knowing type effectiveness always requires knowing the opposing typing. We can thus define an independent core fitness evaluation:

$$F = \mathrm{Eff_A} \cdot P \cdot M_{\mathrm{STAB}} \cdot \mathrm{Eff_D} \cdot \mathrm{MHP}$$

Note that CPM is implicitly cubed in this function.

Of course, a given Pokémon can generally select from multiple fast and charged attacks, knowing up to two of the latter at a given time. Furthermore, fast and charged attacks are not used in equal ratio (there will always be multiple fast attacks per charged attack), and a shield can nullify a charged attack. How do we define P and M_{STAB}? As only one fast attack can be known at a time, it's easy enough to define one fitness for each possible fast attack, leaving out charged attacks for now. All we need do is normalize the power of the fast attack, using the number of Turns it requires.

$$F = \text{Eff}_\text{A} \cdot \frac{P_\text{Fast}}{T_\text{Fast}} \cdot M_\text{STAB-Fast} \cdot \text{Eff}_\text{D} \cdot \text{Eff}_\text{S}$$

Integrating charged attacks is more complex. First, we can simply normalize the charged attack as we did the fast attack, determine the number of fast attacks necessary to launch it:

$$N_\text{Fast} = \left\lceil \frac{E_\text{Charged}}{E_\text{Fast}} \right\rceil$$

yielding the total power of a cycle.

$$TDO = N_\text{Fast} \cdot P_\text{Fast} + P_\text{Charged}$$

We normalize this by the turns of a full cycle:

$$F_\text{cycle} = \frac{TDO}{N_\text{Fast} \cdot T_\text{Fast} + T_\text{Charged}}$$

There are two turns per second. Multiplying F_cycle by two yields a stat the community calls Damage Per Second (DPS).

This has several problems, almost all related to charged attacks. It doesn't account for the possibility of knowing two charged attacks. It doesn't account for leftover energy, which will sometimes be present if E_Charged is not a multiple of E_Fast (i.e. N_Fast might fluctuate from one cycle to the next). It ignores the possibility that the attacker might not use its charged attack immediately (and it is often unwise to throw charged attacks as quickly as possible; see chapter 12). Finally, it presumes that the attacker can always get off a full cycle. In reality, the attacker might be knocked out or substituted long before its charged attack becomes relevant, or the defender might use a shield. We can hardly ignore charged attacks: they tend to dominate our total inflicted damage—when they land.

If we expand over multiple cycles of fast and charged attacks, we can generalize to situations with excess energy. We know $E_\text{Charged} \cdot E_\text{Fast}$ will be a multiple of both the generated and consumed energy, so simply consider E_Charged cycles, each of which throws an average of $\frac{E_\text{Charged}}{E_\text{Fast}}$ fast attacks followed by one charged attack.

$$P_\text{cycles} = E_\text{Charged} \cdot \left(\frac{E_\text{Charged}}{E_\text{Fast}} \cdot P_\text{Fast} + P_\text{Charged} \right)$$

The number of fast attacks in a cycle is actually always either $\lfloor \frac{E_\text{Charged}}{E_\text{Fast}} \rfloor$ or $\lceil \frac{E_\text{Charged}}{E_\text{Fast}} \rceil$ (iff E_Charged is a multiple of E_Fast, these two ex-

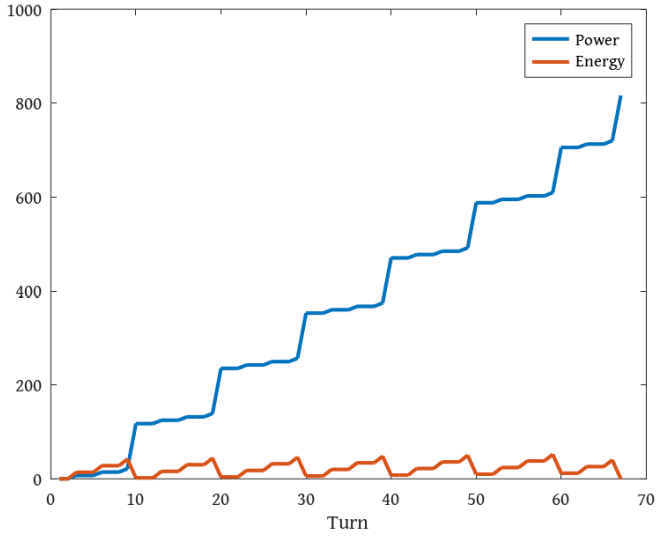


Figure 10.1: Power over time (Water Shuriken + Hydro Cannon—7 round cycle, 67 turns)

pressions are equal, and the number of fast attacks per charged attack is constant). Normalize for the total time:

$$F_{\text{cycles}} = \frac{P_{\text{cycles}}}{E_{\text{Charged}} \cdot \left(\frac{E_{\text{Charged}}}{E_{\text{Fast}}} \cdot T_{\text{Fast}} + T_{\text{Charged}} \right)}$$

This has only exacerbated one of the problems we mentioned before: we may not get to throw all these attacks! Suppose we have some constant chance $0 < L_{\text{KO}} \leq 1$ of being knocked out or substituted following each attack we launch, the probability of being in to throw the Nth attack is $(1 - L_{\text{KO}})^{N-1}$. We could thus define an expected damage from attack N:

$$E_{\text{D}}(N) = \overline{P} \cdot (1 - L_{\text{KO}})^{N-1}$$

and a cumulative expected damage through N attacks:

$$E_{\text{TD}}(N) = \sum_{i=1}^{N} \overline{P} \cdot (1 - L_{\text{KO}})^{i-1}$$

This is a geometric series where $a = \overline{P}$ and $r = 1 - L_{\text{KO}}$. Since $0 \leq r < 1$, this series converges to

$$E_{\mathrm{TD}}(\infty) = \sum_{i=1}^{\infty} \overline{P} \cdot r^{i-1} = \frac{\overline{P}}{1 - L_{\mathrm{KO}}}$$

Of course, our chance of being knocked out is usually not constant across attacks, but rather an immediate function of our remaining HP and any damage we are about to absorb.

10.5 3x3 battles

Two teams of three Pokémon each are locked in mortal combat. Each team has one champion fighting at any given time. The team is ordered: the first Pokémon will lead, and should that Pokémon faint, the second Pokémon will come in unless the Trainer specifies otherwise. An active Pokémon can be substituted, but the Trainer cannot perform another such substitution for fifty seconds. Each Trainer has two shields, and will be given the option to use one each time the opponent uses a charged attack (assuming one is left). The decision must be made before the attack is identified. There is a four minute (240 second) timer on Trainer Battles, which is not displayed until there are twenty seconds remaining or less. If this timer expires, the Trainer with the most Pokémon remaining wins. If they have an equal number of Pokémon, the Trainer with less damage to their Pokémon (by percentage) wins.

Charged attacks are purchased with energy, fast attacks with time. Each turn can be split into two halves, a "top half" and "bottom half". Attacks are launched and substitutions are made in the top half, and damage is accounted in the bottom half. Once a fast attack is started, the Trainer cannot do anything until it is complete. Launching a charged attack brings the opponent's ongoing fast attack to its conclusion. Damage from charged attacks is inflicted before damage from fast attacks, but damage from fast attacks can be inflicted simultaneously. Charged attacks cannot be simultaneous; if both Trainers launch a charged attack on the same turn, one goes first,and can knock out the opponent before it launches its attack. The Pokémon that goes first ("Charged Move Priority") is the one with the higher $\mathrm{Eff}_{\mathrm{ARaw}}$ (recall that this is base attack plus IV_{A}, times CPM, but does not reflect the Shadow bonus). Shadow status does not factor into consideration, nor do any active buffs. 3x3 battles take place four ways: with other Trainers via the friends list, with Team Leaders via the Battle screen, the GO Battle League, and encounters with Team GO Rocket. In only the last case does damage suffered in 3x3 battles persist past the battle's end.

GO Battle League

Ahhh, the best part of Pokémon GO: for me, the rest of the game is mindlessly farming Pokémon for GBL. Assemble a team from your Pokémon, and compete with Trainers around the world. Battle League operates on three-month seasons, divided into twelve weeks. Each week offers participation in two or three formats. Most common are the Great League (1500 CP maximum), Ultra League (2500 CP maximum), and Master League (anything goes). There are variations on the Leagues (*Mega* allows Mega evolved Pokémon; *Premier* prohibits Legendary and Mythical Pokémon), plus assorted Cups with sundry restrictions. Only one Pokémon of a given species can play on a team.

Each win results in an award. There are two reward tiers, Basic and Premium. Trainers can play five Basic sets per day at no cost. Each Premium set requires a Premium Battle Pass. Sets consist of five Trainer Battles. At the end of a set, a Trainer can be promoted to a higher rank (rank does not go down over the course of a season), and their rating is adjusted. Stardust is rewarded at the end of each set based on the Trainer's rank, even if all matches were lost.

Each Trainer's rank and rating reset each season. Rank cannot go down over the season's course. A Trainer's rank and rating are shared across all that season's Leagues and Cups. A Trainer advances through rank 20 by winning (or sometimes simply playing) a certain number of matches. Rating is based on an Elo-like system[2]; the Trainer's rating is displayed upon promotion to rank 20, and at the end of every set thereafter. At the twentieth rank and above, Trainers will be matched against Trainers with similar ratings. Past 20, there are four named ranks (Table 10.7). The highest, Legend, requires attaining a rating of at least 3000; Trainers reaching this rank receive an encounter with the fabulous Pikachu Libre. *¡Es algo rudo pero viril!* The world's 500 top-rated Trainers are shown on Niantic's leaderboard webpage. This opt-out page is updated daily using Trainers' ranking from the end of the previous day, and displays their Trainer name, team, rank, rating, and total battles fought that season.

10.6 Nx1 battles

One Pokémon fends off a number of simultaneously attacking Trainers, each of whom has one Pokémon active at a time. Damage and fainting suffered persist beyond the battle. A Trainer's Pokémon can dodge,

[2]A self-correcting ordered score. Players with the same rating are expected to split their games. Victories, especially upsets, increase the winner's rating. Losses, especially against lower-rated players, decrease it.

Rank	Name	Required rating	Rank	Name	Required rating
21	Ace	2000	23	Expert	2750
22	Veteran	2500	24	Legend	3000

Table 10.7: GO Battle League named ranks

reducing absorbed damage. Charged attacks have a duration of up to several seconds, during which the Pokémon cannot dodge. Attacks usually have different stats in Nx1 battle than they do in 3x3.

Gyms

A team occupies an open gym by leaving a defender there. All defenders must belong to Trainers from the same team. Only one Pokémon of a given species can be left in a gym; there is no such restriction on attacking teams. These Pokémon fight in the order they were left at the gym. Up to six defenders can be left in a gym at once, but only one may be left per Trainer, and that Pokémon must have full health. A Trainer cannot leave their Buddy Pokémon, nor any Mythical nor Legendary Pokémon (Meltan and Melmetal excepted). While in the Gym, the Pokémon still counts against the Trainer's storage, but it cannot be interacted with in any way save feeding it Berries. Berries can be fed to any Pokémon defending a coaligned Gym, though each defender can consume only ten berries per thirty minutes. Pokémon defending the gym steadily lose HP ("motivation") at a rate based on their CP (section 13.1). The first and second loss both cut 28% of max motivation, while a third loss always knocks the defender out of the gym; even a victory cuts 1.6% of max motivation[3]. Higher CP results in a more rapid decay of motivation. Defenders remain in the Gym until their motivation drops to zero; they cannot be recalled. A single Golden Razz berry will fully restore motivation. While the gym is controlled by a Raid Boss, the defenders cannot be challenged, nor fed berries.

Each gym has an associated badge, with Basic, Bronze, Silver and Gold levels. The first interaction secures a basic badge. Bronze, Silver, and Gold require 500, 4,000, and 30,000 gym points respectively. Each victory in the gym awards points equal to 1% of the defeated Pokémon's CP. Losing or retreating results in a consolation prize of five gym points. Installing a defender yields 100; feeding a berry to a defender nets 10,

[3] I was unable to personally verify these rates (though they seem plausible); they are taken from the GamePress wiki.

and a point is awarded for each minute's occupancy. Winning a raid at the gym is worth a cool thousand points[4].

Raids

Mysterious eggs sometimes appear in gyms, together with countdowns. When the countdown expires, the egg hatches, revealing a powerful Boss Pokémon. This Pokémon will hold the gym for some amount of time (displayed as another countdown), usually 45 minutes. During this time, up to twenty Trainers can come together to "raid" the gym. Each trainer provides a team of six Pokémon. If all six are defeated, their Trainer can optionally continue with another team of six. Only one Pokémon of each Trainer is active at a time, but there is unlimited substitution within the team. These raids have their own time limits, and the raid ends when the boss is defeated, no more Pokémon remain fighting, or the timer (180 seconds for raids below the 5★ difficulty level, and 300 seconds otherwise) expires. The contest is primarily against this timer, so prioritize Shadow Pokémon and high $\mathrm{Eff}_{\mathrm{A}}$.

A raid gym has zero or more associated lobbies, each capable of holding twenty Trainers. Empty lobbies are immediately destroyed. Upon entering a raid gym, a Trainer is placed in an existing lobby if there is space. A new lobby is otherwise created for the Trainer, and a 120 second timer starts. At the end of this timer, any Trainers in the lobby will begin the raid. Different lobbies will each fight their own instance of the boss. Taking part in a local raid requires a Raid Pass or a Premium Battle Pass, and a remote raid requires a Remote Raid Pass. Showing a pass is required to enter the lobby, but the pass is only consumed when the raid starts. Involved Trainers can reattempt a failed raid without a second pass.

Shadow raids are backed by Team GO Rocket, and feature Shadowed bosses. Shadow bosses ranked 3★ or more will enter a dangerous "enraged" state after losing about ⅓ of their HP. While enraged, the Pokémon enjoys higher attack and defense, regenerates HP, and is surrounded by a purple aura. Eight purified gems will subdue an enraged boss, as will falling to about 15% of original HP. Each Trainer can use up to five purified gems, with a five second delay between uses (note that this is insufficient to subdue the boss, making 3★+ shadow raids very difficult for solo Trainers). Transitions into the enraged and subdued states are noted with messages.

[4]These figures were likewise taken wholesale from an infographic posted to Reddit by the Pokémon GO Italian League. I cannot personally speak to their accuracy.

Tier	MHP	Shadow MHP	Time (min)
1★	600	600	3
2★	1,800	n/a	3
3★	3,600	4,000	3
4★	9,000	n/a	5
5★	15,000	15,000	5
Elite	20,000	n/a	5
Primal	22,500	n/a	5
6★	22,500	n/a	5

Table 10.8: MHP for raid bosses

Boss Pokémon share base ATK and DEF with their normal brethren, with a 15/15/0 IV. Their MHP is greatly augmented (Table 10.8). Shadow bosses sometimes get a further boost to MHP. A successful raid is followed by a "Bonus challenge", an encounter with the Boss Pokémon. This Pokémon will have its own IVs, and the same base stats as any other member of its species. The encounter uses a fixed number of Premier balls, though the Trainer can also use a Master ball if one is available. Berries can be used, and have the same effects as they do in normal encounters.

While in the lobby, invitations can be sent to selected friends. Additionally, other Trainers can see friends in lobbies, and join without an invitation. Remote Raid Passes will still be necessary in either case. Invitations cannot be sent after marking oneself ready. At the end of a successful raid battle, one to five Trainers are highlighted with "raid achievements" (Table 10.9). These contribute to the Raid Expert medal. A Trainer can receive only one achievement per raid.

Spooky raiding at a distance

In a lobby, remote participants will blink, while avatars of local participants will be solid.

Max battles

A Dynamax or Gigantamax Pokémon occupies a Power Stop for a period of hours to days. A team of up to four trainers can fight a Dynamax Battle, each providing up to three Dynamax, Gigantamax, or Crowned Pokémon (12 total). A Gigantamax Battle supports up to twenty-five such teams (one hundred total Trainers, three hundred total Pokémon).

Title	Cause
The Big One	Used a Mega evolved Pokémon
Charged and Ready	Threw most charged attacks
Charisma Trainer	Most friends in raid
Final Strike	Inflicted the final damage
Hardest Hitter	Inflicted the most damage
Stamina Specialist	Longest-fighting Pokémon
Style Savant	Involves avatar somehow
Traveler	Joined from greatest distance
Walk Star	Most distance covered previous day

Table 10.9: Raid achievements

In the lobby, pressing on the boss or the Trainers will show the boss's typing and the Trainers' names and levels. Unlike a Raid, new Pokémon cannot be introduced to replace their fallen comrades. Max Battles introduce a "Max Meter", which fills based on damage inflicted and energy packs recovered during the battle. There is a distinct Max Meter for each team, when applicable. Once it fills, active Pokémon enter their Dynamax or Gigantamax forms, and perform up to three Max Moves. They will not be attacked in this form. After all three moves, they return to their normal form, and the Max Meter returns to zero. Trainers whose Pokémon have all fainted can cheer along their teammates, helping the Max Meters (all, not just their team's) fill faster. If the remaining Trainers defeat the boss, fainted Trainers will receive rewards and the encounter just as if they were still fighting. Max Particles are not consumed unless the Max Battle is won, though any Remote Raid Pass is consumed when the battle begins. In the event of a loss, the Trainers can try again using the same Remote Raid Pass, unless the boss has left the Power Stop.

There is no explicit timer on Max battles, but after a few minutes the Pokémon will become "desperate" (this state change is announced). Similarly to the "enraged" state of Shadow Raid bosses, their attacks and defense grow much more powerful. Unlike rage, desperation cannot be alleviated with Purified Gems, so it is important to win quickly—take this into consideration before choosing Max Guard or Max Spirit over attacks. Should the battle continue past desperation, it can end with a message that your Pokémon are tired. A Max Mushroom will double the power of all damage inflicted in Max battles for a period of thirty minutes. Entry to Max battles has a cost in Max Particles (Table 10.11). Non-local Trainers must also submit a Remote Raid Pass. Power Stops provide up to 120 Max Particles when interacted with for

Level	Stardust K	MP	Candy	Candy XL
1		400	50–80	
1 (Crowned forms)	25		80	
1 (Eternatus)		400		
2		600	100–130	
2 (Crowned forms)	50		130	
2 (Eternatus)		600	1200	
3		800		40–55
3 (Crowned forms)	100			55
3 (Eternatus)		800	1200	320

Table 10.10: Max Move upgrade costs

Level	Max Particles	Level	Max Particles
1	250	3	400
2	400	4+	800

Table 10.11: Max Battle entry costs

the first time. These can be collected each day, though subsequent interactions yield only 100. 300 Particles are made available after walking 2 km, but these do not stack—until they're collected, further walking has no effect. Max Particles cannot be obtained using these methods between midnight and 0500h local time, and Max Battles can only be fought between 0600h and 2100h. A Max Particle Pack provides 800 Particles. After a Max Battle victory, assuming they do not already have one installed, involved Trainers may leave one of their three Pokémon at the Power Stop. The Pokémon may be fainted. This Pokémon will provide a bonus to future Trainers (Table 10.4), and collect Candy. Assisting in one, two, and four or more Max Battles results in two, three, or five Candy of its family. Candy XL does not yet seem to be awarded. Installing a Gigantamax Pokémon can further result in Dynamax Pokémon spawning around the Power Stop. When the Power Stop expires, installed Pokémon immediately return to their Trainers, though they can be recalled at any time.

10.7 Potions and revives

Damage to your Pokémon persists after a Raid, Max Battle, or 3x3 with Team GO Rocket ends. Those which fainted will remain fainted until a Revive or Max Revive is applied. While fainted, they cannot be brought into battle. Powering up a fainted Pokémon will revive

Item	Effect
Potion	Restore 20 HP, not to exceed MHP
Super Potion	Restore 50 HP, not to exceed MHP
Hyper Potion	Restore 200 HP, not to exceed MHP
Max Potion	Restore to full MHP
Revive	Revive with half of MHP
Max Revive	Revive with full MHP

Table 10.12: Potions and revives

them with minimal HP (section 9.1), while evolving one restores full HP (section 8.2). A regular Revive brings the Pokémon back with half of MHP; the Max Revive restores full HP. If the Pokémon isn't fainted, but merely damaged, four levels of Potion restore various amounts of HP, never exceeding MHP. Hyper Potions heal up 200 HP, sufficient to restore all but the bulkiest Pokémon to MHP. For them, there exist Max Potions, which go all the way to MHP. Potions cannot be applied to fainted Pokémon; they must first be revived. Potions and Revives are level-gated, but once unlocked can be semi-randomly acquired from Gifts (section 4.1), from advancing to a new Level (Table 2.4), from spinning Pokéstops (especially at Gyms, particularly when occupied by your team, and when you have a badge for the gym), in the three 7-day streak awards, by completing Routes, by winning Raids, and in the daily free package from the Store.

10.8 Nuzlocke rules

Robert Munafo developed the fascinating "Nuzlocke variant" from Nick Franco's "Hard Mode" for *Pokémon Ruby*. Capture the first six wild Pokémon you find. You will become very close. Seek out raids and Team GO Rocket[5]. If victorious, you may replace one of your six teammates with the captured raid boss or Shadow Pokémon. Once Max Battles are unlocked, use the two Dynamax Pokémon from research. They can be similarly replaced, but you must always have two (and only two) Max Pokémon, and they can be used only in Max Battles. Nontransferable Pokémon do not count unless you elect to use them, in which case they must replace one of your core six. Your score is the number of distinct raid bosses you have defeated, divided by the number of raids you have attempted. Godspeed. Stout hearts.

[5]Munafo made no mention of Team GO Rocket, but I think they're appropriate.

11 Orders of operations

A common question is "ought I perform X before Y?" Vigilant readers should by now be prepared to answer.

11.1 Transforming Pokémon

To minimize costs, proceed in this order, skipping unwanted steps:

- Purify (saves costs, necessary for trade)
- Trade (might get Lucky trade, saving costs)
- Teach second attack (evolution might add cost)
- Evolve and power up interchangeably

11.2 Prioritizing encounters

The Trainer must often select between numerous possible interactions available from the map. Especially when actively traveling, they must be prioritized, with some potentially missed. I operate thusly:

- Do anything I particularly feel like at the moment. Ignore anything that irritates me[1]. This is a game, not a job.
- Get anything I want that will otherwise be scrolled off the map.
- Capture anything I actively want for battle/development.
- Spin a Pokéstop if short on balls, or I haven't since my last encounter (necessary to sustain ball inventory).
- Capture any Pokémon awarding more than minimum Stardust.
- Capture anything missing from my Pokédex.
- Capture any Pokémon awarding more than minimum Candy.
- Capture anything boosted by my Mega/Primal form.
- Capture anything weather-boosted.
- Capture anything with a Max form I might use.

[1] I intend to never again actively encounter Komala.

Below this level, if the Pokémon escapes once or twice, and I'm on the move, I probably let it go.

- Capture anything I might want for battle/development.
- Spin Pokestops (unless my bag is full).
- Fight Team GO Rocket, if I feel like it.
- Capture anything for which I lack platinum capture medal.
- Capture anything known to be easy to catch.
- Fight Max Battles or raids, if I feel like it.
- Assault gyms, if I feel like it.
- Feed berries to gym defenders for Stardust.
- Continue idly depopulating the countryside.
- Send gifts in celebration.

Throughout, I'm tossing as many berries as possible, and transferring Pokémon as rapidly as they come in. Keep your storage loose!

11.3 Prioritizing development

What ought be evolved, what ought be powered up, and what ought be transferred? A frontline is needed for raiding, Max Battles, Master League, and keeping Team Go Rocket out of one's face. For each attack type, this ought eventually contain at least six (and ideally twelve) Pokémon employing powerful attacks of that type. A Pokémon with a high level is much more valuable in the short term than one with a higher IV. Until a minimal frontline is built up, don't worry about IVs; focus instead on strong species, good attacks, and levels sufficient to beat Team GO Rocket. Once you're easily soloing first tier raids and Max Battles, begin collecting for the long term. Transfer most of what you capture, keeping only quality species with decent IVs (long-term keeps) and captures of level sufficient to immediately serve on your frontline (toss these later). As you develop quality Pokémon, give veterans the thanks they deserve: a quick trip to the Professor! Savor the Candy through which they serve you even in death.

Trainers interested in League play will want a similar (but smaller) set of Pokémon chosen for each League's CP limits. Read on...

12 Tactics

There's not much in the way of tactics for raids: press the charged attack button when it's full, and try not to get hit. Full information is available to the raiding Trainers regarding the raid boss. It's trivial to calculate the exact damage each of your Pokémon can inflict, the time required to inflict it, how much damage they'll take from various possible attacks, and how powering up might affect the situation. If a Pokémon is not strong against a charged attack, it's usually worthwhile to dodge (dodging takes time during which you can't throw attacks). Each Trainer typically throws in a squad of six Pokémon, but it can be advantageous to use fewer when they are much stronger than any others—fight with these top-tier Pokémon, revive them in the lobby, and return to the raid. It has been conjectured that all raids can be won by a pair of Trainers, assuming proper Pokémon.

Regarding Max Battles, the majority of damage is likely to be dealt while in Max form. Filling the Max Meter is essential, as is keeping elite Max forms alive. A basic strategy is thus to do most attacking with a Pokémon having high defense and MHP, employing moves of low duration. Single-turn fast attacks are ideal. Each will advance the Max Meter, and flurries of fast attacks are likely to fill it faster than lengthy charged attacks. While transitioning to Max form, swap in your most powerful attacker. Swap them back out upon detransition, so that they are not exposed to damage. This is a useful technique when battling Dynamax Pokémon; with Gigantamax it is practically a necessity.

This chapter's remainder addresses 3x3 Trainer Battles. Three subsequent chapters cover team selection, but the topics are intertwined. Pokémon enable tactics, and tactics guide Pokémon selection.

A tip regarding battle UI

Without sufficient energy, pressing the charged attack control employs a fast attack. If you know you want to throw a charged attack as soon as possible, press its control until thrown.

One of the greatest advantages one can gain is knowledge. Know Pokémon well, especially those on your team and those you regularly see. Know what moves they can and are likely to learn, and how hard they throw them (Power and Eff_A). Knowing their bulk (Eff_D times MHP) can help decide which charged attack to use. Know type relations cold, and be able to calculate type effectiveness on the fly. The flipside of this is exploitation of ignorance. Opposing Trainers are less likely to

know Pokémon outside the "meta", especially those with uncommon typings. A Pokémon can only know two charged attacks at a time, but if chosen from a move pool of three or more, even an informed opponent can't know what's coming until it's thrown.

Having two charged attacks is a tremendous advantage over only one. If they are different types, you can gain type advantage over a wide range of opponents. Since you choose which one to throw on the fly, resistances are much less of a concern. Their only disadvantage is expense. A second attack costing 50,000 Stardust is the equivalent of powering up from level 27.5 to 31, eleven half-levels. A 100,000 Stardust second attack is about one-fifth the cost of going from level 1 to 50.

Take two charged attacks having equal power-per-energy and type, but different power. The attack delivering more power (and requiring more energy) is beneficial when it can achieve a knockout in one hit, but the attack with less power cannot. This can happen when a new opponent is subbed in, or when the Pokémon is brought back after having been subbed out with significant charge. It also benefits from only one application of the floor function. Otherwise, the cheaper attack deals comparable damage over time, but deals a portion of it earlier, while being less vulnerable to shielding.

Change to Damage inflicted by an effective Attack is at least 60%. Change to Damage inflicted by an ineffective Attack may be as low as 37.5%. It is probably worth accepting an ineffective Fast Attack if it enables an effective Charged Attack, so long as you actually get that Charged Attack off.

Pokémon GO Trainer Battles don't offer many degrees of freedom. Team selection is a complex topic, but once the teams are locked in, there's some truth to the claim that battles are a mere game of "tap tap tap." There are three major classes of tactic:

- when to shield against charged attacks,
- when to substitute the active Pokémon, and
- when to throw charged attacks.

12.1 Shielding

Each team starts a 3x3 battle with two shields. A team is almost certain to see more than two charged attacks, so some will be blocked, and others will not. Optimal shielding can easily decide a match. The tactical situation of both teams is greatly simplified once a team has used both shields, but for that team it is a restrictive simplification (their

space of action is reduced), whereas the opponent enjoys a permissive simplification (their space of useful actions is enlarged). We can easily define the utility of a shield: how much damage can be inflicted when the shield is used, versus the maximum amount of damage inflicted when it is not? Precisely answering this question is impossible without full information.

The decision is most complex early in a match, when the game space is at its largest, but the question can always be reduced to: how much ability to inflict damage is removed by the opponent's charged attack? A Pokémon that is knocked out can inflict no damage—but if there are Pokémon left on the team, they can. A charged attack that inflicts more damage than hit points remaining on the active Pokémon is partially wasted. The following questions ought be considered, and give rise to heuristics:

- How much damage is the active Pokémon capable of inflicting if it eats the charged attack? If it does not?
- How much less damage are remaining Pokémon capable of inflicting if one fewer shield is available to them?
- How much damage is expected from this charged attack?
- How much energy is lost if the active Pokémon is knocked out?

A charged attack that delivers more damage than the recipient has hit points is incompletely utilized. Shielding a Pokémon whose hit points are very low is reasonable only when that Pokémon is the last standing (or all others are similarly damaged), or it is expected to inflict substantial damage (or at least consume a shield) in its final turns. This is just another way of asking our basic question: *how much potential inflicted damage is preserved by this shield?* If the Pokémon that would replace our active player are weak to known or suspected attacks, it makes more sense to shield. If they would be strong, it makes less sense to shield. Allowing a Pokémon to be knocked out allows the Trainer to put in a new Pokémon independently of the substitution timer; if that Pokémon can quickly eliminate the attacker, it can probably make better use of a shield than a weakened Pokémon (and possibly even gain an energy advantage).

Catching charged attacks

When a Pokémon drops to very low health (one or two more fast attacks will knock them out), they can be subbed out. Later, when you know a charged attack to be imminent, bring them back in. If the charged

attack is spent knocking out the original Pokémon, its total damage is greatly lessened, and you can immediately return to the Pokémon you had up. If you can get an effective fast attack out of the sacrifice, all the better. This requires sufficient time between the sub out and the catch, and that the opponent doesn't knock out your sacrifice Pokémon with fast attacks.

12.2 Substitutions

When the active Pokémon is knocked out, the Trainer selects an unfainted Pokémon to replace it (if there is only one such Pokémon, it comes in automatically; if there are none, the match is over). Before a knockout, the Trainer can call for a substitution using any unfainted Pokémon. This starts a substitution cooldown timer of fifty seconds; the Trainer cannot perform an early substitution during this time. Under what circumstances ought early substitutions be made? Remember that subbing out a Pokémon removes all buffing (section 7.2) active for that Pokémon (though not buffs it effected on the opponent).

"Super Effective!" over one's Pokémon is a frightening message. It is natural to want to pull them out, ideally bringing in a teammate resistant to the revealed opponent's attacks and effective against their typing. If the opponent can freely substitute, and has a counter to the Pokémon brought in, our Trainer is in a world of shit. Their substituted Pokémon is going to get cooked, and it is unlikely to inflict much damage on the countering Pokémon. Furthermore, the original threat is still lurking, our original Pokémon is still at a disadvantage, and we cannot sub further. There's no faster way to lose a match. How, then, to deal with a highly disadvantageous initial matchup?

One can always accept the loss of their lead Pokémon, trying to take some shields and HP with them. This is not unreasonable if the Trainer has a strong counter at position two or three that can come out and mow down the initial Pokémon. The opponent will of course be able to bring in their own counter when their lead goes down. The opponent might substitute immediately, protecting their lead (and any charged energy); the Trainer will be able to substitute in turn, possibly locking in a mismatch. Two Trainers enter a match knowing nothing of the other team's composition. Losing a Pokémon has the silver lining of freely choosing among your remaining team, while knowing at least one member of the opposition. Substitution has the same benefit. A chained team, where each Pokémon hard counters the counter of another, can accept such sacrifices.

If the Pokémon brought in is particularly resilient to damage, it

might be unlikely that the opponent has a good counter available. By that logic, why not use such a Pokémon as lead, and make the substitution unnecessary? The lead goes in completely uncertain of their opponent (though the Trainer might have suspicions). Their charged attacks can always be shielded. For this reason, I prefer a lead with minimal weaknesses (even if it means few resistances), strong fast attacks (perhaps at the expense of energy) with few resistances (even if it means few strengths), and low cost charged attacks (despite low power). Dragon and Ghost are obviously good candidates here. Water has some of the best attacks, and several attractive strengths, but Electric and especially Grass counters can wipe out Water. Grass pairs well with Water, the two eliminating most of the other's weaknesses; don't sleep on Ludicolo. Take a look at Table 6.5, and familiarize yourself with the first and second pages. I like a lot of hit points in my lead, as they won't be dealing extreme damage.

The intended third Pokémon is coming into a situation with minimal shields available to either Trainer. There's nothing they can do about a mismatch. They're almost certain to get hit hard, and likely to get their charged attacks in. Here I don't care about weaknesses; the opponent has limited substitution potential, and I don't expect to be around very long anyway. I want lots of attack—Shadow Pokémon are useful here—and fast attacks that quickly enable my powerful charged attacks. This Pokémon absolutely must have two strong attacks of different type; it's essential that the charged attack not be resisted. It's best if they both have STAB. The overpower of charged attacks relative to stamina makes trying to win this via defense a bad idea.

Substituting out a Pokémon with sufficient energy for a charged move (or even two) is a powerful technique. By doing so, a Trainer has more control over when to use the accumulated energy. Why waste a knockout blow on an opponent that's already on the ropes? This can be particularly useful when a fast move is very effective against the current opponent, but your charged move is not. Save that energy for a more profitable matchup. Of course, the Pokémon you would have knocked out might get a charged attack off on your sub, and/or a hard counter might be brought in: this is a gamble until you know the opponent's full lineup. On this note, when deciding whether to shield, be sure to account for built up energy on the opponent's bench.

12.3 Charged move timing

Recall from chapter 10 that charged attacks:

- inflict damage on the turn thrown,

- conclude an opponent's fast attack, and
- inflict damage prior to said fast attack.

A result of these mechanics is that on the turn following a charged attack, both Pokémon are ready to throw a new attack.

Pokémon A concludes their T_A-turn fast attack, and has sufficient energy to throw a charged attack. If Pokémon B has a one-turn fast attack, everything is very simple; A can throw charged attacks whenever they'd like. If Pokémon B is in the middle of a T_B-turn fast attack, with R turns remaining, and $T_A < R$, throwing the charged attack constitutes a blunder[1]. It brings Pokémon B's fast attack to an early conclusion, leaving them ready to start a new attack. If instead Pokémon A runs a fast attack, that attack completes before Pokémon B's, inflicting damage and generating energy. The charged attack can then be thrown. In the extreme case of facing an attack of five turns while using one of a single turn, you can get four attacks in before optimally launching the charged attack.

Let's assume Pokémon A employs Poison Jab, a two-turn fast attack. Pokémon B throws five-turn Incinerate at T_n. If Pokémon A throws its charged attack, at T_{n+1} it will have inflicted one charged attack, and suffered one fast attack. Instead, Pokémon A throws Poison Jab, which concludes on T_{n+1}, dealing damage and charging energy. On T_{n+2}, Pokémon A launches Poison Jab a second time, concluding on T_{n+3}. Finally, at T_{n+4}, Pokémon A throws its charged attack. The result when T_{n+5} rolls around is that both stand ready to throw new attacks, but Pokémon A has the benefit of two extra fast attacks. Compared to throwing the charged attack prior to T_{n+4}, Pokémon A has inflicted more damage and built up more energy. A result: if your fast attack is fewer turns than your opponent's, and you're both set to choose attacks, *don't throw a charged attack if you expect them to throw a fast attack*. Go with $\lfloor \frac{T_B}{T_A} \rfloor$ fast attacks first. Even if you're wrong, and they throw a charged attack, you'll get credit for the fast attack—unless you get knocked out.

Optimal timing requires throwing charged moves only when $R = 1$, and continuously throwing fast moves otherwise (again, this assumes $T_B > 1$). This is impossible to do when T_A is a multiple of T_B[2]. The interesting case is when $1 < R \leq T_A$ (if $1 = R$, the charged attack is optimally timed; if $R > T_A$, throw a fast attack). Replace Poison

[1]Unless it wins the match.

[2]In my opinion, long fast moves are an advantage against weak competition, and a disadvantage against strong competition. Weak competition is more likely to throw early, giving up fast attacks. Strong competition won't do so, and you never get those attacks.

Jab with Astonish (three turns). It throws Astonish at T_n, concluding at T_{n+2}. Throwing Astonish a second time won't see it conclude until T_{n+5}. Assume Pokémon B throws a second Incinerate at T_{n+5}. The time between charged attacks can be thought of as a "period" in which each Pokémon lands some number of fast attacks. A Trainer wants to maximize the ratio of their fast attacks to their opponent's. If Pokémon A throws its charged attack at T_{n+6}, at T_{n+7} Pokémon B has landed two Incinerates against two Astonishes and a charged attack. A charged attack at T_{n+3} would lead to one Incinerate against one Astonish and a charged attack. Pokémon A catches up at T_{n+9}, when it has thrown three attacks, and Pokémon B is completing its second. This 3:2 ratio seems as good as it gets for Pokémon A. At T_{n+12}, we're down to 4:3, and T_{n+15} is 5:4.

Warning! Achtung! 危险! ¡Peligro! 危險! *Tulaga faigata!*

I now contradict longstanding claims of the Pokémon GO community, repeated by people far more experienced than me. Nonetheless, I'm pretty sure they're all wrong, and I'm right.

Again and again, one reads that charged moves ought be thrown on the natural last turn of an opponent's fast move, lest the opponent gain tempo[3]. But this rule is incomplete.

Pokémon B's fast moves complete on turns T_{n+5a-1} for positive integers a. Pokémon A can throw charged moves on turns T_{n+3b} for non-negative integers b. The rule considers $T_{n+9+15c}$ for non-negative integers c optimal times to throw ($T_{n+9}, T_{n+24}, \ldots$), and these are indeed *locally* optimal. At T_{n+18}, the ratio is 6:4, the same as 3:2, despite *not* being the last turn of Pokémon B's attack. And at T_{n+24}, the ratio is 8:5, *better* than T_{n+9}! The maxima converge to 5:3.

What about Pokémon B? Ideally they get their charged move out at T_{n+5}, for a 1:1 ratio. At T_{n+10} the ratio is 2:4, but at T_{n+15} it is 3:6, despite landing on the first turn of the sixth fast attack. At T_{n+20} the ratio is 4:7, but it falls back to 5:9 at T_{n+25}. These maxima of course converge to 3:5.

Simply postponing a charged move can be just as or more effective than timing with respect to the opponent's fast attack. Why is this important? It can be useful to delay a charged attack for any number of reasons. If Pokémon A was willing to accept a 1.5 ratio, throwing

[3]EmpoleonDynamite's "Guide to Fast Move Mechanics" on pvpoke.com (2022), Flarke-Fiasco's r/TheSilphArena post "Charge Move Timing—Yes, it *really* does matter" (2020), avrip's "Mastering the Turn System in Pokémon GO PVP" on GOHub (2024), and Wallower's YouTube video "GBL Advanced Mechanics 1: Charged Move Timing" (2021).

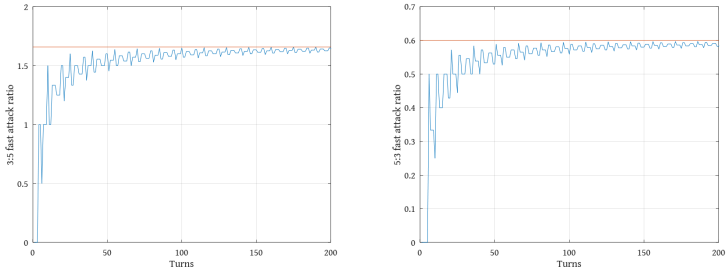


Figure 12.1: Ratios of 3- and 5-turn fast moves (200 turns)

after three Astonish attacks suffices, but six works as well, despite not being the last turn of an Incinerate. No efficiency is lost relative to the three case, though neither three nor six are as efficient as 24. The true maximum efficiency cannot be reached.

Turn A throws	R	A fast attacks	B fast attacks	Ratio
0	5	0	1	0
3	2	1	1	1
6	4	2	2	1
9	1	3	2	1.5
12	3	4	3	$1.\overline{3}$
15	5	5	4	1.2
18	2	6	4	1.5
21	4	7	5	1.4
24	1	8	5	1.6
27	3	9	6	1.5
30	5	10	7	~1.429
33	2	11	7	~1.571
36	4	12	8	1.5
39	1	13	8	1.625
∞	0	5n	3n	$1.\overline{6}$
Turn B throws	R	A fast attacks	B fast attacks	Ratio
0	3	1	0	0
5	1	1	2	0.5
10	2	2	4	0.5
15	3	3	6	0.5
20	1	4	7	~0.571
25	2	5	9	$0.\overline{5}$
30	3	6	11	$0.\overline{54}$
35	1	7	12	$0.58\overline{3}$
∞	0	3n	5n	0.6

Saving charged attacks

If your Pokémon has almost enough energy to throw a charged attack, but is close to fainting, it can be useful to sub them out. When they come back, the situation might have changed so that they can get the attack off, rather than wasting the builtup energy. A downside is that an incoming charged attack will probably inflict more total damage on a healthy Pokémon than one with little HP to lose.

Charged move subterfuge

It's best to keep an opponent guessing as to your charged moves. With two moves, an opponent rarely knows which is coming with certainty. Even with a single move, there is some room for deception. By holding onto a charged attack longer than necessary, a Pokémon can build up energy towards a subsequent attack, and hint towards an attack that requires more energy (and thus presumably packs more power). An opponent that would have absorbed the relatively weak charged attack might be induced to blow a shield instead. This can be particularly effective when the opponent can be drawn down to low HP and has one shield left. The charged attack comes, and is mistaken for a very powerful attack. A shield is deployed, with the reasoning that the attacked Pokémon can do substantial damage with their remaining health, as there isn't enough time for a second attack to be charged. Instead, a second attack comes almost immediately; the Pokémon goes down by necessity, and no shields remain.

If your opponent still has both shields very late in the match, avoid charged attacks entirely. Two are going to do the minimum single point of damage, and possibly give the opponent a gift of tempo.

13 Unbounded team selection

Trainer Battles make very little use of random numbers (to the best of my knowledge, they only show up when checking for a charged attack side effect, and breaking CMP ties). Their intrigue is rooted instead in ignorance: ignorance of the Pokémon you'll face, the order in which you'll face them, their statistics (beyond the static properties of the Species), their attacks, and how their Trainer will employ them.

We've established that Pokémon battle fitness is dependent on opponent details. We cannot name a globally superior Pokémon. Primarily due to type effectiveness, there is no individual Pokémon that (assuming competent play by both Trainers) can defeat all others in even a 1-on-1 contest. Statistics based on some "average opponent" are fundamentally misleading. Averages over the population do not correspond to any actual opponent, the population is more diverse than actual opponents, and current actual opponents cannot generally predict future opponents. Even were this not the case, the situation into which a Pokémon is deployed can change drastically from match to match. Accurate prediction comes not via stats, but simulation (chapter 16).

Yet the game provides a per-Pokémon ordered measure of strength in battle: Combat Power (CP). Obviously no single statistic can account for all possible opponents, but we will see that CP is a very questionable assessment for a PvP context (and not great for PvE, either).

13.1 Combat Power

A Pokémon's CP is defined as:

$$\text{CP} = \max 10, \frac{\text{Mod}_\text{A} \cdot \sqrt{\text{Mod}_\text{D}} \cdot \sqrt{\text{Mod}_\text{S}} \cdot \text{CPM}^2}{10}$$

CP growth is quadratic with respect to CPM, linear with Mod_A, and sublinear with Mod_D and Mod_S. Remember from our damage equation that Mod_A is divided by Mod_D to generate one of the factors. This suggests that Mod_D is undervalued by the CP equation, from which we might expect Mod_A to be divided by Mod_D. MHP isn't used in the damage equation, but knocking out a Pokémon requires inflicting some average damage D n times, where $n = \lceil \frac{\text{MHP}}{D} \rceil$. It is thus similarly undervalued by CP. Finally, recall that $\text{MHP} = \lfloor \text{Eff}_\text{S} \rfloor$. Since the observable MHP increases only stepwise with respect to Eff_S, there is a stepwise overvaluation of Mod_S: a 0/14/13·30.5 Clodsire has the same MHP as a 0/14/14·30.5 at the same level (213), but a CP of 1499 as opposed to

the latter's 1502. Despite being exactly the same on the field, one is allowed in Great League, and the other is prohibited.

The quadratic term for CPM makes sense from the perspective of the damage equation, since CPM is used as a factor when calculating damage in the case of both the attacker and defender. Since CPM is also used to calculate MHP from Mod_S, one might expect it to be raised to the third power. Since $\text{CPM} < 1$ for all Levels, $\text{CPM}^3 < \text{CPM}^2$, and thus it would seem *overvalued* by CP. But rewrite:

$$\begin{aligned}\text{CPM}^2 &= \text{CPM} \cdot \text{CPM} \\ &= \text{CPM} \cdot \sqrt{\text{CPM}} \cdot \sqrt{\text{CPM}}\end{aligned}$$

...and distribute...

$$\begin{aligned}\text{CP} &= \max 10, \frac{\text{Mod}_\text{A}\text{CPM} \cdot \sqrt{\text{Mod}_\text{D}}\sqrt{\text{CPM}} \cdot \sqrt{\text{Mod}_\text{S}}\sqrt{\text{CPM}}}{10} \\ &= \max 10, \frac{\text{Eff}_\text{ARaw} \cdot \sqrt{\text{Eff}_\text{DRaw}} \cdot \sqrt{\text{Eff}_\text{S}}}{10}\end{aligned}$$

and recover our old friends the effective statistics.

Why would the game use such a flawed measure of power? Clearly, a single stat was desired to cover both modes of Pokémon GO battling. Since Raids allow substitution of defeated Pokémon, but are subject to a timer, the ability to defend and absorb damage is less important than being able to quickly inflict damage. Furthermore, when two Pokémon launch charged attacks on the same turn in a Trainer Battle, Eff_ARaw determines which goes first (section 10.5). Perhaps this explains the emphasis on attack, but some of the most important factors in the damage equation are left out of CP entirely! The power and timing of the Pokémon's attacks are not present, despite dominating the inflicted damage and overall flow of the battle. Type effectiveness and STAB have been likewise ignored, as have the properties of Shadow Pokémon. We must look beyond CP in our selection of Pokémon.

Remember that a type advantage is more impactful than a type disadvantage (60% vs -37.5%): all else being equal, it's usually more important to reduce your Pokémons' weaknesses than to increase their strengths. Every typing is weak against at least one attack type—usually several. Weakness against only a single type is uncommon: only seven typings manage it, and in two of those cases it's a double weakness (Table 13.1). The only such typings with much population are Electric and Normal.

Typing	Weakness
Bug+Steel	Fire (doubly weak)
Ghost+Normal	Dark
Dark+Ghost	Fairy
Dark+Poison	Ground
Electric	Ground
Ground+Water	Grass (doubly weak)
Normal	Fighting

Table 13.1: Single-weakness typings

Scaling

Hit points obviously scale. At first glance, Eff_A scales arbitrarily, while Eff_D yields diminishing returns. After all, damage suffered can only be reduced to one, while damage inflicted can arbitrarily grow. Is this really the case? Damage greater than the opponent's hit points is wasted, and thus can't meaningfully scale beyond the 429 hit points of a 15/15/15·50 Blissey. Meanwhile, an Eff_D even four times Eff_A is still a factor an order of magnitude less than the power of a charged attack. With that said, each increase in Mod_A is worth a constant increase in damage (leaving aside the floor function), whereas each increase in Mod_D results in less reduction than the previous.

13.2 How important are IVs?

Well, how important are attack, defense, and stamina? Every calculation that makes use of a Pokémon's base stats also uses the IVs. Indeed, it's quite reasonable to consider each form to be 4,096 different forms, and dispense with IVs altogether. A Beedrill has base stats of 169, 130, and 163. An Ariados has 161, 124, and 172. For the purposes of Eff_A, Eff_D, MHP, and CMP, a 0/0/9·N Beedrill and a 8/6/0·N Ariados are the exact same thing, and will have equal CP.

In bounded competition (see chapter 14), higher IVs—just like higher base stats—are automatically counterbalanced, and subject to various fitness functions. In unbounded raids, Max Battles, Team GO Rocket battles, and the Master League, 15/15/15·N is always optimal, though it is possible for 15/15/M·N to tie. As an example, a Sigilyph (base STA 176) at level 22 has an MHP of 119 with either a 15 or a 14 IV_S: there is literally no difference between the two values.

As with most such questions, we could answer "the details are opponent-dependent", declare the day done, and close up shop. Some-

what vaguely, we might reply, "they're worth a couple levels". More concretely, we can say "they're more important with low base stats, less important with higher base stats". Quantitatively, we can say "An IV_A of 15 is worth more than STAB to an attacker with ATK less than 75. It is worth exactly as much (20%) as STAB to an attacker with ATK of exactly 75. It is worth less than STAB to an attacker with ATK greater than 75." Similarly, an IV_A of 15 is equal to type effectiveness of 1 when ATK is 25. For a more plausible ATK of 150, a maximum IV_A is worth a 10% bonus to attack.

In general, IV_A adds a percentage boost of

$$\frac{\mathrm{IV_A}}{\mathrm{ATK}} \cdot 100$$

to attack, and IV_D lends the same (of course using DEF) to defense. This might not lead to any change in actual damage, depending on an opponent's own attack and defense.

A higher level amplifies the impact of IVs. At level 50, an IV_A of 15 boosts Mod_A by 12.6045. At level 1, it adds 1.41. With unbounded competition fought best by Pokémon of the highest level, it is sensible to power only those with close to maximum IVs beyond level 25 or so. At this point, they are getting almost 80% of the potential benefit from leveling. My (soft) rule is to only level up so long as the CPM fraction exceeds the IV fraction: 14/14/14·is 93.3% of 15/15/15·, so I don't level that Pokémon past 38.5, where CPM of 0.7817 is 93.04% of level 50's 0.8403. Given sufficient Stardust and Candy XL, of course, you can do whatever you want.

13.3 Team assembly

A team's overall fitness depends on the entire opposing team, involving many unknowns. Comparing teams is highly nontrivial, and this greater complexity admits further opportunities for strategy and cunning. It's generally very bad if all three team members are weak to the same type. Ideally, no two members share a type weakness. Lead with a species having few/uncommon weaknesses, to avoid having to make the first switch.

You'll use fast attacks more than anything else, so choose wisely. I lean towards attacks that build energy quickly, at the expense of power, because of the power of charged attacks (remember section 7.4) and the fact that the floor function is applied to a volley of fast attacks multiple times. Attacks of shorter duration might be thought preferable to those requiring several turns, due to greater responsiveness. Attacks

of longer duration can foster opponents' blunders with regard to the timing of their charged attacks, but experienced players will avoid such errors. Short attacks credit damage more quickly than long ones. There's no general rule: fast attack selection comes down to attack type (both for effectiveness and STAB), the Pokémon's charged attacks, and even the $\frac{P \cdot Eff_{\mathrm{A}}}{Eff_{\mathrm{D}}}$ of expected opponents. Some Pokémon can learn two fast attacks of the same type and duration, where one is strictly inferior to the other in terms of power and energy (for instance, Annihilape's Counter is strictly superior to Low Kick). Such garbage attacks ought be immediately changed with a Fast TM.

Dubwool+Wooloo+Mareep is a BAA team

You'll hear a lot of bafflegab about ABA teams and ABB teams and CBD teams. In my opinion, these terms are somewhat useful for characterizing teams (the chained team from chapter 12 would be an ABC team), but they're not design principles, per se. Build a team around the Pokémon, not acronyms.

Each Pokémon ought know two charged attacks. Ought they be of different types? Some say that if they are of the same type, you can select for either time or power, depending on context. This remains true, however, if they are of different types; the power simply depends on the different type relations. It might indeed be that the more expensive charged move with higher PPE is no longer advantageous (if it is ineffective, and the other move is not), but it might also be the case that it is even more advantageous, or the cheaper move is now more powerful. Either way, I consider wider type effectiveness to be more important than gains in PPE; if is after all rare for two quality charged moves' PPE to be separated by a factor of 1.6. It is best if they are not both ineffective against any typing, and one or the other is effective against many typings. Remember, unlike defense, adding attack types can only be beneficial. Pokémon that can't learn two good charged attacks having distinct types are best avoided.

Seeding and building

In raids, Max Battles and Team GO Rocket encounters, you know the type (or at least type theme) of the opponent(s). Pick the best Pokémon for the task and roll out. For a Master League team, you'll want only Pokémon with high levels, high base stats, and high IVs. Identify the set of your Pokémon which qualify to scrap. Find one you like, one that knows solid attacks. Build around it. What opponents can it handle?

What opponents can handle it? What Pokémon do you have that could take out those dangerous opponents? How does the Pokémon operate in various shielding scenarios? Take another suitable Pokémon and repeat the exercise around it. Try to identify Pokémon that can overwhelm your team—you might need find better Pokémon, or level up the ones you have. The nature of unbounded competition lends itself to a small set of viable forms. Identify them, and ensure you have a strategy in place for each. It's difficult to compete in the Master League without having played for some time. Trainers might want to explore bounded play; see chapter 14.

13.4 Solving Pokémon PvP

If there exists a subgraph including the root of the game tree such that at each node it includes all choices from Trainer A for at least one choice from Trainer B (Trainer B's choice can of course be different at different states), and all paths terminate in victory for Trainer A, Trainer A's team can be considered to *dominate* the team of B—assuming perfect play from A (defined as a path in such a subgraph), B is condemned to lose, no matter their choices. We consider finding such a team A to be a "solution" for the problem presented by team B. Does there exist a team that dominates all possible teams?

Almost certainly not. At the unbounded top end, or the top end under a capability bound (chapter 14), Pokémon are not generally wildly superior to one another, nor are their attacks. Gains of 1.6x are infrequent; it is rare that one can overcome type effectiveness with stats alone, whether they be attack, defense, or stamina. Since every typing has weaknesses, a team can be constructed with very effective attacks against all possible orderings of any three Pokémon, and the former team is likely to dominate the latter.

Consider how your team would play against a team of the same or similar composition (simulation is invaluable—see chapter 16). Perturb your selections, replacing them with ideal counters. Develop an ideal team for facing your team, then an ideal team for facing that team. Does this process converge?

14 Restricted team selection

This chapter has no relevance for Nx1 battles, nor the Master League, none of which employ CP bounds.

Several Leagues (and some Research tasks) place a ceiling on the CP of participating Pokémon. We have established that CP is a poor proxy for PvP performance, and thus expect that we might find strong candidates based on where CP fails. If CP does not accurately represent a given Pokémon's chance to win, we ought be able to exploit this by assembling teams using undervalued Pokémon[1]. We first take the sorted list of Pokémon developed in chapter 13, and remove all entries not in the optimal sets generated below. We then select a team using the strategies of that chapter. Since that list was sorted according to a general strength function, it ought apply in this reduced context.

14.1 Optimal IVs and Levels under a *CP* bound

We require a fitness function that takes as input a Pokémon's form, level, and IV, and emits a comparable output. Common functions include CP itself, the arithmetic mean ($\frac{\mathrm{Eff_A}+\mathrm{Eff_D}+\mathrm{MHP}}{3}$), and the geometric mean ($\sqrt[3]{\mathrm{Eff_A} \cdot \mathrm{Eff_D} \cdot \mathrm{MHP}}$)[2]. Optimizing for maximum minimum stat is also intriguing. For a given CP bound, fitness function, and form, there is some optimal set of Pokémon levels and individual vectors. Higher IV components might require a lower level than lower components to come in under the same ceiling. What can be said is that IVs add less value to a high base stat than a low base stat, and that higher levels provide diminishing returns. For a base stat of 100, a corresponding IV component of 15 represents a 15% improvement to $\mathrm{Eff_A}$. For a base stat of 300, the same IV represents only a 5% improvement. A Level 10 Pokémon advancing to level 10.5 enjoys a 2.47% improvement to $\mathrm{Eff_A}$ (and also $\mathrm{Eff_D}$ and $\mathrm{Eff_S}$), paying a price of 5% increase in CP. Advancing from 30 to 30.5 represents only a 0.42% improvement (and a 0.83% increase in CP).

The maximum level for which 15/15/15 comes in under the bound is the minimum possible optimal level, since any lesser level would be strictly less powerful. The maximum level for which 0/0/0 comes

[1]Michael Lewis might call it "Moneymon".

[2]I personally believe the geometric mean to best match Pokémon GO's mechanics, but there is no true "best" fitness function—optimal IVs are dependent upon both the base stats and the opponent.

in under the bound is the maximum possible optimal level, as it is not possible to gain another level while remaining within the bound. Any IV with all three components less than or equal to another IV, but bounded by the same level, is strictly inferior to the second IV, and can be discarded. Compute Eff_A, Eff_D, and MHP using the IVs and corresponding levels. Any resulting set with all three components less than or equal to some other set's is strictly inferior to the second, and can be discarded. This captures MHP's floor function. What remains is an optimal frontier of at least one solution (usually many solutions), where arguments can be made for each depending on how one values attack, defense, and stamina, especially in the context of different opponents.

Does increasing IV_A under a bound always increase Eff_A? No. Under a CP 1500 bound, a 15/15/15·17.5 Golem (CP of 1474) has an Eff_A of 126.296. The same Golem with 12/15/15·18 (CP of 1496) has an Eff_A of 126.386. The latter's Eff_D is of course also higher (120.719 vs 119.031), and it has 116 vs 114 hit points. Going down to 0/15/15·19 (CP of 1494) drops all the way to 122.861, while 1/14/15·—optimal according to $\sqrt[3]{\mathrm{BP}}$—comes back to 123.443. For a CP 2500 bound, the 15/15/15·29.5 pulls ahead on Eff_A (its Eff_D and MHPof course remain inferior), reflecting the rapidly diminishing returns of leveling. High IVs are normally critical for Pokémon with lower base stats, but under a bound, the importance of perfect IVs is greatest for Pokémon with high base stats, as they will be at lower levels.

Before taking Power and Type into the question, let's examine the optimal solutions for a family using the 1500 and 2500 CP bounds, using the geometric mean of Eff_A, Eff_D, and MHP as our global fit function. Timburr (134 ATK, 87 DEF, and 181 STA) evolves into Gurdurr (180 ATK, 134 DEF, and 198 STA), which evolves into Conkeldurr (243 ATK, 158 DEF, 233 STA). Their base products are 2,110,098 (Timburr), 4,775,760 (Gurdurr), and 8,945,802 (Conkeldurr). The geometric means are 128.263, 168.402, and 207.590. Poor Timburr isn't really suited for the common PvP Leagues, and does best at 15/15/15·50 (CP 1487). Gurdurr can hold its own under a 1500 CP ceiling, and its optimal configuration is 1/15/15·26 (CP 1496). It falls short of the Ultra League's 2500, though, where 15/15/15·50 and 15/15/14·50 are functionally equivalent (both result in MHP of 178) despite respective CPs of 2452 and 2447. It is impossible to distinguish between Conkeldurr at 3/15/15·16.5 or 3/15/14·16.5 (134 MHP either way), though the CPs are 1500 and 1497. In the Ultra League, Conkeldurr wants 0/15/12·28 with a CP of 2499. Take two things away from this:

- The optimal IVs, and even the number of equivalent optimal IVs,

can change across evolution. This is largely independent of any global fitness function.

- Hitting the ceiling does not guarantee optimal IVs for most fitness functions. More generally, under most fitness functions, higher CP does not necessarily imply superior IVs. Gurdurr has numerous solutions yielding 1500 CP (3/2/0·28, for instance, with geometric mean 120.015), but 1/15/15·26 beats it at 1496 (121.968).

There are many fitness functions. In the Gurdurr example given previously, 3/2/0·loses to 1/15/15·at geometric mean, but has an Eff_A of 129.36, comfortably above the latter's 123.29. Does this compensate for six fewer hit points (145 vs 139) and lower Eff_D (101.49 vs 96.136)? Let's pit them against one another, using Low Kick (Power of 4, neutral type effectiveness, STAB bonus). Our Level 28 competitor strikes for six damage with each attack:

$$\left\lfloor \frac{129.36 \cdot 4 \cdot 1.2}{101.49} \right\rfloor = \lfloor 6.118 \rfloor = 6$$

The supposedly optimal Gurdurr strikes for six as well:

$$\left\lfloor \frac{123.29 \cdot 4 \cdot 1.2}{96.136} \right\rfloor = \lfloor 6.156 \rfloor = 6$$

At 145 HP, Gurdurr goes down on the 25th attack. Its opponent's 139 HP absorbs 23 attacks before falling to the 24th, but this could have easily gone the other way. If the attack's Power were 10, both hit for nine damage, and both fall after nine attacks.

14.2 Optimal League forms

Pokémon GO offers two CP-bounded PvP leagues, the Great League (CP 1500) and the Ultra League (CP 2500). section A lists species' optimal level and IVs for the Great League as evaluated using the geometric mean of Eff_A, Eff_D, and MHP. Species which can't manage a geometric mean of 124.66 have been left out. section A does the same for the Ultra League, eliding those species which can't hit a $\sqrt[3]{\text{BP}}$ of 156.78. A few observations from the CP1500 table: In general, there is no correlation between $\sqrt[3]{\text{BP}}$ and level, save that everything at the bottom of the list is maxed (15/15/15·50), since many species cannot reach 1500 CP at all. The geometric mean ($\sqrt[3]{\text{BP}}$) ranges from 51.39 (max Shedinja) to 147.18 (15/15/15·49.5 Chansey). There is a strong bimodal preference for IVs: 15/15/15·for levels 49.5 and 50, and otherwise n/15/15·where

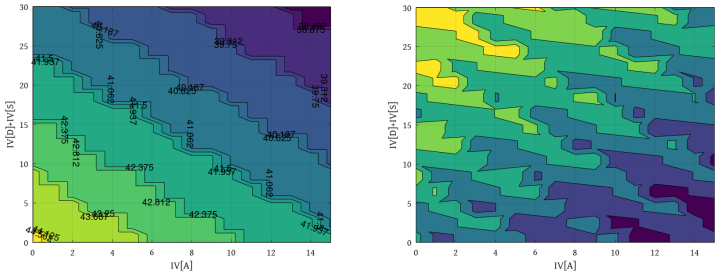


Figure 14.1: Contours of optimal Greninja levels and resulting geometric means (X axis is IV_A, Y axis is $IV_D + IV_S$).

$n < 2$, and n usually equals 0. This verifies (not that we had any doubt) that attack is highly overvalued in the CP calculation relative to $\sqrt[3]{BP}$. Other IVs usually correspond to low level, powerful species, where a level raises CP by a large amount, leaving more room for beneficial IVs. Eff_A ranges from 63.02 (Chansey) to tremendous outlier 254.05 (Deoxys Attack). In general, the top positions have relatively low Eff_A, rising in an orderly fashion to about 145 as we go down the list. At this point, they become more disordered, until falling at the back of the list. MHP and Eff_D are much less predictable. What's more important, IVs or level? Given the vast number of 0/15/15·IVs among the optimal sets, it would seem to be IV_D and IV_S (and that it is equally important to minimize IV_A). This is true for levels below 30 or so, but more powerful Pokémon have optimal configurations below that. Among these, we see much more diversity of IVs. The IVs are being pushed lower to allow for higher levels. This reflects the diminishing returns on CPM as level increases. The real answer is: equal importance until level 30 or so, and IVs beyond that, though the Attack component is always less important than level (as evidenced by the large number of x/15/15·50 configurations). I like to go one above the optimal attack, if possible, so that I win CMP in mirror matchups against ideal configurations. As the CP ceiling falls, the importance of configuration rises, due to diminishing returns on levels.

What's always more important is typing and attack selection. I'm a fan of bringing in powerful Pokémon at low levels; their stats are comparable to less powerful Pokémon at higher levels, but they generally have more powerful moves. One has to be careful choosing, though; most end up woefully underpowered with respect to MHP vs potential MHP (Figure 14.2).

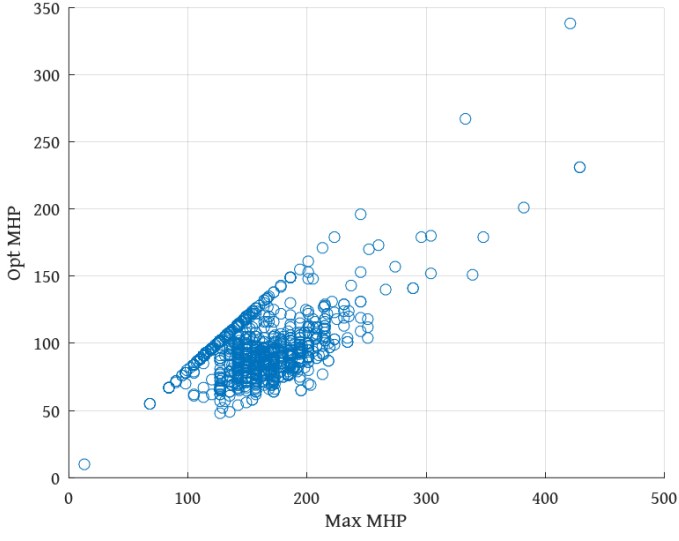


Figure 14.2: $\frac{BS}{3}$-optimal MHP vs maximum possible MHP.

$\sqrt[3]{\text{BP}}$	$\frac{BS}{3}$	CP	Config	Eff_A	Eff_D	HP
			Geometric mean (cube root of product)			
158.2	160.102	2497	1/15/14·35.5	188.981	129.326	162
158.2	158.225	2497	1/15/14·35.5	157.484	155.191	162
158.146	160.106	2497	0/13/15·36	188.78	128.539	163
			...			
154.162	157.539	2483	13/1/0·36	200.751	120.865	151
154.162	154.444	2483	13/1/0·36	167.293	145.038	151
154.125	157.632	2488	14/0/0·36	201.672	120.226	151
			Arithmetic mean (average)			
158.074	160.197	2498	0/10/15·36.5	189.493	127.099	164
158.146	160.106	2497	0/13/15·36	188.78	128.539	163
158.2	160.102	2497	1/15/14·35.5	188.981	129.326	162
			...			
154.278	154.558	2482	14/2/0·35.5	167.422	145.252	151
154.229	154.521	2483	13/0/1·36	167.293	144.271	152
154.125	154.444	2488	14/0/0·36	168.06	144.271	151
			Effective attack			
154.359	157.939	2499	15/0/0·36	202.593	120.226	151
154.783	158.168	2500	15/3/0·35.5	201.824	121.681	151
154.853	158.289	2500	15/2/1·35.5	201.824	121.044	152
			...			
157.796	157.827	2484	1/15/15·35	156.882	154.597	162
157.943	157.97	2491	0/15/15·35.5	156.72	155.191	162
157.943	157.97	2485	0/15/14·35.5	156.72	155.191	162
			Effective defense			
157.589	157.602	2499	0/15/1·38	159.681	158.123	155
157.25	157.268	2493	0/15/0·38	159.681	158.123	154
157.031	157.062	2499	2/15/0·37.5	160.645	157.541	153
			...			
155.355	158.883	2494	15/0/15·33.5	198.72	117.928	160
155.031	158.549	2488	15/0/14·33.5	198.72	117.928	159
154.705	158.216	2482	15/0/13·33.5	198.72	117.928	158
			Bulk			
158.146	158.188	2497	0/13/15·36	157.316	154.247	163
158.2	158.225	2497	1/15/14·35.5	157.484	155.191	162
157.943	157.97	2491	0/15/15·35.5	156.72	155.191	162
			...			
154.308	157.865	2486	15/0/1·35.5	201.824	119.769	152
154.241	157.744	2487	15/1/0·35.5	201.824	120.407	151
154.359	157.939	2499	15/0/0·36	202.593	120.226	151

Table 14.1: Optimal Feraligatr configurations for various functions

IV_D	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
1	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
2	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
3	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
4	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
5	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
6	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
7	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
8	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
9	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
10	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
11	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
12	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
13	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
14	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38
15	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38	38

Table 14.2: Clodsire using Megahorn against Sawk

14.3 Breakpoints

Should you have (or believe you have) a good idea of what you'll be going up against, breakpoint analysis is a powerful tool. Essentially, we want to model the relationship between two Pokémons' Eff_D and Eff_A. Alternately, we want to model damage inflicted against MHP. Using this information, we can perhaps choose more optimal IVs and levels for a given CP bound. This is only as useful as the accuracy of our information, and how narrow a set of opponents it specifies.

In Table 14.2 and Table 14.3, we see level 50 Clodsire employing two charged attacks against level 50 Sawk. Columns correspond to different IV_A for Clodsire, and rows to different IV_D for Sawk. The spread of damage is greater for Earthquake than Megahorn (16 versus 9), a ratio of $1.\overline{7}$, significantly more than the ratio of Earthquake (with STAB) to Megahorn (1.2). I haven't included a table for fast attack, as it deals damage of 2 for all combinations of IVs.

14.4 Type restrictions

A common variation on the usual Leagues is a type restriction. The summer of 2025 features the "Fossil Cup", wherein all competing Pokémon (in addition to coming in under the CP1500 bound) must include Rock, Steel, or Water in their typing. The cover sets of section 7.3 make their return with a vengeance!

We can cover these three types with just two attack types: Fighting

IV_D	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
0	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
1	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
2	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
3	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
4	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
5	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
6	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
7	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
8	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
9	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
10	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
11	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
12	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
13	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
14	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
15	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73

Table 14.3: Clodsire using Earthquake against Sawk

and Grass, or Grass and Ground. Indeed, all three of these types are strong against two of the target types. Two sets of six attack types fully cover these typings. We could stripe these across the two charged attacks of three Pokémon, leaving our fast attacks free, or stripe them across the six total attacks of two Pokémon, leaving the third free. Or we could double up. I'll develop this more fully in chapter 15.

15 A worked example of team selection

Let's consider the Fossil Cup of summer 2025, which began and ended while I was writing this book. Like the Great League, the Fossil Cup had a CP1500 bound, and further restricted participants to those with Rock, Steel, or Water in their typings. This limits teams to 51 of the 171 typings (29.8%): the three monotypes, seventeen dualtypes involving Rock, sixteen dualtypes involving Steel (we already counted Rock/Steel), and fifteen dualtypes involving Water (we already counted Rock/Water and Steel/Water). Consulting Table 6.5, we see these 51 typings populated by 267 total Pokémon. The biggest typing by far is pure Water, with 66. Four typings are unpopulated: Fire/Water, Normal/Steel, Normal/Rock, and Ghost/Rock. One hundred matches in, I was doing alright (despite far from optimal IVs) with the following team, assembled largely off vibes:

Pokémon	IV@Level	Eff_A	Eff_D	MHP	$\sqrt[3]{\mathrm{BP}}$
Greninja	15/14/12·20	142.18	99.17	112	115.27
Magcargo	15/13/12·32.5	115.01	152.35	111	124.82
Gastrodon	0/3/15·25.5	114.01	98.49	174	125.01

With attacks (Power+Energy@Turns and Power@Energy in parens):

Pokémon	Fast attack	Charged attack(s)
Greninja	Water Shuriken (7.2+14@3)	Hydro Cannon (100@40), Night Slash (50@35)
Magcargo	Incinerate (24+20@5)	Overheat (156@55), Stone Edge (100@55)
Gastrodon	Mud-Slap (14.4+10@3)	Earth Power (108@55)

I was having particular trouble with teams making use of Jellicent, Quagsire, Jumpluff, Lucario, Samuratt, and Poliwrath, all members of the "meta" (elite Cup participants as judged by the community). How could I improve?

First off, I could ditch that Night Slash, useful against basically no one even with STAB, and replace it with Aerial Ace. This gives Greninja something of merit against Jumpluff—it eats five more energy (40 vs. 35) than Night Slash, but brings 88 power rather than 60. That one-in-eight chance for a 50% boost to attack seemed unlikely to be missed. Gastrodon doesn't have many great choices for a second move. I hardly needed more Water strength, so I threw on Body Slam for opponents strong against Ground.

15.1 Boosting the numbers

Without changing my choice of species, the following configurations are desirable in the context of optimizing for $\sqrt[3]{\text{BP}}$ [1]:

Pokémon	IV@Level	Eff_A	Eff_D	MHP	$\sqrt[3]{\text{BP}}$
Greninja	3/15/12·20	138.35	102.23	115	117.60
Magcargo	0/15/14·38.5	108.67	161.05	118	127.34
Gastrodon	1/15/14·24.5	112.41	104.47	170	125.92

Of course, it is not generally possible to change IVs. Even if I could, the benefits would be meager: a 2.02% increase for Greninja, 2.02% to Magcargo, and a mere 0.73% for Gastrodon, all of it coming in defense and HP at the expense of a bit of attack. The means themselves are unspectacular, but not bad: Gastrodon and Magcargo are up there in the thick of things, and Greninja is blasting away with that Hydro Cannon every nine turns.

15.2 Covering the typings

Remember what I said earlier: it is better to be effective against a type than for that type to be ineffective against you. We want to maximize the number of relevant typings against which we are effective or very effective, and minimize the number of types which are effective or very effective against us. Only as a secondary consideration need we minimize the number of relevant typings against which we are ineffective, and maximize the number of types which are ineffective against us. Ideally we want to *systematically force* an effective attack from each of our Pokémon against all possible typings.

As noted in section 14.4, there exist two minimal coverings of the forty-seven remaining typings, each of size six:

Bug, Fairy, Fire, Grass, Ground, Rock
Bug, Dragon, Fire, Grass, Ground, Rock

Bug isn't known for high PPT. Infestation manages two while achieving four EPT, but requires three turns. Bug Bite does three on both in a single turn.

Grass and Ground make up a cover of the core types, as do Fighting and Grass. All three of these types (and only these three types) are strong against two of the three types making up the population. Fighting and Ground are neutral against the third type (Water), while Grass

[1] If we optimized for $\frac{BS}{3}$, as done in Appendix A, we'd see different ideals.

Poison/Water	Tentacool, Tentacruel, Qwilfish, Mareanie, Toxapex, Skrelp
Grass/Water	Lombre, Lotad, Ludicolo
Dragon/Water	Kingdra, Palkia, Origin Form Palkia
Poison/Rock	Nihilego
Grass/Rock	Lileep, Cradily
Dragon/Rock	Tyrunt, Tyrantrum
Steel	Galarian Meowth, Registeel, Klink, Klang, Klinklang, Meltan, Melmetal, Perrserker
Steel/Dragon	Dialga, Origin Forme Dialga
Steel/Electric	Magnemite, Magneton, Magnezone, Togedemaru
Steel/Fairy	Mawile, Klefki
Steel/Flying	Skarmory, Celesteela
Steel/Ghost	Honedge, Doublade, Aegislash, Gholdengo
Steel/Poison	Varoom, Revavroom
Steel/Fire	Heatran
Steel/Bug	Forretress, Scizor, Trash Wormadam, Escavalier, Durant, Genesect
Steel/Fighting	Lucario, Crowned Shield Zamazenta
Steel/Dark	Pawniard, Bisharp, Kingambit
Steel/Grass	Ferroseed, Ferrothorn, Kartana
Steel/Psychic	Beldum, Metang, Metagross, Jirachi, Bronzong, Bronzor
Steel/Ice	Alolan Sandshrew, Alolan Sandslash

is ineffective against its third type (Steel). Due to the huge number of potential participants with Water in their typing, we pretty much need Grass.

It is impossible to cover Grass's ineffectiveness against Steel with either Fighting or Ground, due dualtypes of Steel with any of Fighting or Ground's many weaknesses. Similarly, Grass's strength against Rock and Water can be undone by dualtyping them with a Grass weakness. We need something strong where Grass is weak. Something like Rock. Rock is ineffective against Steel, but neutral against our other two cores. Meanwhile, it's strong against three of Grass's weaknesses outside the core (Bug, Fire, and Flying), leaving only Water/Poison, Water/Grass, Water/Dragon, Rock/Poison, Rock/Grass, and Rock/Dragon as neutral. We're ineffective against anything with Steel except for Steel/Ground, Steel/Rock, and Steel/Water, which Grass can hit for neutral damage.

If our three Pokémon all have one Grass and one Rock charged attack, all three of them have a charged attack strong against all but 71 of 267 potential opponents (73.4%). Typings with Grass or Rock in

them will get STAB on one of the two attacks. We do no better than neutral against 17 (6.4%), and both attacks are ineffective against 54 (20.2%), among them most of anything involving Steel. Rock gets us into the tournament, while Grass would have to pair with Steel, Rock, or Water. Rock opens up weaknesses to Fighting, Grass, Ground, Steel, and Water.

Eliminating common weaknesses

I wasn't mowing the grass; Grass was mowing me down. Two of my Pokémon were weak against it, Gastrodon doubly so. Magcargo could handle Grass (especially Steel/Grass Ferrothorn), but without switch advantage, there was usually a Water Pokémon to come in and put out its fire. Looking at the three Pokémon, there are no Grass attacks to learn. Despite that awesome 4.67 EPT from Water Shuriken, Greninja was probably the weakest link due to its lack of bulk. If it goes in with shield disadvantage, it has a bad time. No other fast attack achieves 4.67, but we get 4.5 from several—Psycho Cut, Fairy Wind, Poison Sting, Thunder Shock, and Karate Chop, all of which are fewer turns than Shuriken's 3. Karate Chop (2.5) and Hex or Rollout (2.33) even beat its PPT of 2. The first two don't seem available from any useful Pokémon, but Rollout is available from Blastoise, and we'd even be able to keep Hydro Cannon! Unfortunately, there are no Grass attacks on Blastoise, though he does offer Skull Bash, a powerful Normal attack that will do at least neutral damage to just about everyone. Big beefy Clodsire drives big energy with Mud Shot, and can handle Grass with a Poison charged attack, bringing along Stone Edge or Earthquake for Fire coverage and the potential for massive hits. It can furthermore easily gain shield advantage. Replacing Greninja with Clodsire boosted my Elo by about two hundred points over the course of forty games, but I missed my froggy buddy.

16 Simulation

This chapter is somewhat technical, and can be skipped by readers uninterested in building and evaluating simulation systems.

I'd love to be able to ask questions like, "how often does team A win against team B when team A subs out their lead?" and "how does burning both shields on the lead affect chances of victory?" I'd like to be able to take two teams and walk the game tree, seeing how each decision shapes future possible outcomes: "There are 80 billion possible games from this point. If decision D is made, Team A wins 60% of the remaining 60 billion. If decision E is made instead, Team A wins 80% of the remaining 20 billion." Etc.

It is unlikely that simple closed form solutions exist describing the set of reasonable games between two arbitrary opponents (see chapter 13), let alone two teams. For the highest level of predictive power, we must turn to machine-aided simulation. Here we are lucky, for unlike most contests, Pokémon GO is concretely finite and discrete. Its time evolves in half-second turns, each of which presents a small number of choices to both Trainers. The use of random numbers is minimal. Finally, it never diverges, instead advancing always towards a conclusion[1].

16.1 Probabilistic methods

The easiest approach is similar to Monte Carlo integration. At each turn, we evaluate the space of possibilities, and select one action for each Trainer. This selection might be informed by an expert system, or take the form of a Markov chain, or combine these approaches. Either way, each run takes exactly one path through the game tree, concluding with a single result. This process is repeated many times, with more repetitions required for more diverse paths through the game tree[2]. The output is an estimate of victory for each team (and ties). This method is used by PvPoke and, so far as I'm aware, all other simulation engines. Runs are perfectly parallel, and trivially implemented in $\mathcal{O}(N)$ time and $\mathcal{O}(1)$ space on N turns.

[1]There is an exception to convergence: both Trainers continuously choosing to do nothing (remember, even zero power attacks do one point of damage). This is pathological, and we simply dismiss all choice-pairs that change no state beyond the clock, neatly sidestepping this issue. Even if we didn't, there's a time limit on matches.

[2]A pure expert system merits only one run—it generates the same path every time. As the number of probabilistic choices increases, so must the number of runs.

It has some shortcomings. The results will only ever be as good as the model. To the degree the model fails to reflect reality (i.e. when Trainers act outside its expectations), so will its predictions. With that said, the "right" choice for a Trainer typically seems obvious, and easily described with a few simple rules. They can likely be made quite accurate (widespread use by the community speaks to their predictive power). Ideally, the output would be constantly evaluated against real battle results[3]. Automatic use of feedback would cause predictions to reflect the play of random Trainers, which might be undesirable (I presume an expert system would attempt to play like, well, an expert). Still, *without comparison against real results, we cannot meaningfully speak of the validity of predictions*. Furthermore, questions like those earlier in this chapter become harder to answer, as we have less knowledge of paths considered unlikely by our model, and it is unlikely to bring unorthodox, new strategies to light.

16.2 Exhaustive methods

A naive solution begins at the first turn, generates the set of possible choices for both Trainers, and recurses across the Cartesian product of these sets: depth-first generation of the full game tree. For each state, we must preserve the HP and energy of six Pokémon, the attack and defense buff level for two Pokémon, the number of turns remaining in two ongoing fast attacks, the number of shields remaining for each Trainer, and the turns remaining on each Trainer's substitution timer. When done, we'll know how each choice affects the universe of possible outcomes, and how the teams ought fare for random choices. Growth is clearly exponential: $\mathcal{O}(C^N)$ time for Cartesian products of size C over N turns. Still, let's not reject exhaustive simulation out of hand.

What choices are available on a given turn? If either Trainer has no Pokémon remaining, the match is over, and no choice need be made—we have our result, and can roll up our recursion. A Trainer otherwise has between one and three Pokémon, one of which is active in the arena. If the active Pokémon is in the middle of a multiturn fast attack, the Trainer has no choice to make. Otherwise, if the substitution timer is inactive, the Trainer may sub in some other Pokémon. If there is sufficient energy, the Trainer may call for a charged attack. The Trainer can call for a fast attack, or do nothing for the turn. In combination with these choices, a shield might or might not be used in response to a charged attack. Each option must be pursued for an exhaustive search.

[3]PvPoke does something like this via GO Battle Log.

In the best case, each Trainer is waiting for an attack to complete. In the worst case, each has ten choices, for a Cartesian product of 100 choicepairs—we blow up to ten billion states in five turns, and will not be going to space today. This is $\mathcal{O}(100^N)$ time and $\mathcal{O}(N)$ state for N turns. We'll need prune the game tree using limited expert methods[4].

Common state

Whatever our method, implementing the trainer battle mechanics requires a three-vector for each team pointing into our (readonly) database of Pokémon and attacks. `results` is shared across all nodes (and will need be protected should we go parallel).

```
struct results {
  unsigned long wins[2], ties; // win/tie counts
};

struct simulstate { // dynamic elements
  uint16_t hp[2][TEAMSIZE]; // hp of pokemon
  uint16_t e[2][TEAMSIZE];  // energy of pokemon          [0..100]
  uint16_t dam[2][TEAMSIZE];// precalc damage for attacks
  uint8_t turns[2];         // turns left in fast attack   [0..5]
  uint8_t subtimer[2];      // substitution timers       [0..100]
  int8_t buffleva[2];       // active attack buff levels  [-4..4]
  int8_t bufflevd[2];       // active defense buff levels [-4..4]
  uint8_t shields[2];       // number of shields available [0..2]
  uint8_t active[2];        // indexes of active pokémon   [0..2]
  int cmp;                  // <=> for charged move prio

  inline bool operator==(const simulstate& r) {
    for(unsigned p = 0 ; p < 2 ; ++p){
      if(turns[p] != r.turns[p] ||
          subtimer[p] != r.subtimer[p] ||
          buffleva[p] != r.buffleva[p] ||
          bufflevd[p] != r.bufflevd[p] ||
          shields[p] != r.shields[p] ||
          active[p] != r.active[p]){
        return false;
      }
      for(unsigned t = 0 ; t < TEAMSIZE ; ++t){
        if(hp[p][t] != r.hp[p][t] ||
            e[p][t] != r.e[p][t]){
          return false;
        }
      }
    }
    return true;
  }

};

extern pmon pmons[2][TEAMSIZE];

static inline int other_player(int player){
  return !player; // player is always 0 or 1
}
```

[4]We remain exhaustive, rather than stochastic, just within a limited space.

```
static inline pmon *activemon(const simulstate *s, int p){
  return &pmons[p][s->active[p]];
}
```

16.3 Simulating 1x1

Let's start with exhaustive simulation of a 1x1 contest, where substitution is not in play. A naive implementation blows up almost immediately: the Trainer can choose to do nothing whenever they're not busy, and doing nothing consumes only one turn, meaning we almost always have at least four choicepairs: { noop, noop }, { noop, fast }, { fast, noop }, and { fast, fast }. Our first restriction: we assume perfect play of minigames. Our second restriction: there's no (quantifiably) good reason to do nothing, so the Pokémon must do something. On every turn, we either wait for our fast attack to conclude, or can throw a fast attack. With sufficient energy, charged attacks enter the picture.

```
static inline bool can_charged(const simulstate *s, int p, const attack *c){
  return !s->turns[p] && s->e[p][s->active[p]] >= -c->energytrain;
}

static inline bool can_charged1(const simulstate *s, int p){
  return can_charged(s, p, activemon(s, p)->ca1);
}

static inline bool can_charged2(const simulstate *s, int p){
  if(!pmons[p][s->active[p]].ca2){
    return false;
  }
  return can_charged(s, p, activemon(s, p)->ca2);
}

// can the specified player sub in the pokémon offset mod 3 down?
static inline bool can_sub(const simulstate *s, int p, int offset){
  if(s->turns[p] || s->subtimer[p]){
    return false; // need wait out fast move / timer
  }
  return !!s->hp[p][(s->active[p] + offset) % 3];
}

static inline bool can_sub1(const simulstate *s, int player){
  return can_sub(s, player, 1);
}

static inline bool can_sub2(const simulstate *s, int player){
  return can_sub(s, player, 2);
}
```

While we won't be implementing them yet, assuming other Pokémon have not fainted and the cooldown period is not active, we can substitute. "One" and "two down" here are taken modulo 3, i.e. if the third Pokémon is active, the first Pokémon is one down, and the second Pokémon is two down. Each turn is implemented in two halves. The top half determines available choices and invokes the appropriate bottom half for each.

```
#define bottomhalf_p0charged(cnum, cond, a) do{ \
  if(cond){ \
    const auto c = pmons[0][s->active[0]].a; \
    memcpy(&scopy, s, sizeof(*s)); \
    bottomhalf_charged_fast(&scopy, r, 0, c, cnum, sh1); \
    if(p1c1){ \
      memcpy(&scopy, s, sizeof(*s)); \
      bottomhalf_charged_charged(&scopy, r, c, p1ca1, cnum, 1, sh0, sh1); \
    } \
    if(p1c2){ \
      memcpy(&scopy, s, sizeof(*s)); \
      bottomhalf_charged_charged(&scopy, r, c, p1ca2, cnum, 2, sh0, sh1); \
    } \
  } \
}while(0);

static void tophalf(simulstate *s, results *r){
  const int hp0 = s->hp[0][s->active[0]];
  const int hp1 = s->hp[1][s->active[1]];

  s->subtimer[0] = s->subtimer[0] ? s->subtimer[0] - 1 : 0;
  s->subtimer[1] = s->subtimer[1] ? s->subtimer[1] - 1 : 0;
  if(!hp0){
    if(hp1){
      handle_one_ko(s, r, 0);
    }else{
      handle_dual_kos(s, r);
    }
  }else if(!hp1){
    handle_one_ko(s, r, 1);
  }else{
    uint32_t h;
    int ret = check_cache(s, r, &h);
    if(ret){
      const auto sh0 = s->shields[0];
      const auto sh1 = s->shields[1];
      const auto p0c1 = can_charged1(s, 0);
      const auto p1c1 = can_charged1(s, 1);
      const auto p1ca1 = pmons[1][s->active[1]].ca1;
      const auto p0c2 = can_charged2(s, 0);
      const auto p1c2 = can_charged2(s, 1);
      const auto p1ca2 = pmons[1][s->active[1]].ca2;
      simulstate scopy;
      bottomhalf_p0charged(1, p0c1, ca1);
      bottomhalf_p0charged(2, p0c2, ca2);
      if(p1c1){ // now p1c1 and p0 fast, if p1c1 can happen
        memcpy(&scopy, s, sizeof(*s)); \
        bottomhalf_charged_fast(&scopy, r, 1, p1ca1, 1, sh0);
      }
      if(p1c2){ // now p1c2 and p0 fast, if p1c2 can happen
        memcpy(&scopy, s, sizeof(*s)); \
        bottomhalf_charged_fast(&scopy, r, 1, p1ca2, 2, sh0);
      } // always handle the fast-fast case
      bottomhalf_allfast(s, r);
      if(ret < 0){
        update_cache(h, r);
      }
    }
  }
}
```

The result of `p0_wins_cmp()` is constant across a pair of Pokémon; we cache it. Damage calculations are constant across a pair of Pokémon and a set of buff states; cache them, too.

```
// whenever players change or a buff/debuff takes effect we must recalculate
// the damages of the [4..6] attacks currently in play.
static inline void calculate_damages(simulstate *s){
  const pmon *p0 = &pmons[0][s->active[0]];
  const pmon *p1 = &pmons[1][s->active[1]];
  s->dam[0][0] = calc_damage(p0, p1, p0->fa, s->buffleva[0], s->bufflevd[1]);
  s->dam[0][1] = calc_damage(p0, p1, p0->ca1, s->buffleva[0], s->bufflevd[1]);
  if(p0->ca2){
    s->dam[0][2] = calc_damage(p0, p1, p0->ca2, s->buffleva[0], s->bufflevd[1]);
  }
  s->dam[1][0] = calc_damage(p1, p0, p1->fa, s->buffleva[1], s->bufflevd[0]);
  s->dam[1][1] = calc_damage(p1, p0, p1->ca1, s->buffleva[1], s->bufflevd[0]);
  if(p1->ca2){
    s->dam[1][2] = calc_damage(p1, p0, p1->ca2, s->buffleva[1], s->bufflevd[0]);
  }
  const float a0 = p0->s.effa;
  const float a1 = p1->s.effa;
  s->cmp = a0 > a1 ? -1 : a1 > a0 ? 1 : 0;
}

static inline void subin(simulstate *s, int player, int pos){
  s->active[player] = pos;
  s->buffleva[player] = 0;
  s->bufflevd[player] = 0;
  calculate_damages(s);
}
```

A bottom half is invoked along each path, mutating its own copy of the state and recursing back. We must simulate both paths in the event of a CMP tie—the tiebreaker might be nondeterministic, but we are not!

```
// if no fast attack is ongoing, launch one. either way, decrement turns. if
// the attack concludes as a result, inflict damage and add energy.
static void account_fast_move(simulstate *s, int player){
  if(!s->turns[player]){
    s->turns[player] = activemon(s, player)->fa->turns;
  }
  if(--s->turns[player] == 0){
    accumulate_energy(&s->e[player][s->active[player]], activemon(s, player)->fa->energytrai
    int op = other_player(player);
    inflict_damage(&s->hp[op][s->active[op]], s->dam[player][0]);
  }
}

static void inflict_charged_effect(unsigned chance, int eff, int8_t *lev){
  if(chance){ // if 0 < chance < 1000, we need simulate both paths FIXME
    if((*lev += eff) > MAXCHARGEDBUFF){
      *lev = MAXCHARGEDBUFF;
    }else if(*lev < -MAXCHARGEDBUFF){
      *lev = -MAXCHARGEDBUFF;
    }
  }
}

static void inflict_effect(simulstate *s, int p, const attack *a, int op){
  inflict_charged_effect(a->chance_user_attack, a->user_attack, &s->buffleva[p]);
  inflict_charged_effect(a->chance_user_defense, a->user_defense, &s->bufflevd[p]);
  inflict_charged_effect(a->chance_opp_attack, a->opp_attack, &s->buffleva[op]);
  inflict_charged_effect(a->chance_opp_defense, a->opp_defense, &s->bufflevd[op]);
}

// returns true if we KO the opponent. a must be a charged move, and the
// player must have sufficient energy. oshield may only be set if the
// opponent has a shield. aid is index into s->dam[player].
```

```
static inline bool
throw_charged_move(simulstate *s, int player, const attack *a, int aid, bool oshield){
  int op = other_player(player);
  accumulate_energy(&s->e[player][s->active[player]], a->energytrain);
  inflict_effect(s, player, a, op);
  if(oshield){
    --s->shields[other_player(player)];
    return inflict_damage(&s->hp[op][s->active[op]], 1);
  }
  return inflict_damage(&s->hp[op][s->active[op]], s->dam[player][aid]);
}

static inline void
bottomhalf_allfast(simulstate *s, results *r){
  account_fast_move(s, 0);
  account_fast_move(s, 1);
  tophalf(s, r);
}

static inline void
bottomhalf_charged_fast(simulstate *s, results *r, int player, const attack *c,
                        int aid, int shielded){
  if(shielded){
    simulstate scopy = *s;
    bottomhalf_charged_fast(&scopy, r, player, c, aid, 0);
  }
  if(!throw_charged_move(s, player, c, aid, shielded)){
    s->turns[other_player(player)] = 1; // charged move concludes opposing fast move
    account_fast_move(s, other_player(player));
  }
  tophalf(s, r);
}

// pass three 2-vectors of player id, attacks used/aids, and shield state
static inline void
bottomhalf_cc_ordered(simulstate *s, results *r, const int *ps,
                      const attack **as, const int *aids, const int *ss){
  if(ss[0]){
    simulstate scopy = *s;
    int sss[2] = { 0, ss[1] };
    bottomhalf_cc_ordered(&scopy, r, ps, as, aids, sss);
  }
  if(!throw_charged_move(s, ps[0], as[0], aids[0], ss[0])){
    throw_charged_move(s, ps[1], as[1], aids[1], ss[1]);
  }
  tophalf(s, r);
}

static inline void
bottomhalf_charged_charged(simulstate *s, results *r, const attack *p0c,
                           const attack *p1c, int aid0, int aid1,
                           int p0shield, int p1shield){
  int ps[2], ss[2], aids[2];
  const attack *as[2];

  as[0] = p0c; as[1] = p1c;
  aids[0] = aid0; aids[1] = aid1;
  ss[0] = p1shield; ss[1] = p0shield;
  ps[0] = 0; ps[1] = 1;
  if(s->cmp == 0){ // simulate both paths
    simulstate s2 = *s;
    bottomhalf_cc_ordered(&s2, r, ps, as, aids, ss);
  }
  if(s->cmp >= 0){
    as[0] = p1c; as[1] = p0c;
    aids[0] = aid1; aids[1] = aid0;
```

```
    ss[0] = p0shield; ss[1] = p1shield;
    ps[0] = 1; ps[1] = 0;
  }
  bottomhalf_cc_ordered(s, r, ps, as, aids, ss);
}
```

On a knockout, the top half calls `handle_ko()`. This is the only function that actually records results. Right now we're only handling a single Pokémon per team, but we go ahead and implement this so that it'll work properly with arbitrarily many Pokémon. When a Pokémon goes down, three things can happen. If it was the last on its team, the match is over (possibly in a tie). If there is one Pokémon remaining, bring it in and continue simulating. If two more Pokémon remain, we must simulate both replacements.

```
// handle the case where one and only one player was knocked out.
static void handle_one_ko(simulstate *s, results *r, int player){
  bool replaced = false;
  for(unsigned p = 0 ; p < TEAMSIZE ; ++p){
    if(s->hp[player][p]){
      simulstate snew = *s;
      subin(&snew, player, p);
      tophalf(&snew, r);
      replaced = true;
    }
  }
  if(!replaced){
    ++r->wins[other_player(player)];
  }
}

// both active contestants just got knocked out
static void handle_dual_kos(simulstate *s, results *r){
  s->buffleva[0] = s->buffleva[1] = 0;
  s->bufflevd[0] = s->buffleva[1] = 0;
  bool foundq = false;
  bool foundp = false;
  for(unsigned p = 0 ; p < TEAMSIZE ; ++p){
    if(s->hp[0][p]){
      foundp = true;
      for(unsigned q = 0 ; q < TEAMSIZE ; ++q){
        if(s->hp[1][q]){
          foundq = true;
          simulstate snew = *s;
          subin(&snew, 0, p);
          subin(&snew, 1, q); // runs calculate_damages twice =[
          tophalf(&snew, r);
        }
      }
    }
  }
  if(foundp){ // player 0 had more
    if(!foundq){ // player 1 did not; p0 wins
      ++r->wins[0];
    } // player 1 also had more, no result
  }else{ // need check to see if p1 had more
    for(unsigned q = 0 ; q < TEAMSIZE ; ++q){
      if(s->hp[1][q]){ // p1 did, they win
        ++r->wins[1];
        return;
      }
```

```
    }
    ++r->ties; // zorn, all dead
  }
}
```

The presented code simulates all possible meaningful exchanges of two fully specified Pokémon, starting with full HP, two shields, and no energy.

```
pokémon exhaustive simulator state is 52B
TEAM 1
PoGo Clodsire 35.5 effa: 108.557 effd: 126.905 mhp: 223 cp 1827
 Po (*)        Poison Sting   4   9 2
 Bu                Megahorn 110  55
TEAM 2
 Fg  Sawk 25.5 effa: 165.947 effd: 112.655 mhp: 131 cp 2020
 Fg (*)            Low Kick   4   5 2
 Fg (*)         Focus Blast 150  75
hits: 3,295 misses: 0 opens: 12,662 late: 0
 used: 12,662/268,435,456
p0 wins: 327,621 p1 wins: 8,146 ties: 13,664
 total: 349,431 p0 93.7584% p1 2.3312% t 3.9104%
```

Closed forms in the endgame

Game simulation is friendly to memoization, i.e. storing and recognizing equivalent game states. The easiest place to apply this is the endgame. More correctly, this is the easiest way to choose states to memoize, such that we can efficiently look them up without blowing up memory. Even better would be a closed form analytic treatment of the endgame, which seems like it ought be possible. Let's restrict ourselves to the case of one Pokémon remaining per Trainer. We dispense with charged attacks entirely (at least initially) by considering only those states where the possible turns remaining times EPT plus energy is less than the energy required for a charged attack. This restriction means we can ignore shields, as they're only relevant when charged attacks are used. We call these subgraphs "death marches".

How do we put an upper bound on turns?

$$T_{\max} = \min \left\lceil \frac{\mathrm{HP}_1}{D_2} \right\rceil T_2, \left\lceil \frac{\mathrm{HP}_2}{D_1} \right\rceil T_1$$

D is the damage inflicted per fast attack, and T is the number of turns per fast attack. This equation is well-defined for all attacks, since damage (unlike power, which can be zero) is always at least 1. So, knowing $T_{\max}$, we can determine those cases where no charged attack can be used: whenever $T_{\max} * \mathrm{EPT} + E_{\mathrm{current}} < E_{\mathrm{charged}}$ for both Pokémon. There is only one possible path through such a subtree, with one answer: whichever Pokémon has a lower T wins.

16.4 Simulating 3x3

Simulating a full Trainer Battle requires supporting three Pokémon per Trainer, simulating replacement paths when a Pokémon faints, and handling substitutions. The increase in state is negligible, but substitutions have substantial impact on time complexity, since they can happen on any turn (unless there has been a recent substitution). They furthermore represent two branches early, when a team has all three Pokémon. Our death march closed form cannot be applied when a Pokémon remains. Handling replacement is easier: all we need do is amend our frontend to seed all three positions, and implement switchover. Skirting past a combinatorial explosion requires effective memoization combined with identification of commutative transitions.

Our state object is small enough to hash its entirety. Since our simulation is deterministic and exhaustive, any equivalent states are guaranteed to have the same subtree. By simply keeping a fixed-sized LRU cache of previous states and the net results they generated, we can hash in $\mathcal{O}(N)$ on the state size, match in $\mathcal{O}(1)$ time, and replace an exponential time computation with one of constant time—when we hit cache, anyway. Our LRU can be global or at the level of a set association. `simulstate` is currently less than 64 bytes, and `results` less than 32, but let's call it 96 bytes per stashed state to be safe. At 96 bytes, assuming we don't need tag information, we could keep 134M ($2^{27} = 134,217,728$) states in 12GB ($\frac{96 \cdot 2^{27}}{2^{30}} = 12$) of RAM. Of course, full utilization with $\mathcal{O}(1)$ lookup requires perfect associativity.

If we're distinguishing 134M states, we need 27 bits of discriminant from our hash function. Can we completely distinguish states in 27 bits? We cannot—simply tracking six HPs with a meager 10 bits each requires more than double this space. What state is changing most rapidly? Timers, of course, followed by HP and energy of the active Pokémon[5]. Energy reaches a maximum at 100, requiring (but not making full utilization of) seven bits. Let's use the lower two bits of both fast attack counters[6], the lower 5 bits from each active energy tally, the lower 6 bits from each active HP, and we'll do 2^{26} states in 6GB. This aliases on 64 hit points and 32 units of energy. To improve the hit rate, we add logic to the fast-fast bottom half to advance directly to the end of the shorter fast attack when both are in play. We are able to hit nearly full utilization and achieve an impressive hit rate that increases with greater cache capacity.

We achieve almost perfect task parallelism by placing states to be

[5]In the case of single-turn attacks, they all change equally rapidly.

[6]This exposes Incinerate to greater false sharing.

simulated—stack frames, essentially—onto a work queue, and protecting the cache with granular mutexes. Together with batched retrieval from the queue, this manages to keep all sixty-four cores of my AMD 3970X doing useful work with 98%+ of their cycles. The result is exhaustive simulation of a full 3x3 scenario, using Pokémon of arbitrary power, in less a ten minute worst case, and often less than a minute.

```
pokémon exhaustive simulator state is 52B
TEAM 1
PoGo Clodsire 30.5 effa: 93.3121 effd: 121.232 mhp: 213 cp 1499
 Po (*)        Poison Sting   4   9 2
 Bu                Megahorn 110  55
WaGo Quagsire 29 effa: 109.349 effd: 113.665 mhp: 165 cp 1499
 Wa (*)           Water Gun   3   3 1
 Go (*)          Earthquake 110  65
TEAM 2
FrFl Talonflame 26 effa: 119.885 effd: 114.436 mhp: 136 cp 1500
 Fr (*)          Incinerate  20  20 5
 Fl (*)          Brave Bird 130  55
 Wa  Milotic 19 effa: 111.798 effd: 136.253 mhp: 132 cp 1500
 Wa (*)           Waterfall  12   8 3
 Wa (*)                Surf  75  45
hits: 5,549,824 misses: 628,056 opens: 18,541,522 late: 12
 used: 17,913,466/268,435,456
p0 wins: 2,108,448,650 p1 wins: 7,156,526,484 ties: 1,619,214,048
 total: 10,884,189,182 p0 19.3717% p1 65.7516% t 14.8768%
```

Interpreting these results is non-trivial. Adding a second charged attack strengthens a Pokémon, but can easily cause its win percentage to drop in exhaustive simulation. Take Clodsire with Earthquake against Bellibolt. Adding Stone Edge as a second attack to Clodsire will create new paths that are all more favorable to Bellibolt than the Earthquake paths. In real play, competent Trainers will not be throwing Stone Edge at Bellibolt when Earthquake is available, so these new paths are somewhat irrelevant. I expect the full power of exhaustive simulation to emerge when coupled with automated inflection point analysis, etc. Watch this space.

16.5 Detecting dominators

Recall the domination concept described in section 13.4. Pokémon P dominates another from some turn if, starting from that turn, the Pokémon can make choices such that it wins no matter what the opponent does. We call such a node a dominator node for P. A node can only be a dominator node for zero or one Pokémon, never multiple[7]. We check for knockouts at the top of every turn, before actions are performed. Thus any terminal node in our game tree is a dominator node if one

[7]If one Pokémon dominates from a node, it can make choices such that the other Pokémon cannot win. If the other Pokémon cannot force wins, it cannot dominate.

and only one Pokémon is knocked out (a terminal node could also be a tie); this is our base case. A non-terminal node is a dominator for P if and only if, for some choice, all children are dominator nodes for P. If the root node is a dominator for P, P is said to dominate the contest, and the opponent can win only if P plays less than optimally. We can detect dominator nodes using this inductive definition.

A Optimal CP-bound configurations

CP1500 bound sorted by $\frac{BS}{3}$ (Great League)

Forms[1] are sorted by $\frac{BS}{3}$, the arithmetic mean of Eff_A, Eff_D, and MHP. This metric usually distinguishes between standard and Shadow forms (the geometric mean is always unchanged). I include $\sqrt[3]{\text{BP}}$ and even CP. These rankings *do not* imply that a higher $\sqrt[3]{\text{BP}}$ or $\frac{BS}{3}$ will defeat a lower one. Other issues—type effectiveness, attack choice, strategy—are usually more important. Multiple sets of IVs and levels can score equally due to the discrete nature of MHP; all optimal sets are listed.

$A\%$ is the optimal configuration's advantage in terms of $\frac{BS}{3}$ over the pessimal "reasonable" configuration, i.e. some IV and the highest level attainable given the CP bound. For CP1500 (section A, section A), when a form can max out, i.e. is not restricted by the CP bound, the maximum advantage tends to be 10%–25%, with a few outliers around 50%. It otherwise quickly drops to 4% or less. In CP2500 (section A, section A), the advantage available from IVs is even smaller, as we would expect. For maxed out Pokémon, A% ranges from 6%–11%, increasing as we go down the table. It is otherwise generally less than 12%. These numbers are larger using $\frac{BS}{3}$ than $\sqrt[3]{\text{BP}}$. With the latter, maximum advantages are contained within 12%–15%; everyone else is below 3%.

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{\text{BP}}$	CP	A%
Chansey	15/15/15·50	421	63.02	120.16	201.40	147.18	1418	6.6
Blissey	0/2/15·22	320	80.83	107.14	169.32	140.46	1497	6.4
Wobbuffet	15/15/15·50	333	63.02	101.68	165.90	128.74	1160	8.3
Wobbuffet	15/15/15·50	333	75.63	84.73	164.45	128.74	1160	8.5
Bastiodon	0/15/14·50	142	78.99	252.93	157.97	141.56	1497	7.0
Aegislash	0/14/12·47.5	138	80.30	252.48	156.93	140.91	1500	6.6
Carbink	4/15/15·50	127	83.19	252.09	154.09	138.61	1492	6.4
Shuckle	15/15/15·50	84	26.89	345.36	152.08	92.05	458	9.1
Guzzlord	0/0/15·21	278	115.09	60.60	151.23	124.70	1495	5.8
Bastiodon	0/15/14·50	142	94.79	210.78	149.19	141.56	1497	6.0
Wailord	0/0/15·27	251	145.77	50.33	149.03	122.57	1496	5.8
Wailmer	15/0/14·50	244	152.26	47.62	147.96	120.94	1499	6.5
Alomomola	0/3/15·28	249	97.55	94.72	147.09	132.02	1499	5.2
Toxapex	0/15/6·43	115	91.80	231.93	146.24	134.78	1500	5.5
Wailord	0/0/15·27	251	121.48	60.39	144.29	122.57	1496	5.8
Deoxys Defense	0/15/3·26.5	96	99.03	237.25	144.09	131.14	1496	5.0
Regidrago	0/3/15·20	247	120.67	62.13	143.27	122.80	1497	5.1
2 more not shown...	0/3/14·20	247	120.67	62.13		122.80	1495	
Wailmer	0/15/15·50	245	114.28	69.74	143.01	124.99	1494	6.3
2 more not shown...	1/14/15·50	245	115.12	68.90		124.79	1496	

[1]Forms disallowed in League play are not listed.

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Umbreon	0/15/15·27.5	161	88.27	178.64	142.64	136.42	1500	5.7
	0/15/14·27.5	161	88.27	178.64		136.42	1497	
Clodsire	0/13/15·30.5	214	93.31	120.50	142.60	134.00	1500	5.5
Audino	0/15/15·40.5	194	90.38	141.12	141.83	135.25	1496	5.7
Azumarill	0/15/15·45.5	196	91.59	136.57	141.39	134.84	1499	5.7
Munchlax	0/1/15·35	229	104.33	89.86	141.07	129.01	1497	5.1
Mandibuzz	0/13/15·27.5	180	90.37	152.72	141.03	135.43	1498	5.7
Drifblim	0/0/15·25.5	220	145.71	57.34	141.02	122.50	1495	4.5
Zygarde Complete	0/8/15·15.5	212	96.77	113.08	140.62	132.38	1500	4.8
Wigglytuff	0/0/15·34.5	235	118.35	68.28	140.54	123.83	1499	5.6
Probopass	0/15/15·28	120	95.43	205.00	140.14	132.90	1497	5.3
Registeel	0/12/12·24	132	93.58	194.37	139.98	133.91	1500	4.9
Cresselia	1/15/15·20	164	91.40	163.09	139.50	134.71	1496	5.0
Diggersby	0/15/15·49.5	178	93.83	142.43	138.09	133.49	1495	6.1
Dusclops	0/15/13·45	108	101.10	203.01	137.37	130.38	1499	4.7
Steelix	0/14/15·24	128	96.86	187.17	137.34	132.39	1500	4.9
Araquanid	0/15/11·35	137	95.96	178.21	137.05	132.81	1499	5.0
Jumpluff	0/15/15·42.5	157	94.73	158.95	136.89	133.22	1498	5.3
Lickitung	8/14/15·50	186	97.47	126.89	136.79	132.01	1499	8.3
	7/15/15·50	186	96.63	127.73		131.92	1491	
Drifblim	0/0/15·25.5	220	121.42	68.81	136.74	122.50	1495	4.6
Diggersby	0/15/15·49.5	178	112.60	118.69	136.43	133.49	1495	5.6
Lanturn	0/12/15·28	200	103.21	105.33	136.18	129.55	1498	4.6
Snorlax	0/6/15·18	195	129.22	82.65	135.62	127.70	1499	3.8
Hariyama	1/0/15·21	194	154.26	58.15	135.47	120.29	1495	4.2
Registeel	0/12/12·24	132	112.30	161.97	135.42	133.91	1500	4.1
Uxie	0/15/11·23	123	99.94	182.59	135.18	130.93	1497	4.7
Cetoddle	15/15/15·50	213	112.60	79.83	135.14	124.17	1469	10.4
Probopass	0/15/15·28	120	114.52	170.83	135.12	132.90	1497	4.4
Deoxys Attack	12/0/4·24.5	93	281.68	30.42	135.03	92.71	1499	6.7
Galarian Corsola	0/15/15·50	142	97.47	165.54	135.00	131.83	1498	6.5
	0/15/14·50	142	97.47	165.54		131.83	1494	
Dondozo	0/15/15·19	190	102.48	112.38	134.95	129.83	1499	4.5
Shuckle	15/15/15·50	84	32.27	287.80	134.69	92.05	458	10.6
Stunfisk	0/12/15·27	177	99.96	127.03	134.66	130.99	1498	4.9
Galarian Stunfisk	0/12/15·27	177	99.96	127.03	134.66	130.99	1498	4.9
Cetitan	0/2/15·19	210	121.11	72.78	134.63	122.79	1500	4.2
2 more not shown...	0/2/14·19	210	121.11	72.78		122.79	1498	
Tropius	0/15/15·30	174	99.51	130.24	134.58	131.14	1498	5.0
Dunsparce	0/5/15·42	192	104.84	106.44	134.43	128.92	1499	4.4
Jumpluff	0/14/14·43	157	114.03	132.20	134.41	133.27	1499	4.2
Regirock	0/15/9·18.5	114	102.85	186.16	134.34	129.72	1500	4.4
Regice	0/15/9·18.5	114	102.85	186.16	134.34	129.72	1500	4.4
Lapras	0/1/15·22.5	185	125.46	92.41	134.29	128.96	1497	3.9
Stunfisk	0/12/15·27	177	119.95	105.86	134.27	130.99	1498	4.1
Galarian Stunfisk	0/12/15·27	177	119.95	105.86	134.27	130.99	1498	4.1
Snorlax	0/6/15·18	195	107.68	99.18	133.96	127.70	1499	4.2
Amoonguss	0/3/15·28	186	131.48	83.65	133.71	126.94	1499	3.8
Claydol	0/14/15·29.5	123	101.58	176.31	133.63	130.12	1498	4.7
Whiscash	0/3/14·29	184	130.36	86.33	133.56	127.46	1500	3.9
Lapras	0/10/14·22	182	103.38	115.29	133.56	129.45	1498	4.3
Swalot	0/13/15·29.5	174	101.58	124.80	133.46	130.17	1497	4.7

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Steelix	0/14/15·24	128	116.23	155.97	133.40	132.39	1500	4.1
Lugia	0/15/8·15.5	127	101.51	170.93	133.15	130.13	1500	4.4
	0/15/7·15.5	127	101.51	170.93		130.13	1497	
Dewgong	0/12/15·29.5	161	100.86	137.13	133.00	130.58	1498	4.8
Ledian	13/15/15·50	135	100.84	163.02	132.95	130.44	1497	10.1
Dusclops	0/15/13·45	108	121.32	169.17	132.83	130.38	1499	3.5
Greedent	0/12/14·24.5	181	105.80	111.08	132.63	128.61	1500	4.4
Altaria	0/14/15·29	141	101.44	154.67	132.37	130.30	1497	4.9
Amoonguss	0/14/15·27	183	107.59	106.20	132.27	127.88	1500	4.4
Onix	15/15/15·50	105	84.03	207.55	132.19	122.34	1245	10.4
	15/15/14·50	105	84.03	207.55		122.34	1240	
Sealeo	0/1/15·41.5	177	131.16	88.42	132.19	127.09	1498	3.5
Hypno	0/13/13·28	149	101.79	145.62	132.14	130.23	1500	4.9
Noctowl	1/14/15·28.5	171	104.12	121.24	132.12	129.24	1499	4.6
	0/15/15·28.5	171	103.41	121.95		129.20	1494	
Whiscash	0/14/13·28	180	106.74	109.57	132.10	128.16	1500	4.3
Armored Mewtwo	0/13/12·18	128	103.15	164.93	132.03	129.61	1499	4.5
Altered Forme Giratina	0/11/12·17	163	103.00	129.99	132.00	129.71	1499	4.4
Throh	0/4/15·23	176	132.23	87.56	131.93	126.78	1499	3.6
Mantine	0/15/14·27.5	123	103.68	168.83	131.84	129.13	1500	4.4
	0/15/13·27.5	123	103.68	168.83		129.13	1495	
Skarmory	0/15/14·27.5	123	103.68	168.83	131.84	129.13	1500	4.4
	0/15/13·27.5	123	103.68	168.83		129.13	1495	
Loudred	15/15/15·50	178	150.25	67.22	131.82	121.59	1500	10.8
Altered Forme Giratina	0/9/15·17	164	123.60	107.40	131.67	129.61	1500	3.8
	0/9/14·17	164	123.60	107.40		129.61	1498	
Lickilicky	0/11/15·23.5	166	104.26	124.34	131.53	129.10	1499	4.3
Trash Wormadam	0/13/15·44.5	138	103.23	152.81	131.34	129.60	1499	4.6
Relicanth	1/15/15·22.5	152	103.28	138.14	131.14	129.44	1496	4.4
Sealeo	0/15/14·38	172	106.71	114.50	131.07	128.09	1498	4.2
Miltank	0/14/14·24.5	152	103.81	136.87	130.89	129.26	1497	4.6
Regirock	0/15/9·18.5	114	123.42	155.13	130.85	129.72	1500	3.6
Regice	0/15/9·18.5	114	123.42	155.13	130.85	129.72	1500	3.6
Hypno	0/13/13·28	149	122.15	121.35	130.83	130.23	1500	3.9
Hariyama	0/1/15·21	194	127.94	70.40	130.78	120.45	1495	4.1
	1/0/15·21	194	128.55	69.79		120.29	1495	
Quagsire	0/4/15·30	169	133.46	89.63	130.70	126.45	1499	3.6
Cradily	0/15/15·26	146	103.54	142.36	130.63	129.11	1494	4.5
Ledian	13/15/15·50	135	121.00	135.85	130.62	130.44	1497	10.3
Aurorus	0/2/15·21	171	136.63	84.17	130.60	125.29	1498	3.5
Grimer	12/12/15·50	172	148.23	71.43	130.55	122.12	1500	9.4
Alolan Grimer	12/12/15·50	172	148.23	71.43	130.55	122.12	1500	9.4
Lugia	0/11/11·15.5	129	121.81	140.69	130.50	130.27	1500	3.7
Cranidos	11/0/15·34.5	138	208.47	44.89	130.45	108.90	1498	3.8
Throh	0/11/15·22.5	174	108.99	108.35	130.45	127.13	1497	4.0
Ferrothorn	0/13/13·25	128	105.53	157.63	130.39	128.65	1500	4.2
Female Oinkologne	0/14/15·23	170	108.27	112.75	130.34	127.56	1500	4.3
Cosmoem	15/15/15·50	117	57.98	215.96	130.31	113.57	924	10.5
Jellicent	1/14/14·24.5	158	105.80	126.95	130.25	128.51	1498	4.2
1 more not shown...	0/15/15·24.5	158	105.13	127.62		128.46	1496	
Pachirisu	15/15/15·50	142	91.59	157.14	130.24	126.90	1372	10.5
	15/15/14·50	142	91.59	157.14		126.90	1368	

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Diancie	0/15/4·21.5	87	117.69	185.82	130.17	123.91	1499	3.8
Lileep	15/15/15·50	151	100.84	138.65	130.16	128.28	1460	10.8
Eldegoss	0/14/15·29	122	106.47	161.86	130.11	128.11	1498	4.4
Corviknight	0/13/14·23.5	152	105.56	132.75	130.10	128.66	1500	4.2
Slowpoke	15/15/15·50	186	125.04	79.13	130.05	122.54	1386	11.0
Galarian Slowpoke	15/15/15·50	186	125.04	79.13	130.05	122.54	1386	11.0
Suicune	1/15/14·19	139	105.39	145.57	129.99	128.72	1500	4.2
Alolan Raticate	0/13/14·39	153	105.93	131.03	129.99	128.54	1499	4.3
Amaura	11/15/15·50	167	136.13	86.83	129.99	125.44	1497	9.7
Rhyhorn	0/3/15·44	166	136.13	87.78	129.97	125.65	1500	3.2
Tinkaton	1/14/14·25.5	143	105.23	141.66	129.97	128.70	1497	4.4
1 more not shown...	0/15/15·25.5	143	104.56	142.34		128.63	1495	
Bayleef	3/15/15·50	142	105.04	142.85	129.96	128.68	1500	7.5
	3/15/14·50	142	105.04	142.85		128.68	1496	
Torkoal	0/15/15·27.5	131	105.78	152.72	129.83	128.39	1496	4.6
Alolan Raticate	0/13/14·39	153	127.11	109.20	129.77	128.54	1499	3.3
Cofagrigus	0/15/11·25.5	109	109.96	169.99	129.65	126.77	1498	4.2
Runerigus	0/15/11·25.5	109	109.96	169.99	129.65	126.77	1498	4.2
Wartortle	0/14/15·50	141	105.88	142.01	129.63	128.46	1499	6.8
Cradily	0/15/15·26	146	124.24	118.64	129.63	129.11	1494	3.5
Pignite	1/0/15·33	166	156.55	66.23	129.59	119.84	1500	3.5
Swadloon	10/15/15·50	135	105.04	148.73	129.59	128.24	1489	9.6
Quagsire	0/14/15·29	166	109.35	112.95	129.43	127.04	1498	4.2
Medicham	5/15/15·50	142	105.88	140.33	129.40	128.26	1499	8.0
	5/15/14·50	142	105.88	140.33		128.26	1494	
Servine	4/15/15·50	142	105.88	140.33	129.40	128.26	1499	7.8
	4/15/14·50	142	105.88	140.33		128.26	1494	
Phanpy	15/15/15·50	186	123.02	79.13	129.38	121.88	1364	11.1
Skarmory	0/15/14·27.5	123	124.42	140.69	129.37	129.13	1500	3.4
	0/15/13·27.5	123	124.42	140.69		129.13	1495	
Exploud	0/0/15·25.5	166	144.90	77.01	129.30	122.81	1498	3.3
Magcargo	0/15/14·38.5	118	108.67	161.05	129.24	127.34	1498	4.1
Tinkatuff	15/15/15·50	149	104.20	134.45	129.22	127.80	1477	10.9
Lileep	15/15/15·50	151	121.00	115.54	129.18	128.28	1460	11.1
Gligar	0/15/12·33	131	107.22	149.20	129.14	127.97	1500	4.2
Vullaby	15/15/15·50	157	100.84	129.41	129.08	127.01	1437	10.9
Gastrodon	0/15/15·24.5	171	111.75	104.47	129.07	125.91	1494	3.8
	1/14/15·24.5	171	112.41	103.81		125.90	1498	
Linoone	0/0/14·44.5	162	138.50	86.70	129.07	124.83	1500	3.0
Galarian Linoone	0/0/14·44.5	162	138.50	86.70	129.07	124.83	1500	3.0
Bayleef	3/15/15·50	142	126.05	119.04	129.03	128.68	1500	7.1
	3/15/14·50	142	126.05	119.04		128.68	1496	
Vespiquen	0/14/13·29	133	107.19	146.76	128.98	127.90	1498	4.3
Suicune	1/15/14·19	139	126.47	121.31	128.93	128.72	1500	3.4
Metang	0/13/15·38	132	107.49	147.22	128.90	127.83	1500	4.2
Walrein	0/3/15·21.5	159	135.28	92.39	128.89	125.73	1497	3.3
Honchkrow	0/0/15·22	150	182.71	53.78	128.83	113.80	1499	3.6
Wartortle	0/14/15·50	141	127.05	118.34	128.80	128.46	1499	6.3
Skuntank	3/0/15·25	163	149.88	73.47	128.79	121.53	1500	3.3
Aurorus	0/12/13·20.5	168	112.50	105.84	128.78	126.00	1500	3.9

CP2500 bound sorted by $\frac{BS}{3}$ (Ultra League)

See section A for important notes.

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Blissey	0/1/15·44	414	104.53	137.75	218.76	181.32	2496	5.5
Chansey	15/15/15·50	421	63.02	120.16	201.40	147.18	1418	6.6
Guzzlord	0/0/15·40	359	148.58	78.24	195.27	161.00	2492	4.8
Wailord	15/9/15·50	304	191.59	67.22	187.60	157.61	2500	6.5
Regidrago	0/0/15·37.5	322	156.77	78.38	185.72	158.16	2490	4.8
Alomomola	15/15/15·50	296	128.57	122.68	182.42	167.14	2452	7.3
Deoxys Defense	10/15/15·50	127	129.41	289.90	182.10	168.27	2490	6.4
Zygarde Complete	0/5/15·26	275	125.33	144.41	181.58	170.74	2498	4.0
Wailord	9/15/15·50	304	154.62	85.71	181.44	159.12	2496	6.5
5 more not shown...	10/14/15·50	304	155.46	84.87		158.88	2497	
Registeel	0/14/15·50	172	120.16	251.25	181.14	173.17	2499	4.8
Cresselia	0/13/15·37.5	213	117.96	210.31	180.43	174.18	2499	4.3
Drifblim	12/2/15·50	274	193.61	72.83	180.14	156.91	2500	5.0
Steelix	1/15/15·50	164	125.20	241.17	176.79	170.45	2495	5.0
Umbreon	15/15/15·50	194	118.48	214.28	175.59	170.14	2416	7.8
Snorlax	0/0/15·31	254	168.21	103.90	175.37	164.35	2497	3.4
Registeel	0/14/15·50	172	144.20	209.37	175.19	173.17	2499	4.5
Hariyama	0/0/15·40.5	251	198.84	75.32	175.05	155.48	2497	3.3
Drifblim	1/15/15·50	274	152.09	98.32	174.80	160.02	2499	5.1
Uxie	0/15/13·47	160	128.75	235.21	174.65	169.21	2498	3.9
Deoxys Attack	15/0/11·50	124	360.49	38.65	174.38	120.00	2499	5.8
Dondozo	0/14/15·33.5	246	132.48	144.52	174.33	167.63	2498	3.8
Cetitan	0/0/13·34	272	157.18	92.95	174.04	158.39	2499	3.8
Mandibuzz	15/15/15·50	215	121.00	184.87	173.62	168.80	2417	7.7
	15/15/14·50	215	121.00	184.87		168.80	2413	
Regirock	0/15/10·31.5	148	132.60	240.01	173.54	167.63	2500	3.9
Regice	0/15/10·31.5	148	132.60	240.01	173.54	167.63	2500	3.9
Lapras	0/4/15·45	238	161.43	120.94	173.46	166.87	2500	3.1
Snorlax	0/12/15·29.5	250	137.86	131.33	173.06	165.42	2499	3.6
Lapras	0/13/15·43	235	132.87	150.59	172.82	167.53	2500	3.7
Lugia	0/14/15·25.5	168	130.19	218.56	172.25	168.46	2499	3.9
Steelix	2/15/13·50	163	151.25	200.97	171.74	170.48	2499	4.8
Altered Forme Giratina	0/14/15·28	211	132.19	168.95	170.71	167.65	2497	3.8
Probopass	15/15/15·50	142	126.05	243.69	170.58	163.39	2351	7.8
	15/15/14·50	142	126.05	243.69		163.39	2344	
Greedent	3/15/15·50	231	136.97	143.69	170.55	165.66	2495	5.8
Armored Mewtwo	1/15/15·29.5	166	132.78	212.59	170.46	167.34	2495	3.8
Throh	0/0/14·48.5	228	171.89	111.04	170.31	163.26	2497	2.8
Lickilicky	0/14/15·48.5	214	134.08	162.40	170.16	167.03	2499	4.1
Altered Forme Giratina	0/14/15·28	211	158.62	140.79	170.14	167.65	2497	3.2
Relicanth	0/11/15·47	198	133.70	176.61	169.44	167.21	2500	3.7
Regirock	0/15/10·31.5	148	159.12	200.01	169.04	167.63	2500	3.1
Regice	0/15/10·31.5	148	159.12	200.01	169.04	167.63	2500	3.1
Hariyama	0/0/15·40.5	251	165.70	90.38	169.03	155.48	2497	3.3
Lugia	0/14/15·25.5	168	156.23	182.14	168.79	168.46	2499	3.2
Aurorus	0/1/14·40.5	221	176.95	108.35	168.77	161.82	2500	2.7
Throh	0/14/15·45	224	140.23	141.86	168.70	164.56	2500	3.3
Female Oinkologne	0/13/15·47.5	220	139.90	144.86	168.25	164.59	2498	3.4

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Diancie	0/15/0·43	110	153.01	241.59	168.20	159.61	2497	3.1
Stunfisk	15/15/15·50	214	160.33	130.25	168.19	164.71	2445	8.3
Galarian Stunfisk	15/15/15·50	214	160.33	130.25	168.19	164.71	2445	8.3
Corviknight	0/15/15·48.5	196	135.75	172.39	168.05	166.15	2498	4.3
Miltank	4/15/15·50	194	135.29	174.78	168.02	166.16	2491	6.1
Stunfisk	15/15/15·50	214	133.61	156.30	167.97	164.71	2445	8.2
Galarian Stunfisk	15/15/15·50	214	133.61	156.30	167.97	164.71	2445	8.2
Clodsire	15/15/15·50	245	119.32	139.49	167.94	159.76	2207	8.2
Suicune	0/15/15·33.5	180	135.49	188.18	167.89	166.18	2498	3.4
Jellicent	6/14/15·50	201	138.65	161.34	167.00	165.05	2500	6.1
	5/15/15·50	201	137.81	162.18		165.00	2492	
Ferrothorn	7/14/15·50	163	138.65	199.15	166.93	165.11	2498	6.5
	6/15/15·50	163	137.81	199.99		165.00	2488	
Amoonguss	15/15/15·50	221	171.42	107.84	166.75	159.86	2420	8.1
Lanturn	15/15/15·50	237	135.29	127.73	166.67	159.99	2357	8.0
Walrein	0/5/15·41.5	205	174.24	120.33	166.52	162.59	2498	2.5
Aurorus	0/15/15·37.5	217	144.35	138.14	166.50	162.95	2500	3.1
Suicune	0/15/15·33.5	180	162.59	156.82	166.47	166.18	2498	2.6
Honchkrow	2/0/15·43	193	236.76	69.12	166.29	146.72	2498	2.7
Tentacruel	0/13/15·50	172	139.49	186.55	166.01	164.80	2500	5.0
Toedscruel	0/13/15·50	172	139.49	186.55	166.01	164.80	2500	5.0
Wobbuffet	15/15/15·50	333	63.02	101.68	165.90	128.74	1160	8.3
Musharna	0/15/15·39.5	211	144.11	142.53	165.88	163.04	2499	3.2
Exploud	5/13/15·50	207	185.54	105.04	165.86	159.19	2500	5.8
Kangaskhan	1/1/15·46.5	204	179.70	113.82	165.84	160.99	2499	2.4
Dusknoir	0/15/15·50	120	151.25	226.04	165.76	160.09	2492	5.4
Gastrodon	6/15/15·50	217	147.05	132.77	165.61	161.81	2499	6.3
Oranguru	0/13/15·49	185	140.33	171.24	165.52	164.43	2500	4.4
Skuntank	3/15/14·50	205	188.56	102.94	165.50	158.46	2500	5.4
Probopass	15/15/15·50	142	151.25	203.07	165.44	163.39	2351	8.2
	15/15/14·50	142	151.25	203.07		163.39	2344	
Cofagrigus	10/15/15·50	139	145.37	211.76	165.38	162.35	2498	7.4
Runerigus	10/15/15·50	139	145.37	211.76	165.38	162.35	2498	7.4
Stakataka	0/15/14·28.5	121	151.91	223.22	165.38	160.09	2498	3.1
Cradily	15/15/15·50	180	140.33	175.62	165.32	164.31	2499	8.1
Cloyster	0/15/0·49	114	155.37	226.37	165.24	158.86	2500	2.9
Walrein	0/15/15·39.5	202	143.32	150.41	165.24	163.30	2500	3.2
Tinkaton	12/15/15·50	178	140.33	177.30	165.21	164.22	2499	7.5
	12/15/14·50	178	140.33	177.30		164.22	2493	
Origin Forme Giratina	1/3/15·26	203	184.73	107.85	165.19	159.33	2499	2.6
Ferrothorn	7/14/15·50	163	166.38	165.96	165.11	165.11	2498	6.4
Tentacruel	0/13/15·50	172	167.39	155.46	164.95	164.80	2500	4.7
Cradily	15/15/15·50	180	168.40	146.35	164.92	164.31	2499	8.2
Meganium	0/14/15·50	172	141.17	181.50	164.89	163.95	2496	5.3
Appletun	0/13/15·48.5	214	148.24	132.42	164.88	161.35	2495	4.1
Darmanitan	2/0/14·33	185	238.42	71.23	164.88	146.46	2499	2.8
Galarian Darmanitan	2/0/14·33	185	238.42	71.23	164.88	146.46	2499	2.8
Emboar	0/0/15·36	197	216.41	81.22	164.87	151.28	2500	2.7
Tapu Fini	0/15/15·36	143	145.04	206.43	164.82	162.38	2496	2.9
Piloswine	6/13/15·49.5	201	188.00	105.42	164.81	158.53	2498	5.6
Rampardos	3/0/14·29.5	169	259.47	65.91	164.79	142.44	2500	2.8
Muk	0/1/14·41.5	197	181.90	115.02	164.64	160.33	2499	2.2

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Alolan Muk	0/1/14·41.5	197	181.90	115.02	164.64	160.33	2499	2.2
Slowbro	0/14/14·45.5	188	173.70	132.21	164.64	162.83	2500	2.3
Slowking	0/14/14·45.5	188	173.70	132.21	164.64	162.83	2500	2.3
Blastoise	0/12/15·48.5	169	142.41	182.38	164.60	163.73	2500	4.0
Gogoat	0/3/15·40	221	154.90	117.75	164.55	159.15	2500	2.8
Avalugg	0/14/15·29.5	167	142.21	184.30	164.50	163.58	2499	3.4
Wobbuffet	15/15/15·50	333	75.63	84.73	164.45	128.74	1160	8.5
Amoonguss	15/15/15·50	221	142.85	129.41	164.42	159.86	2420	8.2
Aegislash	15/15/15·50	142	94.11	257.13	164.42	150.90	1803	8.2
	15/15/14·50	142	94.11	257.13		150.90	1798	
Vaporeon	0/11/15·31	215	151.24	126.90	164.38	160.39	2500	3.2
Articuno	0/13/15·32	165	142.81	185.20	164.34	163.42	2497	3.3
Scrafty	9/15/15·50	149	144.53	199.15	164.23	162.47	2494	7.2
Meganium	0/14/15·50	172	169.40	151.25	164.22	163.95	2496	4.9
Politoed	0/15/14·48.5	184	173.89	134.64	164.17	162.71	2498	4.0
Obstagoon	0/15/15·41.5	181	172.32	138.95	164.09	163.04	2495	2.4
Zygarde 50%	1/14/14·27.5	177	142.91	172.33	164.08	163.36	2497	3.3
1 more not shown...	0/15/15·27.5	177	142.21	173.03		163.31	2495	
Reuniclus	3/1/15·36	197	199.83	95.29	164.04	155.38	2500	2.2
Bellibolt	0/11/15·42	204	147.26	140.85	164.04	161.74	2496	3.0
Galarian Slowbro	1/6/15·50	194	184.53	113.44	163.99	159.54	2499	3.8
Wigglytuff	15/15/15·50	260	143.69	88.23	163.97	148.82	2178	8.4
Blastoise	0/12/15·48.5	169	170.89	151.99	163.96	163.73	2500	3.7
Cobalion	0/14/15·32.5	167	143.38	181.47	163.95	163.18	2498	3.1
Virizion	0/14/15·32.5	167	143.38	181.47	163.95	163.18	2498	3.1
Forretress	9/15/15·50	164	142.85	184.87	163.91	163.00	2492	7.0
Kangaskhan	0/14/14·44	200	146.66	145.04	163.90	162.04	2498	3.0
Whiscash	15/15/15·50	215	167.39	109.24	163.88	157.83	2346	8.3
	15/15/14·50	215	167.39	109.24		157.83	2342	
Slowbro	0/14/14·45.5	188	144.75	158.65	163.80	162.83	2500	3.1
Slowking	0/14/14·45.5	188	144.75	158.65	163.80	162.83	2500	3.1
Hippowdon	0/11/15·31.5	188	178.68	124.70	163.79	161.20	2498	2.5
Obstagoon	0/15/15·41.5	181	143.60	166.74	163.78	163.04	2495	3.2
Ursaluna	0/1/15·25	195	194.77	101.30	163.69	156.70	2499	2.7
Milotic	0/13/15·33	173	143.95	173.94	163.63	163.01	2498	3.1
Aggron	0/13/15·33	140	148.45	202.44	163.63	161.44	2500	3.0
Serperior	10/14/15·50	164	143.69	183.19	163.63	162.83	2495	7.0
	9/15/15·50	164	142.85	184.03		162.76	2486	
Male Oinkologne	0/10/15·44	208	150.72	132.08	163.60	160.58	2499	2.8
Articuno	0/13/15·32	165	171.37	154.34	163.57	163.42	2497	2.6
Milotic	0/13/15·33	173	172.74	144.95	163.57	163.01	2498	2.4
Munchlax	15/15/15·50	252	127.73	110.92	163.55	152.84	2139	8.2
	15/15/14·50	252	127.73	110.92		152.84	2135	
Politoed	0/15/14·48.5	184	144.91	161.56	163.49	162.71	2498	4.4
Cofagrigus	10/15/15·50	139	174.45	176.46	163.30	162.35	2498	7.4
Runerigus	10/15/15·50	139	174.45	176.46	163.30	162.35	2498	7.4
Dusknoir	1/15/14·50	119	182.51	188.37	163.29	159.94	2497	5.0
Nidoqueen	0/14/15·47	183	178.26	128.61	163.29	161.29	2498	3.0
Bronzong	13/15/14·50	152	146.21	191.59	163.27	162.08	2495	7.8
Poliwrath	0/14/14·44	179	176.97	133.70	163.22	161.79	2499	2.2
Forretress	11/15/14·49.5	163	172.92	153.60	163.17	162.98	2500	6.9
Aromatisse	4/15/15·50	202	148.73	138.65	163.13	160.90	2492	6.3

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
	5/14/15·50	202	149.57	137.81		160.88	2498	
Cloyster	0/15/0·49	114	186.44	188.64	163.03	158.86	2500	2.0
Abomasnow	3/14/15·50	186	182.51	120.44	162.99	159.91	2497	5.6
Grumpig	3/14/15·50	172	175.45	141.45	162.97	162.22	2500	5.6
Galarian Slowking	0/5/15·41.5	184	181.90	122.99	162.96	160.27	2499	2.1
Gliscor	0/14/15·40.5	155	146.67	187.10	162.92	162.03	2500	3.0
Mantine	15/15/15·50	149	136.97	202.51	162.83	160.48	2383	8.5
Skarmory	15/15/15·50	149	136.97	202.51	162.83	160.48	2383	8.5
Shiftry	15/1/15·50	186	216.80	85.43	162.74	151.03	2498	6.3
Grumpig	3/14/15·50	172	146.21	169.74	162.65	162.22	2500	5.9
	2/15/15·50	172	145.37	170.58		162.17	2491	
Gourgeist Super	0/14/14·42.5	170	146.11	171.80	162.64	162.20	2498	3.0
Muk	0/15/15·38.5	193	148.54	146.19	162.58	161.23	2500	2.9
	0/15/14·38.5	193	148.54	146.19		161.23	2495	
Alolan Muk	0/15/15·38.5	193	148.54	146.19	162.58	161.23	2500	2.9
	0/15/14·38.5	193	148.54	146.19		161.23	2495	
Slaking	2/0/15·21.5	185	217.04	85.68	162.57	150.96	2495	2.5
Origin Forme Giratina	0/13/14·25.5	201	151.78	134.92	162.57	160.26	2499	3.0
Clefable	0/14/14·49	192	148.68	147.01	162.57	161.30	2498	4.5
Exploud	3/15/15·50	207	152.93	127.73	162.55	159.31	2490	6.1
1 more not shown...	4/14/15·50	207	153.77	126.89		159.25	2495	
Gourgeist	1/14/15·50	149	147.89	190.75	162.55	161.39	2498	5.5
	0/15/15·50	149	147.05	191.59		161.32	2489	
Malamar	4/15/15·49.5	180	181.97	125.67	162.55	160.26	2499	5.5
Cryogonal	0/15/15·37.5	159	147.45	180.82	162.43	161.85	2500	3.1
Gourgeist Large	1/14/15·45.5	160	147.20	179.92	162.37	161.82	2499	3.0
2 more not shown...	0/15/15·45.5	160	146.39	180.73		161.77	2491	
Mamoswine	2/1/14·29	184	214.96	88.13	162.36	151.62	2499	2.5
Annihilape	0/3/15·29.5	186	191.55	109.44	162.33	157.40	2498	2.3
Gothitelle	0/14/15·49.5	156	147.45	183.48	162.31	161.60	2499	4.9
Gliscor	0/14/15·40.5	155	176.00	155.92	162.31	162.03	2500	2.1
Poliwrath	0/14/14·44	179	147.47	160.44	162.30	161.79	2499	3.0
Aggron	0/13/15·33	140	178.14	168.70	162.28	161.44	2500	2.3
Galarian Moltres	1/15/15·29.5	161	147.29	178.49	162.26	161.76	2497	3.3
Seismitoad	0/11/15·45	202	153.28	131.26	162.18	159.58	2497	2.7
Hippowdon	0/11/15·31.5	188	148.90	149.64	162.18	161.20	2498	3.1
Bastiodon	15/15/15·50	142	91.59	252.93	162.17	148.72	1741	8.3
	15/15/14·50	142	91.59	252.93		148.72	1735	
Galarian Moltres	1/15/15·29.5	161	176.75	148.74	162.16	161.76	2497	2.5
Hypno	15/15/15·50	178	133.61	174.78	162.13	160.79	2363	8.3
	15/15/14·50	178	133.61	174.78		160.79	2357	
Swampert	1/5/15·34.5	182	190.26	113.79	162.02	157.95	2500	2.1
Granbull	3/0/15·47	183	212.93	90.10	162.01	151.98	2497	2.0
Alolan Sandslash	1/14/15·48.5	163	177.89	145.05	161.98	161.42	2498	4.0
Nidoqueen	0/14/15·47	183	148.55	154.33	161.96	161.29	2498	3.5
Gothitelle	1/14/15·49	156	177.42	152.44	161.95	161.59	2499	4.5
Tangrowth	0/11/15·32.5	179	185.50	121.35	161.95	159.13	2497	2.3
Sharpedo	15/15/15·50	157	260.16	68.62	161.93	141.00	2466	8.6
Turtonator	15/14/14·50	142	151.25	192.43	161.89	160.48	2500	8.1
1 more not shown...	14/15/15·50	142	150.41	193.27		160.42	2499	
Skuntank	3/15/14·50	205	157.14	123.52	161.89	158.46	2500	5.9

CP1500 bound sorted by $\sqrt[3]{BP}$ (Great League)

See section A for important notes. This table uses the geometric mean $\sqrt[3]{\mathrm{BP}}$ instead of the arithmetic mean. Since Shadow forms don't change under the geometric mean, they have been elided.

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{\mathrm{BP}}$	CP	A%
Chansey	15/15/15·50	421	63.02	120.16	201.40	147.18	1418	12.9
Bastiodon	0/15/14·50	142	78.99	252.93	157.97	141.56	1497	4.8
Blissey	0/15/3·21.5	309	79.90	113.97	167.62	141.18	1499	3.8
Aegislash	0/12/15·47	140	80.05	250.07	156.71	140.99	1499	3.9
Carbink	5/15/15·49.5	127	83.78	251.34	154.04	138.80	1498	6.7
Umbreon	0/15/15·27.5	161	88.27	178.64	142.64	136.42	1500	3.8
	0/15/14·27.5	161	88.27	178.64		136.42	1497	
Mandibuzz	0/13/15·27.5	180	90.37	152.72	141.03	135.43	1498	3.8
Audino	0/15/13·41	193	90.66	141.56	141.74	135.31	1499	3.7
Toxapex	0/15/15·40.5	120	90.38	228.33	146.24	135.29	1499	3.9
Azumarill	0/15/15·45.5	196	91.59	136.57	141.39	134.84	1499	3.7
Cresselia	2/15/13·20	163	92.00	163.09	139.36	134.73	1500	3.6
Clodsire	0/14/13·30.5	213	93.31	121.23	142.51	134.06	1499	3.9
Registeel	0/12/12·24	132	93.58	194.37	139.98	133.91	1500	3.5
Diggersby	0/15/13·50	177	94.11	142.85	137.99	133.51	1497	5.4
Jumpluff	0/14/14·43	157	95.03	158.64	136.89	133.27	1499	3.6
Alomomola	0/15/11·27	242	95.79	101.35	146.38	132.94	1500	3.9
Probopass	0/15/15·28	120	95.43	205.00	140.14	132.90	1497	4.0
Araquanid	0/10/15·35	140	95.96	174.40	136.79	132.82	1500	3.5
Zygarde Complete	3/15/15·15	209	96.75	114.86	140.20	132.43	1499	3.6
Steelix	0/14/15·24	128	96.86	187.17	137.34	132.39	1500	3.8
Deoxys Defense	0/15/15·25.5	102	97.14	232.73	143.96	132.11	1500	3.9
Lickitung	8/14/15·50	186	97.47	126.89	136.79	132.01	1499	8.4
Galarian Corsola	0/15/15·50	142	97.47	165.54	135.00	131.83	1498	5.7
	0/15/14·50	142	97.47	165.54		131.83	1494	
Tropius	0/15/15·30	174	99.51	130.24	134.58	131.14	1498	3.8
Stunfisk	0/12/15·27	177	99.96	127.03	134.66	130.99	1498	3.7
Galarian Stunfisk	0/12/15·27	177	99.96	127.03	134.66	130.99	1498	3.7
Uxie	0/13/13·23	124	99.94	181.30	135.08	130.98	1500	3.7
Dewgong	0/12/15·29.5	161	100.86	137.13	133.00	130.58	1498	3.6
Dusclops	0/11/15·45	110	101.10	199.75	136.95	130.48	1499	3.7
Ledian	13/15/15·50	135	100.84	163.02	132.95	130.44	1497	10.4
Altaria	0/14/15·29	141	101.44	154.67	132.37	130.30	1497	3.8
Lugia	0/11/11·15.5	129	101.51	168.83	133.11	130.27	1500	3.6
Hypno	0/13/13·28	149	101.79	145.62	132.14	130.23	1500	3.8
Swalot	0/14/14·29.5	173	101.58	125.52	133.37	130.18	1498	3.6
Munchlax	0/14/13·32	222	101.90	97.44	140.45	130.14	1500	3.8
Claydol	0/14/15·29.5	123	101.58	176.31	133.63	130.12	1498	3.8
Dondozo	0/15/15·19	190	102.48	112.38	134.95	129.83	1499	3.6
Regirock	0/10/12·18.5	116	102.85	183.29	134.05	129.80	1500	3.5
Regice	0/10/12·18.5	116	102.85	183.29	134.05	129.80	1500	3.5
Altered Forme Giratina	0/11/12·17	163	103.00	129.99	132.00	129.71	1499	3.7
Armored Mewtwo	0/11/14·18	129	103.15	163.79	131.98	129.65	1500	3.8
Lanturn	0/13/14·28	199	103.21	106.03	136.08	129.62	1500	3.6
Trash Wormadam	0/13/15·44.5	138	103.23	152.81	131.34	129.60	1499	3.6

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Dunsparce	0/14/12·40	187	103.53	112.22	134.25	129.52	1500	3.5
Lapras	0/10/14·22	182	103.38	115.29	133.56	129.45	1498	3.3
Relicanth	1/15/15·22.5	152	103.28	138.14	131.14	129.44	1496	3.6
Miltank	0/14/14·24.5	152	103.81	136.87	130.89	129.26	1497	3.7
Noctowl	1/14/15·28.5	171	104.12	121.24	132.12	129.24	1499	3.7
Lickilicky	0/15/10·23.5	163	104.26	126.93	131.40	129.21	1500	3.5
Mantine	0/15/14·27.5	123	103.68	168.83	131.84	129.13	1500	3.5
	0/15/13·27.5	123	103.68	168.83		129.13	1495	
Skarmory	0/15/14·27.5	123	103.68	168.83	131.84	129.13	1500	3.5
	0/15/13·27.5	123	103.68	168.83		129.13	1495	
Cradily	0/15/15·26	146	103.54	142.36	130.63	129.11	1494	3.6
Wobbuffet	15/15/15·50	333	63.02	101.68	165.90	128.74	1160	14.1
Suicune	1/15/14·19	139	105.39	145.57	129.99	128.72	1500	3.5
Tinkaton	1/14/14·25.5	143	105.23	141.66	129.97	128.70	1497	3.7
Bayleef	3/15/15·50	142	105.04	142.85	129.96	128.68	1500	7.1
	3/15/14·50	142	105.04	142.85		128.68	1496	
Corviknight	0/13/14·23.5	152	105.56	132.75	130.10	128.66	1500	3.5
Ferrothorn	0/13/13·25	128	105.53	157.63	130.39	128.65	1500	3.5
Greedent	0/12/14·24.5	181	105.80	111.08	132.63	128.61	1500	3.5
Alolan Raticate	0/13/14·39	153	105.93	131.03	129.99	128.54	1499	3.5
Jellicent	1/14/14·24.5	158	105.80	126.95	130.25	128.51	1498	3.6
Wartortle	0/14/15·50	141	105.88	142.01	129.63	128.46	1499	6.3
Torkoal	0/15/15·27.5	131	105.78	152.72	129.83	128.39	1496	3.8
Swadloon	12/15/14·49.5	134	106.40	148.29	129.56	128.35	1500	9.6
Lileep	15/15/15·50	151	100.84	138.65	130.16	128.28	1460	11.2
Medicham	5/15/15·50	142	105.88	140.33	129.40	128.26	1499	7.7
	5/15/14·50	142	105.88	140.33		128.26	1494	
Servine	4/15/15·50	142	105.88	140.33	129.40	128.26	1499	7.4
	4/15/14·50	142	105.88	140.33		128.26	1494	
Snorlax	1/15/14·17.5	192	106.74	102.82	133.85	128.20	1500	3.6
Whiscash	0/14/13·28	180	106.74	109.57	132.10	128.16	1500	3.8
Eldegoss	0/14/15·29	122	106.47	161.86	130.11	128.11	1498	3.8
Sealeo	0/15/14·38	172	106.71	114.50	131.07	128.09	1498	3.5
Gligar	0/15/12·33	131	107.22	149.20	129.14	127.97	1500	3.6
Vespiquen	0/14/13·29	133	107.19	146.76	128.98	127.90	1498	3.6
Amoonguss	0/14/15·27	183	107.59	106.20	132.27	127.88	1500	3.9
Metang	0/13/15·38	132	107.49	147.22	128.90	127.83	1500	3.5
Tinkatuff	15/15/15·50	149	104.20	134.45	129.22	127.80	1477	11.2
Corsola	10/15/15·50	135	107.56	143.69	128.75	127.78	1499	9.6
Lumineon	0/15/12·34.5	138	107.73	140.35	128.69	127.78	1499	3.4
Female Oinkologne	0/14/15·23	170	108.27	112.75	130.34	127.56	1500	3.7
Plant Wormadam	0/15/15·35.5	129	107.79	149.07	128.62	127.51	1500	3.4
	0/15/14·35.5	129	107.79	149.07		127.51	1495	
Sandy Wormadam	0/15/15·35.5	129	107.79	149.07	128.62	127.51	1500	3.4
	0/15/14·35.5	129	107.79	149.07		127.51	1495	
Marowak	0/14/14·33.5	127	108.39	150.55	128.65	127.49	1500	3.5
Alolan Marowak	0/14/14·33.5	127	108.39	150.55	128.65	127.49	1500	3.5
Togetic	0/14/14·38.5	125	108.67	152.45	128.71	127.46	1500	3.6
Tentacruel	1/15/15·23.5	132	108.15	145.06	128.40	127.46	1500	3.5
	1/15/14·23.5	132	108.15	145.06		127.46	1497	
Toedscruel	1/15/15·23.5	132	108.15	145.06	128.40	127.46	1500	3.5
	1/15/14·23.5	132	108.15	145.06		127.46	1497	

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Forretress	0/9/15·25.5	132	108.61	144.36	128.32	127.44	1500	3.5
Serperior	0/10/15·25.5	132	108.61	144.36	128.32	127.44	1500	3.5
Oranguru	0/13/14·23.5	143	108.79	132.75	128.18	127.35	1499	3.6
Magcargo	0/15/14·38.5	118	108.67	161.05	129.24	127.34	1498	3.6
Volbeat	0/15/15·35.5	136	109.32	138.37	127.90	127.18	1500	3.5
Illumise	0/15/15·35.5	136	109.32	138.37	127.90	127.18	1500	3.5
Throh	2/15/15·22	172	109.02	109.65	130.22	127.16	1498	3.4
Dubwool	1/15/15·26	130	108.99	145.09	128.02	127.15	1497	3.6
Spidops	0/13/14·39.5	133	109.46	140.96	127.81	127.08	1499	3.5
Quagsire	0/15/14·29	165	109.35	113.67	129.34	127.05	1499	3.7
Bronzong	1/15/14·25.5	122	109.28	153.80	128.36	127.05	1497	3.6
Vullaby	15/15/15·50	157	100.84	129.41	129.08	127.01	1437	11.3
Scrafty	0/8/15·25.5	120	109.96	155.15	128.37	126.98	1500	3.7
Meganium	0/10/15·24	134	109.95	138.74	127.56	126.91	1499	3.6
Pachirisu	15/15/15·50	142	91.59	157.14	130.24	126.90	1372	11.3
	15/15/14·50	142	91.59	157.14		126.90	1368	
Cofagrigus	0/11/14·25.5	111	109.96	167.30	129.42	126.87	1500	3.8
Runerigus	0/11/14·25.5	111	109.96	167.30	129.42	126.87	1500	3.8
Dartrix	0/15/14·37.5	155	110.20	119.51	128.24	126.86	1500	3.6
Delcatty	0/15/15·49	156	110.26	118.61	128.29	126.83	1500	6.2
Blastoise	1/15/15·23	130	110.19	142.22	127.47	126.77	1498	3.6
Lopunny	0/15/14·28	125	110.27	147.74	127.67	126.75	1499	3.8
Avalugg	2/15/15·17.5	129	110.65	142.50	127.38	126.70	1500	3.8
Gothorita	0/15/14·43	136	110.33	135.29	127.21	126.62	1497	3.5
Zygarde 50%	1/14/14·16.5	137	110.70	133.49	127.06	126.50	1498	3.5
Rhyhorn	0/13/15·41	163	111.34	111.34	128.56	126.43	1500	3.6
Articuno	0/15/15·18.5	127	110.32	144.22	127.18	126.42	1496	3.4
Dachsbun	0/15/14·27.5	114	111.39	159.02	128.14	126.40	1500	3.8
Castform	0/14/15·41.5	149	110.89	122.06	127.32	126.35	1496	3.5
Castform (Sunny)	0/14/15·41.5	149	110.89	122.06	127.32	126.35	1496	3.5
Castform (Rainy)	0/14/15·41.5	149	110.89	122.06	127.32	126.35	1496	3.5
Castform (Snowy)	0/14/15·41.5	149	110.89	122.06	127.32	126.35	1496	3.5
Walrein	0/12/15·21	157	111.41	115.09	127.83	126.27	1499	3.5
Obstagoon	0/14/15·21.5	140	111.49	128.84	126.78	126.22	1500	3.6
Milotic	0/15/11·19	132	111.80	136.25	126.68	126.22	1500	3.6
Guzzlord	1/15/15·19.5	268	111.49	67.25	148.91	126.19	1497	3.7
Lairon	0/14/15·28	120	111.69	149.86	127.18	126.17	1498	3.7
Cobalion	0/12/11·19	128	111.80	140.33	126.71	126.16	1498	3.5
Virizion	0/12/11·19	128	111.80	140.33	126.71	126.16	1498	3.5
Dustox	15/15/15·50	142	94.95	148.73	128.56	126.11	1384	11.2
	15/15/14·50	142	94.95	148.73		126.11	1379	
Linoone	0/15/14·40	158	112.22	113.01	127.75	126.07	1499	3.8
Galarian Linoone	0/15/14·40	158	112.22	113.01	127.75	126.07	1499	3.8
Slowbro	0/13/15·22.5	146	112.16	122.29	126.82	126.05	1500	3.6
Slowking	0/13/15·22.5	146	112.16	122.29	126.82	126.05	1500	3.6
Floette	0/14/15·47	131	112.24	136.17	126.47	126.04	1500	4.5
Musharna	0/12/15·21	164	112.02	108.96	128.33	126.03	1497	3.5
Tirtouga	0/14/15·49.5	133	112.27	134.05	126.44	126.02	1500	6.2
Aurorus	0/12/13·20.5	168	112.50	105.84	128.78	126.00	1500	3.6
Turtonator	0/12/14·26	115	112.39	154.62	127.34	125.96	1499	3.6
Gastrodon	1/15/14·24.5	170	112.41	104.47	128.96	125.92	1500	3.7
Politoed	0/15/11·23.5	141	112.68	125.63	126.44	125.91	1500	3.5

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Grumpig	1/14/15·24	134	112.56	132.20	126.25	125.87	1499	3.6
Klang	0/15/15·32.5	126	112.02	141.14	126.39	125.83	1499	3.3
	0/15/14·32.5	126	112.02	141.14		125.83	1495	
Tapu Fini	0/12/14·20	111	112.91	158.91	127.61	125.81	1500	3.7
Sliggoo	1/15/15·28	130	113.10	135.01	126.04	125.68	1498	3.6
Ninetales	0/15/15·25	128	112.88	136.93	125.94	125.54	1495	3.6
Alolan Ninetales	0/14/12·25	126	113.55	138.26	125.94	125.53	1500	3.6
Gourgeist Super	1/15/14·21.5	131	113.35	133.17	125.84	125.52	1498	3.4
Glalie	0/13/13·27.5	142	113.49	122.60	126.03	125.48	1498	3.4
Nidorina	15/15/15·50	157	110.92	113.44	127.12	125.48	1480	11.4
Furret	1/15/14·35.5	162	113.91	107.03	127.65	125.47	1500	3.4
Amaura	11/15/15·50	167	113.44	104.20	128.21	125.44	1497	10.3
Charjabug	0/13/15·38.5	128	113.36	136.03	125.80	125.44	1497	3.5
Quilladin	0/14/15·37.5	132	113.31	131.93	125.75	125.43	1499	3.3
Mantyke	15/15/15·50	120	100.84	163.02	127.95	125.41	1411	11.6
Bellossom	1/14/14·25	130	113.55	133.59	125.71	125.40	1497	3.5
Gourgeist Large	1/14/15·22.5	124	114.06	139.40	125.82	125.39	1500	3.6
Kangaskhan	0/14/15·22	155	113.41	112.16	126.85	125.39	1497	3.5
Bellibolt	0/14/12·21.5	156	113.97	110.87	126.95	125.39	1499	3.6
Kecleon	0/15/15·28	120	113.81	144.20	126.00	125.35	1498	3.8
Hakamo-o	0/13/15·39	126	113.77	137.31	125.69	125.33	1498	3.5
Poliwrath	0/14/15·22	139	114.04	124.06	125.70	125.28	1498	3.6
Gliscor	1/15/14·21	119	113.86	145.08	125.98	125.27	1498	3.6
Gothitelle	0/15/15·23.5	121	113.97	142.47	125.81	125.25	1497	3.6
Wigglytuff	0/15/12·30	224	114.15	76.83	138.32	125.24	1499	3.9
Galarian Moltres	0/13/12·18	124	114.48	138.29	125.59	125.21	1499	3.5
Poliwhirl	6/15/15·49.5	149	113.94	115.62	126.19	125.21	1496	8.5
Aromatisse	0/13/15·24.5	159	114.39	107.78	127.06	125.15	1499	3.5
Furfrou	1/14/15·27	136	114.53	125.64	125.39	125.08	1497	3.5
Slurpuff	1/14/14·26	141	115.12	120.57	125.56	125.08	1500	3.7
Minun	0/15/14·38.5	132	114.92	129.00	125.31	125.08	1500	3.5
Hippopotas	13/15/14·49.5	153	114.78	111.43	126.40	125.08	1500	10.1
Gourgeist	0/14/13·24	115	114.53	148.56	126.03	125.07	1498	3.6
Maushold	0/14/15·29	139	114.38	123.02	125.47	125.06	1498	3.7
Palpitoad	9/15/15·49.5	164	114.78	103.89	127.56	125.05	1499	9.3
Alolan Sandslash	0/14/14·23.5	126	114.62	135.34	125.32	125.03	1498	3.6
Shiinotic	0/14/15·32	126	114.54	135.37	125.30	125.01	1498	3.5
Wailmer	0/15/15·50	245	114.28	69.74	143.01	124.99	1494	8.8
Cryogonal	0/14/11·20.5	121	114.92	140.32	125.41	124.96	1500	3.4
Appletun	2/15/14·23	164	115.32	103.15	127.49	124.95	1499	3.6
Ludicolo	0/15/15·24.5	135	114.39	126.29	125.23	124.94	1496	3.5
Comfey	1/15/14·27	106	115.23	159.65	126.96	124.93	1500	3.7
Pidgeot	0/14/14·27	145	115.23	116.62	125.61	124.90	1498	3.6
Gourgeist Small	0/15/13·25.5	107	115.35	157.85	126.74	124.90	1500	3.6
Vigoroth	1/15/15·29	147	115.10	115.10	125.74	124.88	1499	3.7
Aggron	0/14/12·19	107	115.29	157.80	126.70	124.86	1499	3.5
Clefable	0/13/15·23.5	149	115.27	113.33	125.87	124.86	1500	3.5
Hippowdon	0/14/10·18.5	143	115.49	117.79	125.43	124.83	1499	3.4
Palossand	0/15/11·23.5	135	115.27	124.98	125.08	124.82	1499	3.5
Nidoqueen	0/15/12·23	140	115.32	120.44	125.25	124.82	1499	3.5
Poipole	1/14/15·40.5	144	115.75	116.54	125.43	124.77	1500	3.5
Sudowoodo	0/14/11·27	127	115.92	131.89	124.94	124.75	1500	3.7

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{\text{BP}}$	CP	A%
Meowstic	0/14/15·27	134	115.23	125.64	124.96	124.72	1498	3.6

CP2500 bound sorted by $\sqrt[3]{BP}$ (Ultra League)

See section A for important notes. This table uses the geometric mean $\sqrt[3]{\text{BP}}$ instead of the arithmetic mean. Since Shadow forms don't change under the geometric mean, they have been elided.

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{\text{BP}}$	CP	A%
Blissey	0/15/14·41	405	102.59	146.34	217.98	182.52	2499	3.1
Cresselia	0/13/15·37.5	213	117.96	210.31	180.43	174.18	2499	2.8
Registeel	0/14/15·50	172	120.16	251.25	181.14	173.17	2499	4.3
Zygarde Complete	0/15/12·25.5	270	124.12	149.76	181.29	171.21	2498	2.9
Steelix	2/15/15·49.5	164	125.67	240.45	176.71	170.49	2497	4.7
Umbreon	15/15/15·50	194	118.48	214.28	175.59	170.14	2416	8.4
Uxie	0/15/15·46.5	161	128.36	234.50	174.62	169.22	2496	2.9
Mandibuzz	15/15/15·50	215	121.00	184.87	173.62	168.80	2417	8.3
	15/15/14·50	215	121.00	184.87		168.80	2413	
Lugia	0/14/15·25.5	168	130.19	218.56	172.25	168.46	2499	3.0
Deoxys Defense	12/13/15·49.5	127	130.70	287.37	181.69	168.33	2500	7.3
Regirock	0/12/15·31	151	132.06	236.82	173.29	167.77	2499	3.2
Regice	0/12/15·31	151	132.06	236.82	173.29	167.77	2499	3.2
Altered Forme Giratina	0/14/15·28	211	132.19	168.95	170.71	167.65	2497	3.0
Dondozo	0/14/15·33.5	246	132.48	144.52	174.33	167.63	2498	2.8
Lapras	0/15/15·42.5	234	132.46	151.73	172.73	167.54	2498	2.8
Armored Mewtwo	0/12/13·30	166	133.17	212.19	170.45	167.40	2500	3.0
Relicanth	0/11/15·47	198	133.70	176.61	169.44	167.21	2500	2.8
Alomomola	15/15/15·50	296	128.57	122.68	182.42	167.14	2452	8.8
Lickilicky	0/14/15·48.5	214	134.08	162.40	170.16	167.03	2499	3.7
Suicune	0/15/15·33.5	180	135.49	188.18	167.89	166.18	2498	2.7
Miltank	4/15/15·50	194	135.29	174.78	168.02	166.16	2491	5.8
Corviknight	0/15/15·48.5	196	135.75	172.39	168.05	166.15	2498	3.9
Greedent	3/15/15·50	231	136.97	143.69	170.55	165.66	2495	5.8
Snorlax	0/12/15·29.5	250	137.86	131.33	173.06	165.42	2499	3.0
Ferrothorn	7/14/15·50	163	138.65	199.15	166.93	165.11	2498	6.4
Jellicent	6/14/15·50	201	138.65	161.34	167.00	165.05	2500	6.0
Tentacruel	0/13/15·50	172	139.49	186.55	166.01	164.80	2500	4.7
Toedscruel	0/13/15·50	172	139.49	186.55	166.01	164.80	2500	4.7
Stunfisk	15/15/15·50	214	133.61	156.30	167.97	164.71	2445	8.5
Galarian Stunfisk	15/15/15·50	214	133.61	156.30	167.97	164.71	2445	8.5
Female Oinkologne	0/15/15·47	219	139.48	146.08	168.18	164.63	2497	3.2
Throh	0/14/15·45	224	140.23	141.86	168.70	164.56	2500	2.9
Oranguru	0/13/15·49	185	140.33	171.24	165.52	164.43	2500	4.1
Cradily	15/15/15·50	180	140.33	175.62	165.32	164.31	2499	8.2
Tinkaton	13/15/15·49.5	178	140.75	176.78	165.18	164.22	2499	7.5
Meganium	0/14/15·50	172	141.17	181.50	164.89	163.95	2496	5.0
Blastoise	0/12/15·48.5	169	142.41	182.38	164.60	163.73	2500	3.8
Avalugg	0/14/15·29.5	167	142.21	184.30	164.50	163.58	2499	3.1
Articuno	0/13/15·32	165	142.81	185.20	164.34	163.42	2497	2.9

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Probopass	15/15/15·50	142	126.05	243.69	170.58	163.39	2351	8.6
	15/15/14·50	142	126.05	243.69		163.39	2344	
Zygarde 50%	1/14/14·27.5	177	142.91	172.33	164.08	163.36	2497	2.9
Walrein	0/15/15·39.5	202	143.32	150.41	165.24	163.30	2500	2.8
Guzzlord	0/15/14·35.5	347	143.72	87.15	192.62	163.20	2499	3.1
Cobalion	0/14/15·32.5	167	143.38	181.47	163.95	163.18	2498	2.8
Virizion	0/14/15·32.5	167	143.38	181.47	163.95	163.18	2498	2.8
Obstagoon	0/15/13·42	180	144.05	167.26	163.77	163.08	2500	2.8
Musharna	0/15/15·39.5	211	144.11	142.53	165.88	163.04	2499	2.9
Milotic	0/13/15·33	173	143.95	173.94	163.63	163.01	2498	2.7
Forretress	9/15/15·50	164	142.85	184.87	163.91	163.00	2492	6.9
Aurorus	0/15/15·37.5	217	144.35	138.14	166.50	162.95	2500	2.9
Slowbro	0/14/14·45.5	188	144.75	158.65	163.80	162.83	2500	2.8
Slowking	0/14/14·45.5	188	144.75	158.65	163.80	162.83	2500	2.8
Serperior	10/14/15·50	164	143.69	183.19	163.63	162.83	2495	7.0
Politoed	0/15/14·48.5	184	144.91	161.56	163.49	162.71	2498	4.2
Scrafty	9/15/15·50	149	144.53	199.15	164.23	162.47	2494	7.3
Tapu Fini	0/13/14·36.5	143	145.59	205.67	164.75	162.38	2499	2.8
Cofagrigus	10/15/15·50	139	145.37	211.76	165.38	162.35	2498	7.6
Runerigus	10/15/15·50	139	145.37	211.76	165.38	162.35	2498	7.6
Grumpig	3/14/15·50	172	146.21	169.74	162.65	162.22	2500	5.8
Gourgeist Super	0/14/14·42.5	170	146.11	171.80	162.64	162.20	2498	2.8
Bronzong	13/15/14·50	152	146.21	191.59	163.27	162.08	2495	7.9
Kangaskhan	0/15/13·44	199	146.66	145.85	163.84	162.07	2500	2.8
Gliscor	0/14/15·40.5	155	146.67	187.10	162.92	162.03	2500	2.8
Bellibolt	0/15/10·42	200	147.26	144.05	163.77	161.89	2499	2.7
Cryogonal	0/15/15·37.5	159	147.45	180.82	162.43	161.85	2500	2.9
Gourgeist Large	1/14/15·45.5	160	147.20	179.92	162.37	161.82	2499	2.8
Gastrodon	6/15/15·50	217	147.05	132.77	165.61	161.81	2499	6.6
Poliwrath	0/14/14·44	179	147.47	160.44	162.30	161.79	2499	2.8
Galarian Moltres	1/15/15·29.5	161	147.29	178.49	162.26	161.76	2497	3.2
Gothitelle	0/14/15·49.5	156	147.45	183.48	162.31	161.60	2499	4.8
Appletun	0/15/15·48	213	147.79	133.68	164.82	161.45	2496	4.1
Aggron	0/13/15·33	140	148.45	202.44	163.63	161.44	2500	2.9
Alolan Sandslash	0/14/15·49	163	147.85	174.58	161.81	161.43	2499	4.3
Gourgeist	1/14/15·50	149	147.89	190.75	162.55	161.39	2498	5.5
Clefable	0/15/13·49	191	148.68	147.85	162.51	161.33	2500	4.4
Palossand	0/13/14·49	177	148.68	159.54	161.74	161.33	2499	4.2
Nidoqueen	0/14/15·47	183	148.55	154.33	161.96	161.29	2498	3.3
Hippowdon	0/14/15·31	187	148.29	151.24	162.18	161.27	2496	2.9
Muk	0/15/15·38.5	193	148.54	146.19	162.58	161.23	2500	2.7
	0/15/14·38.5	193	148.54	146.19		161.23	2495	
Alolan Muk	0/15/15·38.5	193	148.54	146.19	162.58	161.23	2500	2.7
	0/15/14·38.5	193	148.54	146.19		161.23	2495	
Dubwool	15/15/15·50	160	146.21	178.98	161.73	161.18	2478	8.6
Alolan Ninetales	7/15/15·50	161	148.73	174.78	161.51	161.15	2497	6.9
Hisuian Avalugg	1/14/15·27	160	149.24	174.92	161.39	161.05	2499	3.1
Diancie	0/15/15·39	119	149.08	235.39	167.82	161.03	2497	3.0
Drapion	0/15/15·48	155	149.45	180.18	161.54	161.01	2499	4.1
Aromatisse	6/15/14·49.5	201	149.97	138.24	163.07	160.92	2500	6.4
Galarian Slowking	0/15/15·39.5	181	149.62	153.56	161.39	160.81	2500	2.8
	0/15/14·39.5	181	149.62	153.56		160.81	2495	

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Dragalge	1/15/15·50	149	149.57	186.55	161.71	160.80	2498	5.7
Hypno	15/15/15·50	178	133.61	174.78	162.13	160.79	2363	8.5
	15/15/14·50	178	133.61	174.78		160.79	2357	
Male Oinkologne	0/14/12·43.5	205	150.25	134.90	163.38	160.77	2499	2.7
Sylveon	0/13/15·31.5	171	150.38	161.49	160.96	160.74	2499	2.9
Vaporeon	0/15/13·30.5	213	150.62	129.31	164.31	160.68	2500	3.2
Ninetales	9/15/15·50	161	149.57	172.26	160.94	160.68	2493	7.3
Bellossom	9/15/15·50	164	149.57	168.90	160.82	160.61	2494	7.1
Turtonator	15/14/14·50	142	151.25	192.43	161.89	160.48	2500	8.3
Mantine	15/15/15·50	149	136.97	202.51	162.83	160.48	2383	8.8
Skarmory	15/15/15·50	149	136.97	202.51	162.83	160.48	2383	8.8
Mew	0/15/10·29	169	151.07	161.86	160.65	160.48	2499	2.9
Celebi	0/15/10·29	169	151.07	161.86	160.65	160.48	2499	2.9
Jirachi	0/15/10·29	169	151.07	161.86	160.65	160.48	2499	2.9
Shaymin	0/15/10·29	169	151.07	161.86	160.65	160.48	2499	2.9
Victini	0/15/10·29	169	151.07	161.86	160.65	160.48	2499	2.9
Ludicolo	6/14/15·50	172	150.41	159.66	160.69	160.45	2494	6.5
Bouffalant	0/14/15·37.5	179	151.33	152.11	160.81	160.32	2498	2.8
Malamar	3/15/15·50	180	151.25	151.25	160.84	160.29	2500	5.9
Origin Forme Giratina	0/13/14·25.5	201	151.78	134.92	162.57	160.26	2499	3.0
Chesnaught	1/15/14·33.5	164	152.05	164.85	160.30	160.19	2500	2.8
Regidrago	0/14/15·33.5	312	152.05	86.56	183.54	160.14	2500	2.8
Cloyster	0/14/14·45	123	151.65	220.13	164.93	160.13	2496	2.9
Stakataka	0/15/14·28.5	121	151.91	223.22	165.38	160.09	2498	3.2
Dusknoir	0/15/15·50	120	151.25	226.04	165.76	160.09	2492	5.9
Galarian Slowbro	1/15/11·48.5	189	152.40	142.41	161.27	160.08	2500	4.2
Gogoat	0/14/15·37.5	217	152.11	124.17	164.43	160.03	2498	2.8
Drifblim	1/15/15·50	274	152.09	98.32	174.80	160.02	2499	6.5
Lanturn	15/15/15·50	237	135.29	127.73	166.67	159.99	2357	8.8
Goodra	0/12/12·27	152	152.71	176.31	160.34	159.96	2500	2.9
Abomasnow	3/15/14·50	185	152.09	145.37	160.82	159.93	2499	6.0
Celesteela	0/15/15·30.5	171	152.09	157.23	160.11	159.91	2500	3.0
	0/15/14·30.5	171	152.09	157.23		159.91	2495	
Amoonguss	15/15/15·50	221	142.85	129.41	164.42	159.86	2420	8.7
Houndstone	0/14/15·46	156	152.58	171.44	160.01	159.80	2500	2.9
Seismitoad	0/15/12·44.5	199	152.81	134.11	161.97	159.77	2497	2.8
Clodsire	15/15/15·50	245	119.32	139.49	167.94	159.76	2207	9.1
Cetitan	0/14/15·30.5	265	152.83	100.66	172.83	159.75	2500	3.0
	0/14/14·30.5	265	152.83	100.66		159.75	2497	
Florges	0/14/15·29	144	152.51	185.60	160.71	159.74	2498	3.1
Torterra	0/15/15·34	174	152.65	153.40	160.02	159.72	2497	2.7
Crustle	0/14/15·45	152	153.28	174.47	159.92	159.59	2499	2.9
Gourgeist Small	11/15/15·50	135	152.93	196.63	161.52	159.53	2494	8.0
Weezing	8/15/15·50	149	152.93	178.14	160.03	159.52	2496	7.2
Galarian Weezing	8/15/15·50	149	152.93	178.14	160.03	159.52	2496	7.2
Barbaracle	0/15/15·40.5	151	153.80	174.42	159.74	159.41	2499	2.9
Exploud	4/15/14·50	206	153.77	127.73	162.50	159.35	2498	6.4
Skeledirge	0/15/15·32	183	153.96	143.55	160.17	159.33	2500	2.7
Melmetal	0/13/15·26	190	153.94	138.28	160.74	159.33	2495	2.9
Carracosta	1/14/15·42	155	154.46	168.86	159.44	159.30	2500	2.8
Lunatone	5/15/15·50	186	153.77	141.17	160.32	159.24	2495	6.7
Solrock	5/15/15·50	186	153.77	141.17	160.32	159.24	2495	6.7

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	A%
Tangrowth	0/14/15·32	178	153.96	147.27	159.74	159.22	2496	2.6
Wailord	9/15/15·50	304	154.62	85.71	181.44	159.12	2496	8.8
Crobat	0/15/14·41.5	169	154.77	153.98	159.25	159.10	2497	2.8
Sandslash	2/14/15·50	164	154.62	158.82	159.14	159.10	2500	5.6
Kingdra	0/15/15·41.5	156	154.77	166.74	159.17	159.08	2499	2.8
Torkoal	15/15/15·50	157	139.49	183.19	159.89	158.90	2366	8.8
Slurpuff	15/15/15·50	174	153.77	149.57	159.12	158.77	2486	8.5
Garbodor	3/15/15·50	172	154.62	150.41	159.01	158.74	2488	6.3
Venusaur	1/15/14·39	160	156.14	160.07	158.74	158.73	2499	2.7
Piloswine	5/15/12·50	199	156.30	128.57	161.29	158.72	2500	6.3
Porygon2	1/15/15·39	167	156.14	153.00	158.72	158.60	2496	2.7
Doublade	0/14/14·48.5	139	156.57	183.22	159.59	158.57	2499	4.4
Swampert	0/14/13·33.5	179	156.57	142.27	159.28	158.57	2499	2.7
Chimecho	11/15/15·50	164	156.30	155.46	158.58	158.54	2500	7.7
Skuntank	3/15/14·50	205	157.14	123.52	161.89	158.46	2500	6.3
Mesprit	1/15/15·31	151	157.14	167.47	158.54	158.39	2500	2.9
Ho-Oh	1/15/14·24	149	157.06	169.50	158.52	158.30	2497	3.0
Feraligatr	1/15/14·35.5	162	157.48	155.19	158.22	158.20	2497	2.6
Latias	1/15/14·26.5	140	157.48	179.49	158.99	158.17	2498	3.0
Annihilape	0/15/15·28.5	183	156.90	137.64	159.18	158.10	2492	3.0
Kommo-o	0/11/14·28.5	139	158.32	179.01	158.78	157.93	2497	3.1
Crowned Shield Zamazenta	0/12/12·22.5	129	158.41	192.63	160.01	157.89	2499	2.9
Whiscash	15/15/15·50	215	139.49	131.09	161.86	157.83	2346	8.8
	15/15/14·50	215	139.49	131.09		157.83	2342	
Golisopod	1/14/15·29.5	142	158.90	174.14	158.35	157.80	2500	3.1
Stoutland	0/14/15·36.5	164	158.68	150.98	157.89	157.80	2497	2.8
Mudsdale	0/15/14·31.5	177	158.53	140.01	158.51	157.79	2495	2.7
Golem	0/15/15·33.5	154	158.83	160.33	157.72	157.70	2498	2.7
Alolan Golem	0/15/15·33.5	154	158.83	160.33	157.72	157.70	2498	2.7
Golduck	0/13/13·48.5	169	159.06	145.74	157.93	157.64	2496	4.1
Klinklang	0/12/15·42	136	159.26	180.87	158.71	157.64	2498	2.8
Tauros	0/15/15·42	156	158.46	158.46	157.64	157.64	2498	2.7
	0/15/14·42	156	158.46	158.46		157.64	2491	
Togekiss	0/15/15·28	150	159.05	164.00	157.68	157.57	2499	3.0
Ursaluna	1/15/15·24	191	159.68	128.27	159.65	157.57	2500	3.0
Donphan	0/15/15·32	165	159.17	148.76	157.64	157.50	2494	2.7
Empoleon	1/15/14·34.5	160	160.07	152.48	157.52	157.48	2500	2.7
Altaria	15/15/15·50	164	131.09	181.50	158.86	157.43	2266	8.7
Incineroar	0/15/15·32.5	172	159.81	141.89	157.90	157.41	2500	2.7
Noivern	0/15/14·38	165	159.68	148.00	157.56	157.40	2496	2.8
Zarude	0/11/14·24.5	163	160.02	149.44	157.48	157.37	2499	2.8
Stonjourner	0/15/15·29	172	159.71	141.72	157.81	157.31	2498	3.0
Omastar	0/14/15·37.5	145	160.65	166.85	157.50	157.23	2499	2.8
Dewgong	15/15/15·50	186	129.41	161.34	158.91	157.18	2245	8.9
Noctowl	15/15/15·50	201	134.45	143.69	159.71	157.18	2288	8.8
Rhyperior	0/14/14·25	177	160.97	136.26	158.08	157.17	2499	3.1
Hariyama	1/15/15·36	243	161.15	98.99	167.72	157.09	2500	2.9
Rhydon	0/14/14·29.5	179	161.08	134.23	158.10	157.01	2498	3.0
Lurantis	0/15/15·49.5	156	160.86	154.16	157.00	156.98	2499	5.4
Nihilego	0/14/15·23.5	165	161.25	145.06	157.10	156.86	2495	3.0

CP1500 bound sorted by bulk (Great League)

Configurations of forms are selected to maximize $\sqrt[3]{\mathrm{BP}}$, and these configurations are sorted by bulk (geometric mean of MHPand $\mathrm{Eff_D}$).

Species	IV·L	HP	$\mathrm{Eff_A}$	$\mathrm{Eff_D}$	$\frac{BS}{3}$	$\sqrt[3]{\mathrm{BP}}$	CP	Bulk
Chansey	15/15/15·50	421	63.02	120.16	201.40	147.18	1418	224.9
Bastiodon	0/15/14·50	142	78.99	252.93	157.97	141.56	1497	189.5
Blissey	0/15/3·21.5	309	79.90	113.97	167.62	141.18	1499	187.7
Aegislash	0/12/15·47	140	80.05	250.07	156.71	140.99	1499	187.1
Wobbuffet	15/15/15·50	333	63.02	101.68	165.90	128.74	1160	184.0
Carbink	5/15/15·49.5	127	83.78	251.34	154.04	138.80	1498	178.7
Umbreon	0/15/15·27.5	161	88.27	178.64	142.64	136.42	1500	169.6
Mandibuzz	0/13/15·27.5	180	90.37	152.72	141.03	135.43	1498	165.8
Toxapex	0/15/15·40.5	120	90.38	228.33	146.24	135.29	1499	165.5
Audino	0/15/13·41	193	90.66	141.56	141.74	135.31	1499	165.3
Azumarill	0/15/15·45.5	196	91.59	136.57	141.39	134.84	1499	163.6
Cresselia	2/15/13·20	163	92.00	163.09	139.36	134.73	1500	163.0
Clodsire	0/14/13·30.5	213	93.31	121.23	142.51	134.06	1499	160.7
Registeel	0/12/12·24	132	93.58	194.37	139.98	133.91	1500	160.2
Diggersby	0/15/13·50	177	94.11	142.85	137.99	133.51	1497	159.0
Jumpluff	0/14/14·43	157	95.03	158.64	136.89	133.27	1499	157.8
Probopass	0/15/15·28	120	95.43	205.00	140.14	132.90	1497	156.8
Alomomola	0/15/11·27	242	95.79	101.35	146.38	132.94	1500	156.6
Araquanid	0/10/15·35	140	95.96	174.40	136.79	132.82	1500	156.3
Zygarde Complete	3/15/15·15	209	96.75	114.86	140.20	132.43	1499	154.9
Steelix	0/14/15·24	128	96.86	187.17	137.34	132.39	1500	154.8
Deoxys Defense	0/15/15·25.5	102	97.14	232.73	143.96	132.11	1500	154.1
Lickitung	8/14/15·50	186	97.47	126.89	136.79	132.01	1499	153.6
Galarian Corsola	0/15/15·50	142	97.47	165.54	135.00	131.83	1498	153.3
Tropius	0/15/15·30	174	99.51	130.24	134.58	131.14	1498	150.5
Galarian Stunfisk	0/12/15·27	177	99.96	127.03	134.66	130.99	1498	149.9
Stunfisk	0/12/15·27	177	99.96	127.03	134.66	130.99	1498	149.9
Uxie	0/13/13·23	124	99.94	181.30	135.08	130.98	1500	149.9
Pachirisu	15/15/15·50	142	91.59	157.14	130.24	126.90	1372	149.4
Dewgong	0/12/15·29.5	161	100.86	137.13	133.00	130.58	1498	148.6
Ledian	13/15/15·50	135	100.84	163.02	132.95	130.44	1497	148.3
Dusclops	0/11/15·45	110	101.10	199.75	136.95	130.48	1499	148.2
Altaria	0/14/15·29	141	101.44	154.67	132.37	130.30	1497	147.7
Lugia	0/11/11·15.5	129	101.51	168.83	133.11	130.27	1500	147.6
Swalot	0/14/14·29.5	173	101.58	125.52	133.37	130.18	1498	147.4
Hypno	0/13/13·28	149	101.79	145.62	132.14	130.23	1500	147.3
Claydol	0/14/15·29.5	123	101.58	176.31	133.63	130.12	1498	147.3
Munchlax	0/14/13·32	222	101.90	97.44	140.45	130.14	1500	147.1
Dondozo	0/15/15·19	190	102.48	112.38	134.95	129.83	1499	146.1
Regice	0/10/12·18.5	116	102.85	183.29	134.05	129.80	1500	145.8
Regirock	0/10/12·18.5	116	102.85	183.29	134.05	129.80	1500	145.8
Altered Forme Giratina	0/11/12·17	163	103.00	129.99	132.00	129.71	1499	145.6
Armored Mewtwo	0/11/14·18	129	103.15	163.79	131.98	129.65	1500	145.4
Dustox	15/15/15·50	142	94.95	148.73	128.56	126.11	1384	145.3
Lanturn	0/13/14·28	199	103.21	106.03	136.08	129.62	1500	145.3
Trash Wormadam	0/13/15·44.5	138	103.23	152.81	131.34	129.60	1499	145.2
Relicanth	1/15/15·22.5	152	103.28	138.14	131.14	129.44	1496	144.9

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	Bulk
Dunsparce	0/14/12·40	187	103.53	112.22	134.25	129.52	1500	144.9
Lapras	0/10/14·22	182	103.38	115.29	133.56	129.45	1498	144.9
Lileep	15/15/15·50	151	100.84	138.65	130.16	128.28	1460	144.7
Miltank	0/14/14·24.5	152	103.81	136.87	130.89	129.26	1497	144.2
Cradily	0/15/15·26	146	103.54	142.36	130.63	129.11	1494	144.2
Skarmory	0/15/14·27.5	123	103.68	168.83	131.84	129.13	1500	144.1
Mantine	0/15/14·27.5	123	103.68	168.83	131.84	129.13	1500	144.1
Noctowl	1/14/15·28.5	171	104.12	121.24	132.12	129.24	1499	144.0
Lickilicky	0/15/10·23.5	163	104.26	126.93	131.40	129.21	1500	143.8
Vullaby	15/15/15·50	157	100.84	129.41	129.08	127.01	1437	142.5
Bayleef	3/15/15·50	142	105.04	142.85	129.96	128.68	1500	142.4
Tinkaton	1/14/14·25.5	143	105.23	141.66	129.97	128.70	1497	142.3
Suicune	1/15/14·19	139	105.39	145.57	129.99	128.72	1500	142.2
Corviknight	0/13/14·23.5	152	105.56	132.75	130.10	128.66	1500	142.1
Ferrothorn	0/13/13·25	128	105.53	157.63	130.39	128.65	1500	142.0
Greedent	0/12/14·24.5	181	105.80	111.08	132.63	128.61	1500	141.8
Jellicent	1/14/14·24.5	158	105.80	126.95	130.25	128.51	1498	141.6
Alolan Raticate	0/13/14·39	153	105.93	131.03	129.99	128.54	1499	141.6
Tinkatuff	15/15/15·50	149	104.20	134.45	129.22	127.80	1477	141.5
Wartortle	0/14/15·50	141	105.88	142.01	129.63	128.46	1499	141.5
Torkoal	0/15/15·27.5	131	105.78	152.72	129.83	128.39	1496	141.4
Servine	4/15/15·50	142	105.88	140.33	129.40	128.26	1499	141.2
Medicham	5/15/15·50	142	105.88	140.33	129.40	128.26	1499	141.2
Swadloon	12/15/14·49.5	134	106.40	148.29	129.56	128.35	1500	141.0
Eldegoss	0/14/15·29	122	106.47	161.86	130.11	128.11	1498	140.5
Snorlax	1/15/14·17.5	192	106.74	102.82	133.85	128.20	1500	140.5
Whiscash	0/14/13·28	180	106.74	109.57	132.10	128.16	1500	140.4
Sealeo	0/15/14·38	172	106.71	114.50	131.07	128.09	1498	140.3
Mantyke	15/15/15·50	120	100.84	163.02	127.95	125.41	1411	139.9
Gligar	0/15/12·33	131	107.22	149.20	129.14	127.97	1500	139.8
Vespiquen	0/14/13·29	133	107.19	146.76	128.98	127.90	1498	139.7
Amoonguss	0/14/15·27	183	107.59	106.20	132.27	127.88	1500	139.4
Metang	0/13/15·38	132	107.49	147.22	128.90	127.83	1500	139.4
Corsola	10/15/15·50	135	107.56	143.69	128.75	127.78	1499	139.3
Lumineon	0/15/12·34.5	138	107.73	140.35	128.69	127.78	1499	139.2
Sandy Wormadam	0/15/15·35.5	129	107.79	149.07	128.62	127.51	1500	138.7
Plant Wormadam	0/15/15·35.5	129	107.79	149.07	128.62	127.51	1500	138.7
Female Oinkologne	0/14/15·23	170	108.27	112.75	130.34	127.56	1500	138.4
Toedscruel	1/15/15·23.5	132	108.15	145.06	128.40	127.46	1500	138.4
Tentacruel	1/15/15·23.5	132	108.15	145.06	128.40	127.46	1500	138.4
Alolan Marowak	0/14/14·33.5	127	108.39	150.55	128.65	127.49	1500	138.3
Marowak	0/14/14·33.5	127	108.39	150.55	128.65	127.49	1500	138.3
Togetic	0/14/14·38.5	125	108.67	152.45	128.71	127.46	1500	138.0
Serperior	0/10/15·25.5	132	108.61	144.36	128.32	127.44	1500	138.0
Forretress	0/9/15·25.5	132	108.61	144.36	128.32	127.44	1500	138.0
Magcargo	0/15/14·38.5	118	108.67	161.05	129.24	127.34	1498	137.9
Oranguru	0/13/14·23.5	143	108.79	132.75	128.18	127.35	1499	137.8
Dubwool	1/15/15·26	130	108.99	145.09	128.02	127.15	1497	137.3
Throh	2/15/15·22	172	109.02	109.65	130.22	127.16	1498	137.3
Illumise	0/15/15·35.5	136	109.32	138.37	127.90	127.18	1500	137.2
Volbeat	0/15/15·35.5	136	109.32	138.37	127.90	127.18	1500	137.2
Bronzong	1/15/14·25.5	122	109.28	153.80	128.36	127.05	1497	137.0

Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	Bulk
Quagsire	0/15/14·29	165	109.35	113.67	129.34	127.05	1499	136.9
Spidops	0/13/14·39.5	133	109.46	140.96	127.81	127.08	1499	136.9
Scrafty	0/8/15·25.5	120	109.96	155.15	128.37	126.98	1500	136.4
Meganium	0/10/15·24	134	109.95	138.74	127.56	126.91	1499	136.3
Runerigus	0/11/14·25.5	111	109.96	167.30	129.42	126.87	1500	136.3
Cofagrigus	0/11/14·25.5	111	109.96	167.30	129.42	126.87	1500	136.3
Dartrix	0/15/14·37.5	155	110.20	119.51	128.24	126.86	1500	136.1
Delcatty	0/15/15·49	156	110.26	118.61	128.29	126.83	1500	136.0
Blastoise	1/15/15·23	130	110.19	142.22	127.47	126.77	1498	136.0
Lopunny	0/15/14·28	125	110.27	147.74	127.67	126.75	1499	135.9
Gothorita	0/15/14·43	136	110.33	135.29	127.21	126.62	1497	135.6
Avalugg	2/15/15·17.5	129	110.65	142.50	127.38	126.70	1500	135.6
Articuno	0/15/15·18.5	127	110.32	144.22	127.18	126.42	1496	135.3
Zygarde 50%	1/14/14·16.5	137	110.70	133.49	127.06	126.50	1498	135.2
Castform (Snowy)	0/14/15·41.5	149	110.89	122.06	127.32	126.35	1496	134.9
Castform (Rainy)	0/14/15·41.5	149	110.89	122.06	127.32	126.35	1496	134.9
Castform (Sunny)	0/14/15·41.5	149	110.89	122.06	127.32	126.35	1496	134.9
Castform	0/14/15·41.5	149	110.89	122.06	127.32	126.35	1496	134.9
Rhyhorn	0/13/15·41	163	111.34	111.34	128.56	126.43	1500	134.7
Dachsbun	0/15/14·27.5	114	111.39	159.02	128.14	126.40	1500	134.6
Walrein	0/12/15·21	157	111.41	115.09	127.83	126.27	1499	134.4
Obstagoon	0/14/15·21.5	140	111.49	128.84	126.78	126.22	1500	134.3
Guzzlord	1/15/15·19.5	268	111.49	67.25	148.91	126.19	1497	134.2
Milotic	0/15/11·19	132	111.80	136.25	126.68	126.22	1500	134.1
Lairon	0/14/15·28	120	111.69	149.86	127.18	126.17	1498	134.1
Virizion	0/12/11·19	128	111.80	140.33	126.71	126.16	1498	134.0
Cobalion	0/12/11·19	128	111.80	140.33	126.71	126.16	1498	134.0
Musharna	0/12/15·21	164	112.02	108.96	128.33	126.03	1497	133.7
Galarian Linoone	0/15/14·40	158	112.22	113.01	127.75	126.07	1499	133.6
Linoone	0/15/14·40	158	112.22	113.01	127.75	126.07	1499	133.6
Slowking	0/13/15·22.5	146	112.16	122.29	126.82	126.05	1500	133.6
Slowbro	0/13/15·22.5	146	112.16	122.29	126.82	126.05	1500	133.6
Floette	0/14/15·47	131	112.24	136.17	126.47	126.04	1500	133.6
Tirtouga	0/14/15·49.5	133	112.27	134.05	126.44	126.02	1500	133.5
Nidorina	15/15/15·50	157	110.92	113.44	127.12	125.48	1480	133.5
Klang	0/15/15·32.5	126	112.02	141.14	126.39	125.83	1499	133.4
Aurorus	0/12/13·20.5	168	112.50	105.84	128.78	126.00	1500	133.3
Turtonator	0/12/14·26	115	112.39	154.62	127.34	125.96	1499	133.3
Gastrodon	1/15/14·24.5	170	112.41	104.47	128.96	125.92	1500	133.3
Grumpig	1/14/15·24	134	112.56	132.20	126.25	125.87	1499	133.1
Politoed	0/15/11·23.5	141	112.68	125.63	126.44	125.91	1500	133.1
Tapu Fini	0/12/14·20	111	112.91	158.91	127.61	125.81	1500	132.8
Sliggoo	1/15/15·28	130	113.10	135.01	126.04	125.68	1498	132.5
Ninetales	0/15/15·25	128	112.88	136.93	125.94	125.54	1495	132.4
Gourgeist Super	1/15/14·21.5	131	113.35	133.17	125.84	125.52	1498	132.1
Alolan Ninetales	0/14/12·25	126	113.55	138.26	125.94	125.53	1500	132.0
Quilladin	0/14/15·37.5	132	113.31	131.93	125.75	125.43	1499	132.0
Charjabug	0/13/15·38.5	128	113.36	136.03	125.80	125.44	1497	132.0
Glalie	0/13/13·27.5	142	113.49	122.60	126.03	125.48	1498	131.9
Amaura	11/15/15·50	167	113.44	104.20	128.21	125.44	1497	131.9
Furret	1/15/14·35.5	162	113.91	107.03	127.65	125.47	1500	131.7

CP2500 bound sorted by bulk (Ultra League)

Configurations of forms are selected to maximize $\sqrt[3]{\mathrm{BP}}$, and these configurations are sorted by bulk (geometric mean of MHPand $\mathrm{Eff_D}$).

Species	IV·L	HP	$\mathrm{Eff_A}$	$\mathrm{Eff_D}$	$\frac{BS}{3}$	$\sqrt[3]{\mathrm{BP}}$	CP	Bulk
Blissey	0/15/14·41	405	102.59	146.34	217.98	182.52	2499	243.4
Cresselia	0/13/15·37.5	213	117.96	210.31	180.43	174.18	2499	211.7
Registeel	0/14/15·50	172	120.16	251.25	181.14	173.17	2499	207.9
Umbreon	15/15/15·50	194	118.48	214.28	175.59	170.14	2416	203.9
Zygarde Complete	0/15/12·25.5	270	124.12	149.76	181.29	171.21	2498	201.1
Mandibuzz	15/15/15·50	215	121.00	184.87	173.62	168.80	2417	199.4
Steelix	2/15/15·49.5	164	125.67	240.45	176.71	170.49	2497	198.6
Uxie	0/15/15·46.5	161	128.36	234.50	174.62	169.22	2496	194.3
Lugia	0/14/15·25.5	168	130.19	218.56	172.25	168.46	2499	191.6
Deoxys Defense	12/13/15·49.5	127	130.70	287.37	181.69	168.33	2500	191.0
Alomomola	15/15/15·50	296	128.57	122.68	182.42	167.14	2452	190.6
Regice	0/12/15·31	151	132.06	236.82	173.29	167.77	2499	189.1
Regirock	0/12/15·31	151	132.06	236.82	173.29	167.77	2499	189.1
Altered Forme Giratina	0/14/15·28	211	132.19	168.95	170.71	167.65	2497	188.8
Dondozo	0/14/15·33.5	246	132.48	144.52	174.33	167.63	2498	188.6
Lapras	0/15/15·42.5	234	132.46	151.73	172.73	167.54	2498	188.4
Armored Mewtwo	0/12/13·30	166	133.17	212.19	170.45	167.40	2500	187.7
Relicanth	0/11/15·47	198	133.70	176.61	169.44	167.21	2500	187.0
Lickilicky	0/14/15·48.5	214	134.08	162.40	170.16	167.03	2499	186.4
Probopass	15/15/15·50	142	126.05	243.69	170.58	163.39	2351	186.0
Miltank	4/15/15·50	194	135.29	174.78	168.02	166.16	2491	184.1
Suicune	0/15/15·33.5	180	135.49	188.18	167.89	166.18	2498	184.0
Corviknight	0/15/15·48.5	196	135.75	172.39	168.05	166.15	2498	183.8
Galarian Stunfisk	15/15/15·50	214	133.61	156.30	167.97	164.71	2445	182.9
Stunfisk	15/15/15·50	214	133.61	156.30	167.97	164.71	2445	182.9
Greedent	3/15/15·50	231	136.97	143.69	170.55	165.66	2495	182.2
Snorlax	0/12/15·29.5	250	137.86	131.33	173.06	165.42	2499	181.2
Ferrothorn	7/14/15·50	163	138.65	199.15	166.93	165.11	2498	180.2
Jellicent	6/14/15·50	201	138.65	161.34	167.00	165.05	2500	180.1
Toedscruel	0/13/15·50	172	139.49	186.55	166.01	164.80	2500	179.1
Tentacruel	0/13/15·50	172	139.49	186.55	166.01	164.80	2500	179.1
Female Oinkologne	0/15/15·47	219	139.48	146.08	168.18	164.63	2497	178.9
Throh	0/14/15·45	224	140.23	141.86	168.70	164.56	2500	178.3
Oranguru	0/13/15·49	185	140.33	171.24	165.52	164.43	2500	178.0
Cradily	15/15/15·50	180	140.33	175.62	165.32	164.31	2499	177.8
Tinkaton	13/15/15·49.5	178	140.75	176.78	165.18	164.22	2499	177.4
Meganium	0/14/15·50	172	141.17	181.50	164.89	163.95	2496	176.7
Hypno	15/15/15·50	178	133.61	174.78	162.13	160.79	2363	176.4
Blastoise	0/12/15·48.5	169	142.41	182.38	164.60	163.73	2500	175.6
Avalugg	0/14/15·29.5	167	142.21	184.30	164.50	163.58	2499	175.4
Articuno	0/13/15·32	165	142.81	185.20	164.34	163.42	2497	174.8
Zygarde 50%	1/14/14·27.5	177	142.91	172.33	164.08	163.36	2497	174.7
Walrein	0/15/15·39.5	202	143.32	150.41	165.24	163.30	2500	174.3
Forretress	9/15/15·50	164	142.85	184.87	163.91	163.00	2492	174.1
Virizion	0/14/15·32.5	167	143.38	181.47	163.95	163.18	2498	174.1
Cobalion	0/14/15·32.5	167	143.38	181.47	163.95	163.18	2498	174.1
Guzzlord	0/15/14·35.5	347	143.72	87.15	192.62	163.20	2499	173.9

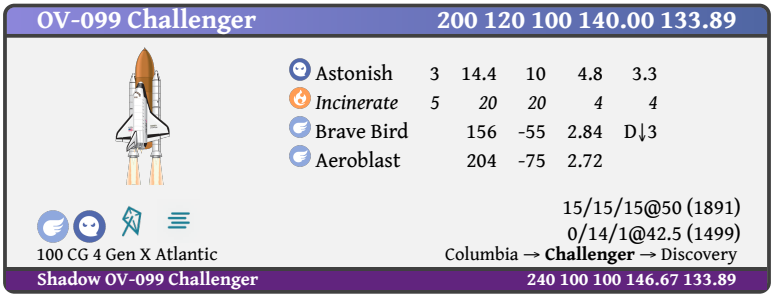
Species	IV·L	HP	Eff_A	Eff_D	$\frac{BS}{3}$	$\sqrt[3]{BP}$	CP	Bulk
Obstagoon	0/15/13·42	180	144.05	167.26	163.77	163.08	2500	173.5
Milotic	0/13/15·33	173	143.95	173.94	163.63	163.01	2498	173.5
Musharna	0/15/15·39.5	211	144.11	142.53	165.88	163.04	2499	173.4
Serperior	10/14/15·50	164	143.69	183.19	163.63	162.83	2495	173.3
Aurorus	0/15/15·37.5	217	144.35	138.14	166.50	162.95	2500	173.1
Slowking	0/14/14·45.5	188	144.75	158.65	163.80	162.83	2500	172.7
Slowbro	0/14/14·45.5	188	144.75	158.65	163.80	162.83	2500	172.7
Politoed	0/15/14·48.5	184	144.91	161.56	163.49	162.71	2498	172.4
Scrafty	9/15/15·50	149	144.53	199.15	164.23	162.47	2494	172.3
Runerigus	10/15/15·50	139	145.37	211.76	165.38	162.35	2498	171.6
Cofagrigus	10/15/15·50	139	145.37	211.76	165.38	162.35	2498	171.6
Tapu Fini	0/13/14·36.5	143	145.59	205.67	164.75	162.38	2499	171.5
Gourgeist Super	0/14/14·42.5	170	146.11	171.80	162.64	162.20	2498	170.9
Grumpig	3/14/15·50	172	146.21	169.74	162.65	162.22	2500	170.9
Bronzong	13/15/14·50	152	146.21	191.59	163.27	162.08	2495	170.7
Kangaskhan	0/15/13·44	199	146.66	145.85	163.84	162.07	2500	170.4
Gliscor	0/14/15·40.5	155	146.67	187.10	162.92	162.03	2500	170.3
Bellibolt	0/15/10·42	200	147.26	144.05	163.77	161.89	2499	169.7
Gastrodon	6/15/15·50	217	147.05	132.77	165.61	161.81	2499	169.7
Gourgeist Large	1/14/15·45.5	160	147.20	179.92	162.37	161.82	2499	169.7
Cryogonal	0/15/15·37.5	159	147.45	180.82	162.43	161.85	2500	169.6
Galarian Moltres	1/15/15·29.5	161	147.29	178.49	162.26	161.76	2497	169.5
Poliwrath	0/14/14·44	179	147.47	160.44	162.30	161.79	2499	169.5
Dubwool	15/15/15·50	160	146.21	178.98	161.73	161.18	2478	169.2
Gothitelle	0/14/15·49.5	156	147.45	183.48	162.31	161.60	2499	169.2
Appletun	0/15/15·48	213	147.79	133.68	164.82	161.45	2496	168.7
Alolan Sandslash	0/14/15·49	163	147.85	174.58	161.81	161.43	2499	168.7
Gourgeist	1/14/15·50	149	147.89	190.75	162.55	161.39	2498	168.6
Aggron	0/13/15·33	140	148.45	202.44	163.63	161.44	2500	168.3
Hippowdon	0/14/15·31	187	148.29	151.24	162.18	161.27	2496	168.2
Nidoqueen	0/14/15·47	183	148.55	154.33	161.96	161.29	2498	168.1
Palossand	0/13/14·49	177	148.68	159.54	161.74	161.33	2499	168.0
Clefable	0/15/13·49	191	148.68	147.85	162.51	161.33	2500	168.0
Alolan Muk	0/15/15·38.5	193	148.54	146.19	162.58	161.23	2500	168.0
Muk	0/15/15·38.5	193	148.54	146.19	162.58	161.23	2500	168.0
Alolan Ninetales	7/15/15·50	161	148.73	174.78	161.51	161.15	2497	167.7
Diancie	0/15/15·39	119	149.08	235.39	167.82	161.03	2497	167.4
Hisuian Avalugg	1/14/15·27	160	149.24	174.92	161.39	161.05	2499	167.3
Drapion	0/15/15·48	155	149.45	180.18	161.54	161.01	2499	167.1
Dragalge	1/15/15·50	149	149.57	186.55	161.71	160.80	2498	166.7
Galarian Slowking	0/15/15·39.5	181	149.62	153.56	161.39	160.81	2500	166.7
Aromatisse	6/15/14·49.5	201	149.97	138.24	163.07	160.92	2500	166.7
Ninetales	9/15/15·50	161	149.57	172.26	160.94	160.68	2493	166.5
Bellossom	9/15/15·50	164	149.57	168.90	160.82	160.61	2494	166.4
Male Oinkologne	0/14/12·43.5	205	150.25	134.90	163.38	160.77	2499	166.3
Sylveon	0/13/15·31.5	171	150.38	161.49	160.96	160.74	2499	166.2
Vaporeon	0/15/13·30.5	213	150.62	129.31	164.31	160.68	2500	166.0

B Species by typings

Forms are sorted by typing, and within typing by Pokédex number. Historically, base statistics are rarely manipulated from season to season, but various Pokémon gain the ability to learn new attacks.

Interpreting form cards

The title displays the form name on the left. If a Shiny form exists, the shiny icon ( ) is displayed. The form's base ATK, DEF, and STA appear on the right, followed by the arithmetic and geometric means ($\frac{BS}{3}$ and $\sqrt[3]{\text{BP}}$). The colors of the title bar indicate the typing. To the right of a picture is a table of fast and charged attacks. STAB is factored into applicable attacks (italics indicate a lack of STAB). Fast attacks show turns, power, energy generated, PPT, and EPT. Charged attacks show power, energy consumed, PPE, and any buffs. Attacks in boldface cannot be acquired without an Elite TM or special circumstances. Type, cost group, weather boosting, and existence of a Shiny form are indicated with icons. The optimal configurations for CP2500 and CP1500-bounded play are specified below the attack table. The last line of the card shows the Stardust bounty, cost group, generation, and region on the left, and evolutionary line on the right. Finally, if there is a Shadow form, that is indicated, along with the same stats provided for the regular form.



We see here that OV-099 Challenger has Ghost+Flying typing, with base ATK, DEF, and STA of 200, 120, and 100, respectively. Its $\frac{BS}{3}$ is 140, and its $\sqrt[3]{\text{BP}}$ is 133.89. It has a Shadow form, but not a Shiny form. The Shadow form has higher ATK and lower DEF, changing its $\frac{BS}{3}$ to 146.67. Its optimal configuration for a CP1500 bound is 0/14/1 at level 42.5. It is poorly suited for CP2500 bounds and liftoffs in low temperatures. Capturing a Challenger rewards 100 Stardust.

#0010 Caterpie ✧ — 55 55 128 79.33 72.89

Bug Bite	1	4.8	3	4.80	3.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (494)

100 CG 1 Gen I Kanto

Caterpie → Metapod (200) → Butterfree (208)

Shadow Caterpie — 66 45.8333 128 79.94 72.89

#0011 Metapod ✧ — 45 80 137 87.33 79.01

Bug Bite	1	4.8	3	4.80	3.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (509)

300 CG 1 Gen I Kanto

Caterpie (200) → **Metapod** → Butterfree (208)

Shadow Metapod — 54 66.6667 137 85.89 79.01

#0127 Pinsir ✧ — 238 182 163 194.33 191.84

Fury Cutter	1	3.6	4	3.60	4.00	
Bug Bite	1	4.8	3	4.80	3.00	
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*	
Vise Grip		*40*	*-40*	*1.00*		
Submission		***60***	***-50***	***1.20***		
X-Scissor		78	-40	1.95		
Close Combat		*100*	*-45*	*2.22*	*D↓2*	
Superpower		*85*	*-40*	*2.12*	*A+D↓*	

0/14/15·33 (2498)
0/13/14·19 (1499)

100 CG 3 Gen I Kanto

No evolution

Shadow Pinsir — 285.6 151.667 163 200.09 191.84

#0204 Pineco ✧ — 108 122 137 122.33 121.76

Bug Bite	1	4.8	3	4.80	3.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Sand Tomb		*25*	*-40*	*0.62*	*OD↓*
Gyro Ball		*80*	*-50*	*1.60*	

15/15/15·50 (1253)

100 CG 3 Gen II Johto

Pineco → Forretress (218)

Shadow Pineco — 129.6 101.667 137 122.76 121.76

#0265 Wurmple — 75 59 128 87.33 82.74

Bug Bite	1	4.8	3	4.80	3.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (653)

100 CG 1 Gen III Hoenn

Wurmple → Silcoon (201) → Beautifly (209)

#0266 Silcoon — 60 77 137 91.33 85.86

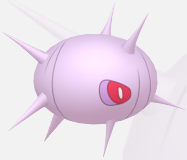
Bug Bite	1	4.8	3	4.80	3.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (626)

300 CG 1 Gen III Hoenn

Wurmple (201) → **Silcoon** → Beautifly (209)

#0268 Cascoon — 60 77 137 91.33 85.86



Bug Bite	1	4.8	3	4.80	3.00
Poison Sting	*2*	*4*	*9*	*2.00*	*4.50*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (626)

300 CG 1 Gen III Hoenn

Wurmple (201) → **Cascoon** → Dustox (216)

#0313 Volbeat — 143 166 163 157.33 156.99

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Struggle Bug	3	10.8	8	3.60	2.67
Bug Buzz		120	-60	2.00	30%OD↓
Thunderbolt		*90*	*-55*	*1.64*	
Signal Beam		90	-55	1.64	20%OA+D↓

15/15/15·50 (2002)
0/15/15·35.5 (1500)

100 CG 2 Gen III Hoenn

No evolution

#0314 Illumise ✧ — 143 166 163 157.33 156.99

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Struggle Bug	3	10.8	8	3.60	2.67
Bug Buzz		120	-60	2.00	30%OD↓
Dazzling Gleam		*90*	*-55*	*1.64*	
Silver Wind		72	-45	1.60	10%A+D↑

15/15/15·50 (2002)
0/15/15·35.5 (1500)
No evolution

100 CG 2 Gen III Hoenn

#0401 Kricketot ✧ — 45 74 114 77.67 72.41

Bug Bite	1	4.8	3	4.80	3.00
Struggle Bug	3	10.8	8	3.60	2.67
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (453)
Kricketot → Kricketune (202)

100 CG 1 Gen IV Sinnoh

#0402 Kricketune ✧ — 160 100 184 148.00 143.32

Fury Cutter	1	3.6	4	3.60	4.00
Struggle Bug	3	10.8	8	3.60	2.67
Aerial Ace		*60*	*-45*	*1.33*	
Bug Buzz		120	-60	2.00	30%OD↓
X-Scissor		78	-40	1.95	

15/15/15·50 (1869)
0/15/15·39.5 (1500)
Kricketot (202) → **Kricketune**

300 CG 1 Gen IV Sinnoh

#0412 Burmy ✧ — 53 83 120 85.33 80.82

Bug Bite	1	4.8	3	4.80	3.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (552)
Burmy → Plant Wormadam (212)

100 CG 1 Gen IV Sinnoh

#0588 Karrablast ✧ — 137 87 137 120.33 117.76

Fury Cutter	1	3.6	4	3.60	4.00
Peck	*2*	*6*	*8*	*3.00*	*4.00*
Aerial Ace		*60*	*-45*	*1.33*	
Drill Run		*80*	*-45*	*1.78*	
Signal Beam		90	-55	1.64	20%OA+D↓
X-Scissor		78	-40	1.95	

15/15/15·50 (1336)

100 CG 2 Gen V Unova

Karrablast → Escavalier (218)

Shadow Karrablast — 164.4 72.5 137 124.63 117.76

#0616 Shelmet ✧ — 72 140 137 116.33 111.36

Acid	*2*	*6*	*8*	*3.00*	*4.00*
Infestation	3	7.2	12	2.40	4.00
Bug Buzz		120	-60	2.00	30%OD↓
Signal Beam		90	-55	1.64	20%OA+D↓
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (942)

100 CG 2 Gen V Unova

Shelmet → Accelgor (203)

Shadow Shelmet — 86.4 116.667 137 113.36 111.36

#0617 Accelgor ✧ — 220 120 190 176.67 171.18

Acid	*2*	*6*	*8*	*3.00*	*4.00*
Infestation	3	7.2	12	2.40	4.00
Water Shuriken	*3*	*6*	*14*	*2.00*	*4.67*
Bug Buzz		120	-60	2.00	30%OD↓
Signal Beam		90	-55	1.64	20%OA+D↓
Focus Blast		*150*	*-75*	*2.00*	
Energy Ball		***90***	***-55***	***1.64***	***10%OD↓***
Acid Spray		*20*	*-45*	*0.44*	*OD↓2*

0/15/13·47.5 (2495)
0/14/15·23 (1496)

300 CG 2 Gen V Unova

Shelmet (203) → **Accelgor**

Shadow Accelgor — 264 100 190 184.67 171.18

#0664 Scatterbug ✧ — 63 63 116 80.67 77.22

Bug Bite	1	4.8	3	4.80	3.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (556)

100 CG 1 Gen VI Kalos

Scatterbug → Spewpa (204) → Vivillon (211)

#0665 Spewpa ✧ — 48 89 128 88.33 81.77

Struggle Bug	3	10.8	8	3.60	2.67
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (542)

300 CG 1 Gen VI Kalos

Scatterbug (203) → **Spewpa** → Vivillon (211)

#0736 Grubbin ✧ — 115 85 132 110.67 108.87

Bug Bite	1	4.8	3	4.80	3.00
Spark	*2*	*5*	*7*	*2.50*	*3.50*
Vise Grip		*40*	*-40*	*1.00*	
X-Scissor		78	-40	1.95	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1112)

100 CG 1 Gen VII Alola

Grubbin → Charjabug (206) → Vikavolt (206)

Shadow Grubbin — 138 70.8333 132 113.61 108.87

#0917 Tarountula — 70 77 111 86.00 84.26

Bug Bite	1	4.8	3	4.80	3.00
Struggle Bug	3	10.8	8	3.60	2.67
X-Scissor		78	-40	1.95	
Grass Knot		*90*	*-50*	*1.80*	
Lunge		72	-45	1.60	OA↓

15/15/15·50 (646) 15/15/14·50 (643)

100 CG 2 Gen IX Paldea

Tarountula → Spidops (204)

#0918 Spidops — 139 166 155 153.33 152.93

Bug Bite	1	4.8	3	4.80	3.00
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
X-Scissor		78	-40	1.95	
Grass Knot		*90*	*-50*	*1.80*	
Lunge		72	-45	1.60	OA↓

15/15/15·50 (1907) 15/15/14·50 (1901)
0/13/14·39.5 (1499)

300 CG 2 Gen IX Paldea

Tarountula (204) → **Spidops**

#0919 Nymble — 81 65 107 84.33 82.59

Bug Bite	1	4.8	3	4.80	3.00
Struggle Bug	3	10.8	8	3.60	2.67
Bug Buzz		120	-60	2.00	30%OD↓
X-Scissor		78	-40	1.95	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

100 CG 2 Gen IX Paldea

15/15/15·50 (669)
Nymble → Lokix (205)

#0920 Lokix — 199 144 174 172.33 170.84

Bug Bite	1	4.8	3	4.80	3.00
Sucker Punch	2	9.6	7	4.80	3.50
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Dark Pulse		96	-50	1.92	
Bug Buzz		120	-60	2.00	30%OD↓
Trailblaze		*65*	*-45*	*1.44*	*A↑*

300 CG 2 Gen IX Paldea

5/15/15·50 (2497)
0/14/14·24.5 (1499)
Nymble (205) → **Lokix**

#0595 Joltik — 110 98 137 115.00 113.88

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Charge Beam	3	6	11	2.00	3.67
Discharge		66	-40	1.65	
Bug Buzz		120	-60	2.00	30%OD↓
Cross Poison		*50*	*-35*	*1.43*	*12.5%A↑2*

100 CG 2 Gen V Unova

15/15/15·50 (1156)
Joltik → Galvantula (205)

Shadow Joltik — 132 81.6667 137 116.89 113.88

#0596 Galvantula — 201 128 172 167.00 164.18

Fury Cutter	1	3.6	4	3.60	4.00
Volt Switch	4	16.8	16	4.20	4.00
Discharge		66	-40	1.65	
Bug Buzz		120	-60	2.00	30%OD↓
Cross Poison		*50*	*-35*	*1.43*	*12.5%A↑2*
Energy Ball		*90*	*-55*	*1.64*	*10%OD↓*
Lunge		72	-45	1.60	OA↓

300 CG 2 Gen V Unova

15/15/15·50 (2494)
0/15/15·25.5 (1495)
Joltik (205) → **Galvantula**

Shadow Galvantula — 241.2 106.667 172 173.29 164.18

#0737 Charjabug ✧ — 145 161 149 151.67 151.52

Bug Bite	1	4.8	3	4.80	3.00
Spark	2	6	7	3.00	3.50
Volt Switch	**4**	**16.8**	**16**	**4.20**	**4.00**
Discharge		66	-40	1.65	
X-Scissor		78	-40	1.95	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

300 CG 1 Gen VII Alola

15/15/15·50 (1919)
0/13/15·38.5 (1497)
Grubbin (204) → **Charjabug** → Vikavolt (206)

Shadow Charjabug — 174 134.167 149 152.39 151.52

#0738 Vikavolt ✧ — 254 158 184 198.67 194.73

Bug Bite	1	4.8	3	4.80	3.00
Spark	2	6	7	3.00	3.50
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Volt Switch	**4**	**16.8**	**16**	**4.20**	**4.00**
Discharge		66	-40	1.65	
X-Scissor		78	-40	1.95	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Fly		*80*	*-45*	*1.78*	

500 CG 1 Gen VII Alola

2/15/15·29.5 (2500)
0/14/12·18 (1498)
Grubbin (204) → Charjabug (206) → **Vikavolt**

Shadow Vikavolt — 304.8 131.667 184 206.82 194.73

#0742 Cutiefly ✧ — 110 81 120 103.67 102.26

Struggle Bug	3	10.8	8	3.60	2.67
Fairy Wind	2	4.8	9	2.40	4.50
Bug Buzz		120	-60	2.00	30%OD↓
Dazzling Gleam		108	-55	1.96	

100 CG 1 Gen VII Alola

15/15/15·50 (1004)
Cutiefly → Ribombee (206)

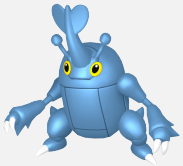
#0743 Ribombee ✧ — 198 146 155 166.33 164.86

Struggle Bug	3	10.8	8	3.60	2.67
Charm	3	15.6	8	5.20	2.67
Fairy Wind	2	4.8	9	2.40	4.50
Bug Buzz		120	-60	2.00	30%OD↓
Draining Kiss		72	-55	1.31	
Dazzling Gleam		108	-55	1.96	

300 CG 1 Gen VII Alola

15/15/15·50 (2488) 15/15/14·50 (2480)
1/15/15·25.5 (1498) 1/15/14·25.5 (1493)
Cutiefly (206) → **Ribombee**

#0214 Heracross — 234 179 190 201.00 199.65



Counter	2	9.6	6	4.80	3.00
Struggle Bug	3	10.8	8	3.60	2.67
Megahorn		132	-55	2.40	
Earthquake		*110*	*-65*	*1.69*	
Close Combat		120	-45	2.67	D↓2
Rock Blast		*50*	*-40*	*1.25*	
Upper Hand		84	-40	2.10	30%OD↓

0/14/13·30.5 (2500)
0/15/15·18 (1498)
No evolution

100 CG 2 Gen II Johto

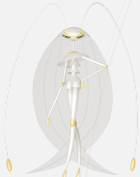
#0794 Buzzwole — 236 196 216 216.00 215.38

Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Counter	2	9.6	6	4.80	3.00
Lunge		72	-45	1.60	OA↓
Superpower		102	-40	2.55	A+D↓
Fell Stinger		24	-35	0.69	A↑
Power-Up Punch		24	-35	0.69	A↑

0/13/15·27 (2498)
2/15/15·16 (1500)
No evolution

100 CG 4 Gen VII Alola Ultra Beast

#0795 Pheromosa — 316 85 174 191.67 167.19



Bug Bite	1	4.8	3	4.80	3.00
Low Kick	2	4.8	5	2.40	2.50
Bug Buzz		120	-60	2.00	30%OD↓
Close Combat		120	-45	2.67	D↓2
Focus Blast		180	-75	2.40	
Lunge		72	-45	1.60	OA↓

0/15/15·34.5 (2500)
1/15/11·19.5 (1500)
No evolution

100 CG 4 Gen VII Alola Ultra Beast

#0636 Larvesta — 156 107 146 136.33 134.57

Bug Bite	1	4.8	3	4.80	3.00
Ember	2	4.8	9	2.40	4.50
Flame Wheel		96	-45	2.13	
Bug Buzz		120	-60	2.00	30%OD↓
Flame Charge		78	-50	1.56	A↑

15/15/15·50 (1692)
0/15/15·47.5 (1498)
Larvesta → Volcarona (208)

100 CG 3 Gen V Unova

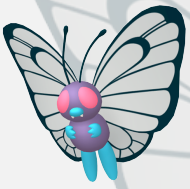
#0637 Volcarona ✧ — 264 189 198 217.00 214.57

Bug Bite	1	4.8	3	4.80	3.00
Fire Spin	3	13.2	10	4.40	3.33
Bug Buzz		120	-60	2.00	30%OD↓
Solar Beam		*150*	*-80*	*1.88*	
Hurricane		*110*	*-65*	*1.69*	
Overheat		156	-55	2.84	A↓2

0/15/14·25.5 (2498)
0/9/15·15.5 (1499)
Larvesta (207) → **Volcarona**

300 CG 3 Gen V Unova

#0012 Butterfree ✧ — 167 137 155 153.00 152.50



Bug Bite	**1**	**4.8**	**3**	**4.80**	**3.00**
Confusion	*4*	*16*	*14*	*4.00*	*3.50*
Struggle Bug	3	10.8	8	3.60	2.67
Bug Buzz		120	-60	2.00	30%OD↓
Signal Beam		90	-55	1.64	20%OA+D↓
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

15/15/15·50 (2065) 15/15/14·50 (2059)
0/13/15·33 (1499)
Caterpie (200) → Metapod (200) → **Butterfree**

500 CG 1 Gen I Kanto

Shadow Butterfree — 200.4 114.167 155 156.52 152.50

#0123 Scyther ✧ — 218 170 172 186.67 185.41

Fury Cutter	1	3.6	4	3.60	4.00
Steel Wing	**2**	**7**	**5**	**3.50**	**2.50**
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Bug Buzz		**120**	**-60**	**2.00**	**30%OD↓**
Night Slash		*50*	*-35*	*1.43*	
X-Scissor		78	-40	1.95	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

0/13/15·39.5 (2500)
0/14/11·21 (1499)
Scyther → Scizor (218)

100 CG 3 Gen I Kanto

Shadow Scyther — 261.6 141.667 172 191.76 185.41

#0165 Ledyba ✧ — 72 118 120 103.33 100.65

Bug Bite	1	4.8	3	4.80	3.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Aerial Ace		72	-45	1.60	
Swift		*55*	*-35*	*1.57*	
Silver Wind		72	-45	1.60	10%A+D↑

15/15/15·50 (823)
Ledyba → Ledian (209)

100 CG 1 Gen II Johto

Shadow Ledyba — 86.4 98.3333 120 101.58 100.65

#0166 Ledian ✧ — 107 179 146 144.00 140.88

Bug Bite	1	4.8	3	4.80	3.00
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Struggle Bug	3	10.8	8	3.60	2.67
Aerial Ace		72	-45	1.60	
Bug Buzz		120	-60	2.00	30%OD↓
Dynamic Punch		*90*	*-45*	*2.00*	
Silver Wind		72	-45	1.60	10%A+D↑

300 CG 1 Gen II Johto

15/15/15·50 (1522)
13/15/15·50 (1497)
Ledyba (208) → **Ledian**

Shadow Ledian — 128.4 149.167 146 141.19 140.88

#0193 Yanma ✧ — 154 94 163 137.00 133.13

Wing Attack	2	6	7	3.00	3.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Aerial Ace		72	-45	1.60	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Silver Wind		72	-45	1.60	10%A+D↑

100 CG 2 Gen II Johto

15/15/15·50 (1662)
0/14/15·49.5 (1498)
Yanma → Yanmega (211)

#0267 Beautifly ✧ — 189 98 155 147.33 142.13

Infestation	3	7.2	12	2.40	4.00
Struggle Bug	3	10.8	8	3.60	2.67
Bug Buzz		120	-60	2.00	30%OD↓
Air Cutter		54	-35	1.54	30%A↑
Silver Wind		72	-45	1.60	10%A+D↑

500 CG 1 Gen III Hoenn

15/15/15·50 (1996) 15/15/14·50 (1990)
0/15/15·34 (1495)
Wurmple (201) → Silcoon (201) → **Beautifly**

#0284 Masquerain ✧ — 192 150 172 171.33 170.47

Air Slash	3	10.8	9	3.60	3.00
Infestation	3	7.2	12	2.40	4.00
Bubble Beam		*25*	*-40*	*0.62*	*OA↓*
Ominous Wind		*45*	*-45*	*1.00*	*10%A+D↑*
Air Cutter		54	-35	1.54	30%A↑
Silver Wind		72	-45	1.60	10%A+D↑
Lunge		72	-45	1.60	OA↓

300 CG 1 Gen III Hoenn

9/15/15·50 (2493)
0/15/14·25 (1500)
Surskit (219) → **Masquerain**

#0291 Ninjask ✧ — 199 112 156 155.67 151.50

Fury Cutter	1	3.6	4	3.60	4.00
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Aerial Ace		72	-45	1.60	
Bug Buzz		120	-60	2.00	30%OD↓
Shadow Ball		*100*	*-55*	*1.82*	

15/15/15·50 (2226)
0/12/15·29 (1499)
Nincada (213) → **Ninjask**

300 CG 3 Gen III Hoenn

#0414 Mothim ✧ — 185 98 172 151.67 146.10

Bug Bite	1	4.8	3	4.80	3.00
Air Slash	3	10.8	9	3.60	3.00
Psybeam		*70*	*-60*	*1.17*	
Aerial Ace		72	-45	1.60	
Bug Buzz		120	-60	2.00	30%OD↓

15/15/15·50 (2052)
0/15/15·32.5 (1499)
Burmy (202) → **Mothim**

300 CG 1 Gen IV Sinnoh

#0415 Combee ✧ — 59 83 102 81.33 79.34

Bug Bite	1	4.8	3	4.80	3.00
Bug Buzz		120	-60	2.00	30%OD↓

15/15/15·50 (559)
Combee → Vespiquen (210)

750 CG 2 Gen IV Sinnoh

#0416 Vespiquen ✧ — 149 190 172 170.33 169.49

Fury Cutter	1	3.6	4	3.60	4.00
Bug Bite	1	4.8	3	4.80	3.00
Poison Sting	*2*	*4*	*9*	*2.00*	*4.50*
Air Slash	3	10.8	9	3.60	3.00
Bug Buzz		120	-60	2.00	30%OD↓
Power Gem		*85*	*-50*	*1.70*	
Signal Beam		90	-55	1.64	20%OA+D↓
X-Scissor		78	-40	1.95	
Fell Stinger		24	-35	0.69	A↑

15/15/15·50 (2267)
0/14/13·29 (1498)
Combee (210) → **Vespiquen**

950 CG 2 Gen IV Sinnoh

#0469 Yanmega ✧ — 231 156 200 195.67 193.16

Bug Bite	1	4.8	3	4.80	3.00
Wing Attack	2	6	7	3.00	3.50
Aerial Ace		72	-45	1.60	
Bug Buzz		120	-60	2.00	30%OD↓
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*

300 CG 2 Gen IV Sinnoh

1/15/15·33 (2500)
0/14/15·19 (1497)
Yanma (209) → **Yanmega**

#0666 Vivillon ✧ — 176 103 190 156.33 151.02

Struggle Bug	3	10.8	8	3.60	2.67
Gust	4	19.2	12	4.80	3.00
Aerial Ace		72	-45	1.60	
Bug Buzz		120	-60	2.00	30%OD↓
Hurricane		132	-65	2.03	
Energy Ball		*90*	*-55*	*1.64*	*10%OD↓*

500 CG 1 Gen VI Kalos

15/15/15·50 (2097)
0/15/14·31.5 (1498)
Scatterbug (203) → Spewpa (204) → **Vivillon**

#0292 Shedinja ✧ — 153 73 1 75.67 22.35

Bug Bite	1	4.8	3	4.80	3.00
Shadow Claw	2	7.2	8	3.60	4.00
Struggle Bug	**3**	**10.8**	**8**	**3.60**	**2.67**
Dig		*70*	*-50*	*1.40*	
Aerial Ace		*60*	*-45*	*1.33*	
Shadow Sneak		60	-45	1.33	

100 CG 3 Gen III Hoenn

15/15/15·50 (445)
No evolution

#0046 Paras ✧ — 121 99 111 110.33 109.96

Bug Bite	1	4.8	3	4.80	3.00
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Seed Bomb		66	-40	1.65	
Cross Poison		*50*	*-35*	*1.43*	*12.5%A↑2*
X-Scissor		78	-40	1.95	

500 CG 2 Gen I Kanto

15/15/15·50 (1150) 15/15/14·50 (1146)
Paras → Parasect (212)

#0047 Parasect ✧ 165 146 155 155.33 155.14

Fury Cutter	1	3.6	4	3.60	4.00
Bug Bite	**1**	**4.8**	**3**	**4.80**	**3.00**
Struggle Bug	3	10.8	8	3.60	2.67
Cross Poison		*50*	*-35*	*1.43*	*12.5%A↑2*
X-Scissor		78	-40	1.95	
Solar Beam		180	-80	2.25	

700 CG 2 Gen I Kanto

15/15/15·50 (2102) 15/15/14·50 (2096)
0/13/15·32 (1500)
Paras (211) → **Parasect**

#0413 Plant Wormadam ✧ 141 180 155 158.67 157.86

Bug Bite	1	4.8	3	4.80	3.00
Confusion	*4*	*16*	*14*	*4.00*	*3.50*
Psybeam		*70*	*-60*	*1.17*	
Bug Buzz		120	-60	2.00	30%OD↓
Energy Ball		108	-55	1.96	10%OD↓

300 CG 1 Gen IV Sinnoh

15/15/15·50 (2005) 15/15/14·50 (1999)
0/15/15·35.5 (1500) 0/15/14·35.5 (1495)
Burmy (202) → **Plant Wormadam**

#0540 Sewaddle ✧ 96 124 128 116.00 115.07

Bug Bite	1	4.8	3	4.80	3.00
Struggle Bug	3	10.8	8	3.60	2.67
Seed Bomb		66	-40	1.65	
Silver Wind		72	-45	1.60	10%A+D↑
Energy Ball		108	-55	1.96	10%OD↓

100 CG 1 Gen V Unova

15/15/15·50 (1105)
Sewaddle → Swadloon (212) → Leavanny (213)

#0541 Swadloon ✧ 115 162 146 141.00 139.59

Bug Bite	1	4.8	3	4.80	3.00
Struggle Bug	3	10.8	8	3.60	2.67
Bug Buzz		120	-60	2.00	30%OD↓
Silver Wind		72	-45	1.60	10%A+D↑
Energy Ball		108	-55	1.96	10%OD↓

300 CG 1 Gen V Unova

15/15/15·50 (1549)
12/15/14·49.5 (1500)
Sewaddle (212) → **Swadloon** → Leavanny (213)

#0542 Leavanny ✧ — 205 165 181 183.67 182.94

Bug Bite	1	4.8	3	4.80	3.00
Shadow Claw	**2**	**6**	**8**	**3.00**	**4.00**
Razor Leaf	2	10.8	4	5.40	2.00
X-Scissor		78	-40	1.95	
Leaf Blade		84	-35	2.40	
Silver Wind		72	-45	1.60	10%A+D↑
Leaf Storm		156	-55	2.84	A↓2

0/12/14·44 (2500)
0/13/14·22 (1499)

500 CG 1 Gen V Unova

Sewaddle (212) → Swadloon (212) → **Leavanny**

#0290 Nincada ✧ — 80 126 104 103.33 101.59

Bug Bite	1	4.8	3	4.80	3.00
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Aerial Ace		*60*	*-45*	*1.33*	
Bug Buzz		120	-60	2.00	30%OD↓
Night Slash		*50*	*-35*	*1.43*	

15/15/15·50 (868) 15/15/14·50 (865)

100 CG 3 Gen III Hoenn

Nincada → Ninjask (210)

#0413 Sandy Wormadam ✧ — 141 180 155 158.67 157.86

Bug Bite	1	4.8	3	4.80	3.00
Confusion	*4*	*16*	*14*	*4.00*	*3.50*
Psybeam		*70*	*-60*	*1.17*	
Bug Buzz		120	-60	2.00	30%OD↓
Bulldoze		54	-45	1.20	50%OD↓

15/15/15·50 (2005) 15/15/14·50 (1999)
0/15/15·35.5 (1500) 0/15/14·35.5 (1495)

300 CG 1 Gen IV Sinnoh

Burmy (202) → **Sandy Wormadam**

#0872 Snom — 76 59 102 79.00 77.05

Powder Snow	2	6	8	3.00	4.00
Struggle Bug	3	10.8	8	3.60	2.67
Icy Wind		72	-45	1.60	OA↓
Bug Buzz		120	-60	2.00	30%OD↓

15/15/15·50 (597)

100 CG 3 Gen VIII Galar

Snom → Frosmoth (214)

#0873 Frosmoth — 230 155 172 185.67 183.03

Powder Snow	2	6	8	3.00	4.00
Bug Bite	1	4.8	3	4.80	3.00
Icy Wind		72	-45	1.60	OA↓
Bug Buzz		120	-60	2.00	30%OD↓
Ice Beam		108	-55	1.96	
Hurricane		*110*	*-65*	*1.69*	

0/14/15·38.5 (2499)
0/15/15·20.5 (1500)

300 CG 3 Gen VIII Galar

Snom (213) → **Frosmoth**

#0013 Weedle ✧ — 63 50 120 77.67 72.30

Bug Bite	1	4.8	3	4.80	3.00
Poison Sting	2	4.8	9	2.40	4.50
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (515)

100 CG 1 Gen I Kanto

Weedle → Kakuna (214) → Beedrill (214)

Shadow Weedle — 75.6 41.6667 120 79.09 72.30

#0014 Kakuna ✧ — 46 75 128 83.00 76.15

Bug Bite	1	4.8	3	4.80	3.00
Poison Sting	2	4.8	9	2.40	4.50
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (488)

300 CG 1 Gen I Kanto

Weedle (214) → **Kakuna** → Beedrill (214)

Shadow Kakuna — 55.2 62.5 128 81.90 76.15

#0015 Beedrill ✧ — 169 130 163 154.00 152.99

Bug Bite	**1**	**4.8**	**3**	**4.80**	**3.00**
Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Infestation	3	7.2	12	2.40	4.00
Aerial Ace		*60*	*-45*	*1.33*	
Drill Run		***80***	***-45***	***1.78***	
Sludge Bomb		96	-50	1.92	
X-Scissor		78	-40	1.95	
Fell Stinger		24	-35	0.69	A↑

15/15/15·50 (2087)
0/13/14·32.5 (1499)

500 CG 1 Gen I Kanto

Weedle (214) → Kakuna (214) → **Beedrill**

Shadow Beedrill — 202.8 108.333 163 158.04 152.99

#0048 Venonat — 100 100 155 118.33 115.73

Bug Bite	1	4.8	3	4.80	3.00
Confusion	*4*	*16*	*14*	*4.00*	*3.50*
Psybeam		*70*	*-60*	*1.17*	
Poison Fang		54	-40	1.35	OD↓
Signal Beam		90	-55	1.64	20%OA+D↓

100 CG 2 Gen I Kanto

15/15/15·50 (1135) 15/15/14·50 (1132)

Venonat → Venomoth (215)

Shadow Venonat — 120 83.3333 155 119.44 115.73

#0049 Venomoth — 179 143 172 164.67 163.90

Bug Bite	**1**	**4.8**	**3**	**4.80**	**3.00**
Confusion	*4*	*16*	*14*	*4.00*	*3.50*
Infestation	3	7.2	12	2.40	4.00
Psywave	*1*	*3*	*4*	*3.00*	*4.00*
Bug Buzz		120	-60	2.00	30%OD↓
Poison Fang		54	-40	1.35	OD↓
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Silver Wind		72	-45	1.60	10%A+D↑

300 CG 2 Gen I Kanto

15/15/15·50 (2354)
0/13/15·27.5 (1500)

Venonat (215) → **Venomoth**

Shadow Venomoth — 214.8 119.167 172 168.66 163.90

#0167 Spinarak — 105 73 120 99.33 97.25

Bug Bite	1	4.8	3	4.80	3.00
Poison Sting	2	4.8	9	2.40	4.50
Night Slash		*50*	*-35*	*1.43*	
Cross Poison		60	-35	1.71	12.5%A↑2
Signal Beam		90	-55	1.64	20%OA+D↓

100 CG 1 Gen II Johto

15/15/15·50 (923)

Spinarak → Ariados (215)

#0168 Ariados — 161 124 172 152.33 150.87

Poison Sting	2	4.8	9	2.40	4.50
Infestation	3	7.2	12	2.40	4.00
Megahorn		132	-55	2.40	
Shadow Sneak		*50*	*-45*	*1.11*	
Cross Poison		60	-35	1.71	12.5%A↑2
Lunge		72	-45	1.60	OA↓
Trailblaze		*65*	*-45*	*1.44*	*A↑*

300 CG 1 Gen II Johto

15/15/15·50 (2003)
0/14/15·35 (1500)

Spinarak (215) → **Ariados**

#0269 Dustox ✧ — 98 162 155 138.33 135.01

Confusion	*4*	*16*	*14*	*4.00*	*3.50*
Struggle Bug	3	10.8	8	3.60	2.67
Bug Buzz		120	-60	2.00	30%OD↓
Sludge Bomb		96	-50	1.92	
Silver Wind		72	-45	1.60	10%A+D↑

15/15/15·50 (1384) 15/15/14·50 (1379)

500 CG 1 Gen III Hoenn

Wurmple (201) → Cascoon (201) → **Dustox**

#0543 Venipede ✧ — 83 99 102 94.67 94.28

Bug Bite	1	4.8	3	4.80	3.00
Poison Sting	2	4.8	9	2.40	4.50
Sludge Bomb		96	-50	1.92	
Signal Beam		90	-55	1.64	20%OA+D↓
Gyro Ball		*80*	*-50*	*1.60*	

15/15/15·50 (799)

100 CG 1 Gen V Unova

Venipede → Whirlipede (216) → Scolipede (216)

Shadow Venipede — 99.6 82.5 102 94.70 94.28

#0544 Whirlipede ✧ — 100 173 120 131.00 127.57

Bug Bite	1	4.8	3	4.80	3.00
Poison Sting	2	4.8	9	2.40	4.50
Sludge Bomb		96	-50	1.92	
Signal Beam		90	-55	1.64	20%OA+D↓
Gyro Ball		*80*	*-50*	*1.60*	

15/15/15·50 (1293)

300 CG 1 Gen V Unova

Venipede (216) → **Whirlipede** → Scolipede (216)

Shadow Whirlipede — 120 144.167 120 128.06 127.57

#0545 Scolipede ✧ — 203 175 155 177.67 176.59

Bug Bite	1	4.8	3	4.80	3.00
Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Megahorn		132	-55	2.40	
Sludge Bomb		96	-50	1.92	
X-Scissor		78	-40	1.95	
Gyro Ball		*80*	*-50*	*1.60*	

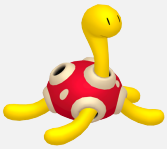
0/15/15·47.5 (2500)
1/15/14·23 (1500)

500 CG 1 Gen V Unova

Venipede (216) → Whirlipede (216) → **Scolipede**

Shadow Scolipede — 243.6 145.833 155 181.48 176.59

#0213 Shuckle ✧ — 17 396 85 166.00 83.02



Rock Throw	2	9.6	5	4.80	2.50
Struggle Bug	3	10.8	8	3.60	2.67
Stone Edge		120	-55	2.18	
Rock Blast		60	-40	1.50	
Gyro Ball		*80*	*-50*	*1.60*	

15/15/15·50 (458)

100 CG 2 Gen II Johto

No evolution

Shadow Shuckle — 20.4 330 85 145.13 83.02

#0557 Dwebble ✧ — 118 128 137 127.67 127.43

Cut	*1*	*3*	*2*	*3.00*	*2.00*
Smack Down	3	14.4	8	4.80	2.67
Rock Tomb		96	-50	1.92	OA↓
X-Scissor		78	-40	1.95	
Rock Blast		60	-40	1.50	

15/15/15·50 (1384)

100 CG 1 Gen V Unova

Dwebble → Crustle (217)

Shadow Dwebble — 141.6 106.667 137 128.42 127.43

#0558 Crustle ✧ — 188 200 172 186.67 186.31

Fury Cutter	1	3.6	4	3.60	4.00
Smack Down	3	14.4	8	4.80	2.67
Rock Wrecker		132	-50	2.64	
Rock Slide		90	-45	2.00	
X-Scissor		78	-40	1.95	
Rock Blast		60	-40	1.50	

0/14/15·45 (2499)
0/13/13·22.5 (1498)

300 CG 1 Gen V Unova

Dwebble (217) → **Crustle**

Shadow Crustle — 225.6 166.667 172 188.09 186.31

#0900 Kleavor ✧ — 253 174 172 199.67 196.37

Fury Cutter	1	3.6	4	3.60	4.00
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Air Slash	*3*	*9*	*9*	*3.00*	*3.00*
Stone Edge		120	-55	2.18	
Rock Slide		90	-45	2.00	
X-Scissor		78	-40	1.95	
Trailblaze		*65*	*-45*	*1.44*	A↑

1/15/13·29.5 (2500)
0/15/8·18 (1498)

100 CG 3 Gen VIII Hisui

No evolution

#0205 Forretress ✧ 161 205 181 182.33 181.45

Bug Bite	1	4.8	3	4.80	3.00
Volt Switch	*4*	*14*	*16*	*3.50*	*4.00*
Struggle Bug	3	10.8	8	3.60	2.67
Earthquake		*110*	*-65*	*1.69*	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Sand Tomb		*25*	*-40*	*0.62*	*OD↓*
Heavy Slam		84	-50	1.68	
Mirror Shot		42	-35	1.20	30%OA↓

300 CG 3 Gen II Johto

9/15/15·50 (2492)
0/9/15·25.5 (1500)
Pineco (200) → **Forretress**

Shadow Forretress 193.2 170.833 181 181.68 181.45

#0212 Scizor ✧ 236 181 172 196.33 194.40

Fury Cutter	1	3.6	4	3.60	4.00
Bullet Punch	2	9.6	7	4.80	3.50
Night Slash		*50*	*-35*	*1.43*	
Iron Head		84	-50	1.68	
X-Scissor		78	-40	1.95	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

300 CG 3 Gen II Johto

0/15/15·32 (2499)
1/15/15·18.5 (1497)
Scyther (208) → **Scizor**

Shadow Scizor 283.2 150.833 172 202.01 194.40

#0413 Trash Wormadam ✧ 127 175 155 152.33 151.03

Bug Bite	1	4.8	3	4.80	3.00
Confusion	*4*	*16*	*14*	*4.00*	*3.50*
Metal Sound	2	6	8	3.00	4.00
Psybeam		*70*	*-60*	*1.17*	
Bug Buzz		120	-60	2.00	30%OD↓
Iron Head		84	-50	1.68	

300 CG 1 Gen IV Sinnoh

15/15/15·50 (1802) 15/15/14·50 (1796)
0/13/15·44.5 (1499)
Burmy (202) → **Trash Wormadam**

#0589 Escavalier ✧ 223 187 172 194.00 192.85

Bug Bite	1	4.8	3	4.80	3.00
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Megahorn		132	-55	2.40	
Aerial Ace		*60*	*-45*	*1.33*	
Drill Run		*80*	*-45*	*1.78*	
Acid Spray		*20*	*-45*	*0.44*	*OD↓2*
Razor Shell		***35***	***-35***	***1.00***	***50%OD↓***

300 CG 2 Gen V Unova

1/15/14·34.5 (2498)
0/15/13·19.5 (1500)
Karrablast (203) → **Escavalier**

Shadow Escavalier 267.6 155.833 172 198.48 192.85

#0632 Durant ✧ — 217 188 151 185.33 183.32

Bug Bite	1	4.8	3	4.80	3.00
Metal Claw	2	6	7	3.00	3.50
Stone Edge		*100*	*-55*	*1.82*	
Iron Head		84	-50	1.68	
X-Scissor		78	-40	1.95	

0/12/15·41 (2500)
1/15/15·21 (1499) 1/15/14·21 (1495)
No evolution

100 CG 2 Gen V Unova

#0649 Genesect ✧ — 252 199 174 208.33 205.87

Fury Cutter	1	3.6	4	3.60	4.00
Metal Claw	2	6	7	3.00	3.50
Hyper Beam		*150*	*-80*	*1.88*	
Magnet Bomb		84	-45	1.87	
X-Scissor		78	-40	1.95	
Techno Blast		***120***	***-55***	***2.18***	

1/15/15·27.5 (2497)
2/15/14·16.5 (1500)
No evolution

100 CG 4 Gen V Unova Mythical

#0283 Surskit ✧ — 93 87 120 100.00 99.02

Bug Bite	1	4.8	3	4.80	3.00
Bubble	3	9.6	11	3.20	3.67
Bubble Beam		30	-40	0.75	OA↓
Aqua Jet		84	-40	2.10	
Signal Beam		90	-55	1.64	20%OA+D↓

15/15/15·50 (894)
Surskit → Masquerain (209)

100 CG 1 Gen III Hoenn

#0767 Wimpod ✧ — 67 74 93 78.00 77.26

Struggle Bug	3	10.8	8	3.60	2.67
Bug Buzz		120	-60	2.00	30%OD↓

15/15/15·50 (567)
Wimpod → Golisopod (220)

100 CG 1 Gen VII Alola

#0768 Golisopod — 218 226 181 208.33 207.37

Fury Cutter	1	3.6	4	3.60	4.00
Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Waterfall	3	14.4	8	4.80	2.67
Aerial Ace		*60*	*-45*	*1.33*	
Aqua Jet		84	-40	2.10	
X-Scissor		78	-40	1.95	
Razor Shell		42	-35	1.20	50%OD↓
Liquidation		84	-45	1.87	30%OD↓

1/14/15·29.5 (2500)
0/8/15·18 (1499)
Wimpod (219) → **Golisopod**

300 CG 1 Gen VII Alola

#0052 Alolan Meowth — 99 78 120 99.00 97.49

Bite	1	4.8	2	4.80	2.00
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Dark Pulse		96	-50	1.92	
Night Slash		60	-35	1.71	
Foul Play		72	-40	1.80	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

15/15/15·50 (901)
Alolan Meowth → Alolan Persian (220)

750 CG 2 Gen I Kanto

Shadow Alolan Meowth — 118.8 65 120 101.27 97.49

#0053 Alolan Persian — 158 136 163 152.33 151.87

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Feint Attack	2	7.2	6	3.60	3.00
Dark Pulse		96	-50	1.92	
Play Rough		*90*	*-60*	*1.50*	
Foul Play		72	-40	1.80	
Payback		132	-60	2.20	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

15/15/15·50 (2002)
1/15/15·34.5 (1500)
Alolan Meowth (220) → **Alolan Persian**

950 CG 2 Gen I Kanto

Shadow Alolan Persian — 189.6 113.333 163 155.31 151.87

#0197 Umbreon — 126 240 216 194.00 186.93

Feint Attack	2	7.2	6	3.60	3.00
Snarl	3	6	13	2.00	4.33
Dark Pulse		96	-50	1.92	
Psychic		***75***	***-55***	***1.36***	***10%OD↓***
Foul Play		72	-40	1.80	
Last Resort		***90***	***-55***	***1.64***	

15/15/15·50 (2416)
0/15/15·27.5 (1500) 0/15/14·27.5 (1497)
Eevee (353) → **Umbreon**

300 CG 3 Gen II Johto

#0261 Poochyena — 96 61 111 89.33 86.62

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Snarl	3	6	13	2.00	4.33
Dig		*70*	*-50*	*1.40*	
Poison Fang		*45*	*-40*	*1.12*	*OD↓*
Crunch		84	-45	1.87	20%OD↓

100 CG 1 Gen III Hoenn

15/15/15·50 (766) 15/15/14·50 (763)
Poochyena → Mightyena (221)

Shadow Poochyena — 115.2 50.8333 111 92.34 86.62

#0262 Mightyena — 171 132 172 158.33 157.17

Bite	1	4.8	2	4.80	2.00
Sucker Punch	2	9.6	7	4.80	3.50
Fire Fang	*2*	*8*	*6*	*4.00*	*3.00*
Thunder Fang	*2*	*8*	*6*	*4.00*	*3.00*
Ice Fang	*2*	*8*	*6*	*4.00*	*3.00*
Poison Fang		*45*	*-40*	*1.12*	*OD↓*
Play Rough		*90*	*-60*	*1.50*	
Crunch		84	-45	1.87	20%OD↓

300 CG 1 Gen III Hoenn

15/15/15·50 (2177)
0/12/14·30 (1498)
Poochyena (221) → **Mightyena**

Shadow Mightyena — 205.2 110 172 162.40 157.17

#0359 Absol — 246 120 163 176.33 168.82

Psycho Cut	*2*	*3*	*9*	*1.50*	*4.50*
Snarl	3	6	13	2.00	4.33
Dark Pulse		96	-50	1.92	
Megahorn		*110*	*-55*	*2.00*	
Thunder		*100*	*-60*	*1.67*	
Payback		132	-60	2.20	
Brutal Swing		**66**	**-35**	**1.89**	

100 CG 3 Gen III Hoenn

0/15/14·44 (2496)
0/15/15·22 (1497)
No evolution

Shadow Absol — 295.2 100 163 186.07 168.82

#0491 Darkrai — 285 198 172 218.33 213.31

Feint Attack	2	7.2	6	3.60	3.00
Snarl	3	6	13	2.00	4.33
Dark Pulse		96	-50	1.92	
Shadow Ball		*100*	*-55*	*1.82*	
Sludge Bomb		***80***	***-50***	***1.60***	
Focus Blast		*150*	*-75*	*2.00*	

100 CG 4 Gen IV Sinnoh Mythical

0/10/14·25 (2500)
0/10/14·15 (1500)
No evolution

#0509 Purrloin — 98 73 121 97.33 95.30

Sucker Punch	2	9.6	7	4.80	3.50
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Dark Pulse		96	-50	1.92	
Night Slash		60	-35	1.71	
Play Rough		*90*	*-60*	*1.50*	

100 CG 1 Gen V Unova

15/15/15·50 (872)
Purrloin → Liepard (222)

Shadow Purrloin — 117.6 60.8333 121 99.81 95.30

#0510 Liepard — 187 106 162 151.67 147.53

Snarl	3	6	13	2.00	4.33
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Dark Pulse		96	-50	1.92	
Play Rough		*90*	*-60*	*1.50*	
Gunk Shot		*130*	*-75*	*1.73*	
Payback		132	-60	2.20	

300 CG 1 Gen V Unova

15/15/15·50 (2087)
0/15/14·31.5 (1497)
Purrloin (222) → **Liepard**

Shadow Liepard — 224.4 88.3333 162 158.24 147.53

#0570 Zorua — 153 78 120 117.00 112.72

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Feint Attack	2	7.2	6	3.60	3.00
Dark Pulse		96	-50	1.92	
Aerial Ace		*60*	*-45*	*1.33*	
Night Shade		*80*	*-45*	*1.78*	*12.5%A↑2*
Foul Play		72	-40	1.80	

100 CG 3 Gen V Unova

15/15/15·50 (1329)
Zorua → Zoroark (222)

#0571 Zoroark — 250 127 155 177.33 170.10

Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Snarl	3	6	13	2.00	4.33
Flamethrower		*90*	*-55*	*1.64*	
Sludge Bomb		*80*	*-50*	*1.60*	
Night Shade		*80*	*-45*	*1.78*	*12.5%A↑2*
Foul Play		72	-40	1.80	

300 CG 3 Gen V Unova

1/15/15·42 (2497)
1/15/15·21.5 (1496)
Zorua (222) → **Zoroark**

#0827 Nickit — 85 82 120 95.67 94.22

Sucker Punch	2	9.6	7	4.80	3.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Snarl	3	6	13	2.00	4.33
Night Slash		60	-35	1.71	
Play Rough		*90*	*-60*	*1.50*	

100 CG 1 Gen VIII Galar

15/15/15·50 (808)
Nickit → Thievul (223)

#0828 Thievul — 172 164 172 169.33 169.29

Sucker Punch	2	9.6	7	4.80	3.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Snarl	3	6	13	2.00	4.33
Night Slash		60	-35	1.71	
Play Rough		*90*	*-60*	*1.50*	

300 CG 1 Gen VIII Galar

15/15/15·50 (2415)
0/15/11·27 (1499)
Nickit (223) → **Thievul**

#0633 Deino — 116 93 141 116.67 115.01

Dragon Breath	1	3.6	4	3.60	4.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Dragon Pulse		108	-55	1.96	
Body Slam		*55*	*-35*	*1.57*	
Crunch		84	-45	1.87	20%OD↓

100 CG 3 Gen V Unova

15/15/15·50 (1200)
Deino → Zweilous (223) → Hydreigon (224)

#0634 Zweilous — 159 135 176 156.67 155.75

Bite	1	4.8	2	4.80	2.00
Dragon Breath	1	3.6	4	3.60	4.00
Dark Pulse		96	-50	1.92	
Dragon Pulse		108	-55	1.96	
Body Slam		*55*	*-35*	*1.57*	

300 CG 3 Gen V Unova

15/15/15·50 (2079)
0/15/15·32.5 (1500)
Deino (223) → **Zweilous** → Hydreigon (224)

#0635 Hydreigon — 256 188 211 218.33 216.55

Bite	1	4.8	2	4.80	2.00
Dragon Breath	1	3.6	4	3.60	4.00
Dark Pulse		96	-50	1.92	
Flash Cannon		*110*	*-70*	*1.57*	
Dragon Pulse		108	-55	1.96	
Brutal Swing		**66**	**-35**	**1.89**	

0/15/15·25.5 (2495)
0/15/10·15.5 (1499)

500 CG 3 Gen V Unova

Deino (223) → Zweilous (223) → **Hydreigon**

#0799 Guzzlord — 188 99 440 242.33 201.57

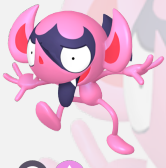
Dragon Tail	3	10.8	12	3.60	4.00
Snarl	3	6	13	2.00	4.33
Dragon Claw		96	-50	1.92	
Sludge Bomb		*80*	*-50*	*1.60*	
Crunch		84	-45	1.87	20%OD↓
Brutal Swing		66	-35	1.89	

0/15/14·35.5 (2499)
1/15/15·19.5 (1497)

100 CG 4 Gen VII Alola Ultra Beast

No evolution

#0859 Impidimp — 103 69 128 100.00 96.89



Bite	1	4.8	2	4.80	2.00
Sucker Punch	2	9.6	7	4.80	3.50
Dark Pulse		96	-50	1.92	
Play Rough		108	-60	1.80	
Foul Play		72	-40	1.80	

15/15/15·50 (913)

100 CG 3 Gen VIII Galar

Impidimp → Morgrem (224) → Grimmsnarl (225)

#0860 Morgrem — 145 102 163 136.67 134.09

Bite	1	4.8	2	4.80	2.00
Sucker Punch	2	9.6	7	4.80	3.50
Dark Pulse		96	-50	1.92	
Play Rough		108	-60	1.80	
Foul Play		72	-40	1.80	

15/15/15·50 (1630)
3/15/15·49.5 (1499)

300 CG 3 Gen VIII Galar

Impidimp (224) → **Morgrem** → Grimmsnarl (225)

#0861 Grimmsnarl — 237 139 216 197.33 192.34

Bite	1	4.8	2	4.80	2.00
Sucker Punch	2	9.6	7	4.80	3.50
Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Dark Pulse		96	-50	1.92	
Play Rough		108	-60	1.80	
Foul Play		72	-40	1.80	
Power-Up Punch		*20*	*-35*	*0.57*	*A↑*

500 CG 3 Gen VIII Galar

0/14/14·33 (2499)
0/12/15·19 (1500)
Impidimp (224) → Morgrem (224) → **Grimmsnarl**

#0559 Scraggy — 132 132 137 133.67 133.65

Feint Attack	2	7.2	6	3.60	3.00
Rock Smash	3	10.8	7	3.60	2.33
Thunder Punch		*60*	*-40*	*1.50*	
Brick Break		48	-40	1.20	OD↓
Foul Play		72	-40	1.80	
Acid Spray		*20*	*-45*	*0.44*	*OD↓2*
Upper Hand		84	-40	2.10	30%OD↓

100 CG 2 Gen V Unova

15/15/15·50 (1551)
11/15/15·49.5 (1500)
Scraggy → Scrafty (225)

#0560 Scrafty — 163 222 163 182.67 180.68

Counter	2	9.6	6	4.80	3.00
Snarl	3	6	13	2.00	4.33
Thunder Punch		*60*	*-40*	*1.50*	
Foul Play		72	-40	1.80	
Acid Spray		*20*	*-45*	*0.44*	*OD↓2*
Power-Up Punch		24	-35	0.69	A↑
Upper Hand		84	-40	2.10	30%OD↓

300 CG 2 Gen V Unova

9/15/15·50 (2494)
0/8/15·25.5 (1500)
Scraggy (225) → **Scrafty**

#0228 Houndour — 152 83 128 121.00 117.32

Ember	2	4.8	9	2.40	4.50
Feint Attack	2	7.2	6	3.60	3.00
Dark Pulse		96	-50	1.92	
Flamethrower		108	-55	1.96	
Crunch		84	-45	1.87	20%OD↓

100 CG 2 Gen II Johto

15/15/15·50 (1395)
Houndour → Houndoom (226)

Shadow Houndour 182.4 69.1667 128 126.52 117.32

#0229 Houndoom — 224 144 181 183.00 180.07

Fire Fang	2	9.6	6	4.80	3.00
Snarl	3	6	13	2.00	4.33
Flamethrower		108	-55	1.96	
Fire Blast		168	-80	2.10	
Crunch		84	-45	1.87	20%OD↓
Foul Play		72	-40	1.80	

0/15/14·41 (2494)
0/13/13·21.5 (1499)

300 CG 2 Gen II Johto

Houndour (225) → **Houndoom**

Shadow Houndoom 268.8 120 181 189.93 180.07

#0146 Galarian Moltres — 202 231 207 213.33 212.97

Sucker Punch	2	9.6	7	4.80	3.50
Wing Attack	2	6	7	3.00	3.50
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Brave Bird		156	-55	2.84	D↓3
Payback		132	-60	2.20	
Fly		96	-45	2.13	

1/15/15·29.5 (2497)
0/13/12·18 (1499)

100 CG 4 Gen I Kanto Legendary

No evolution

Shadow Galarian Moltres 242.4 192.5 207 213.97 212.97

#0198 Murkrow — 175 87 155 139.00 133.14

Peck	2	7.2	8	3.60	4.00
Feint Attack	2	7.2	6	3.60	3.00
Dark Pulse		96	-50	1.92	
Drill Peck		84	-40	2.10	
Foul Play		72	-40	1.80	

15/15/15·50 (1766) 15/15/14·50 (1761)
0/15/14·43.5 (1499)

100 CG 2 Gen II Johto

Murkrow → Honchkrow (226)

Shadow Murkrow 210 72.5 155 145.83 133.14

#0430 Honchkrow — 243 103 225 190.33 177.91

Peck	2	7.2	8	3.60	4.00
Snarl	3	6	13	2.00	4.33
Dark Pulse		96	-50	1.92	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Brave Bird		156	-55	2.84	D↓3
Sky Attack		90	-50	1.80	

0/15/15·38.5 (2499)
0/15/15·20.5 (1495)

300 CG 2 Gen IV Sinnoh

Murkrow (226) → **Honchkrow**

Shadow Honchkrow 291.6 85.8333 225 200.81 177.91

#0629 Vullaby — 105 139 172 138.67 135.91

Feint Attack	2	7.2	6	3.60	3.00
Air Slash	3	10.8	9	3.60	3.00
Dark Pulse		96	-50	1.92	
Brave Bird		156	-55	2.84	D↓3
Foul Play		72	-40	1.80	

100 CG 3 Gen V Unova

15/15/15·50 (1437)

Vullaby → Mandibuzz (227)

#0630 Mandibuzz — 129 205 242 192.00 185.66

Air Slash	3	10.8	9	3.60	3.00
Snarl	3	6	13	2.00	4.33
Dark Pulse		96	-50	1.92	
Aerial Ace		72	-45	1.60	
Shadow Ball		*100*	*-55*	*1.82*	
Foul Play		72	-40	1.80	

300 CG 3 Gen V Unova

15/15/15·50 (2417) 15/15/14·50 (2413)
0/13/15·27.5 (1498)

Vullaby (227) → **Mandibuzz**

#0717 Yveltal — 250 185 246 227.00 224.91

Sucker Punch	2	9.6	7	4.80	3.50
Snarl	3	6	13	2.00	4.33
Gust	4	19.2	12	4.80	3.00
Hyper Beam		*150*	*-80*	*1.88*	
Dark Pulse		96	-50	1.92	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Hurricane		132	-65	2.03	
Focus Blast		*150*	*-75*	*2.00*	
Oblivion Wing		**102**	**-50**	**2.04**	

100 CG 4 Gen VI Kalos Legendary

0/15/15·24.5 (2497)
0/9/13·15 (1500)

No evolution

#0302 Sableye — 141 136 137 138.00 137.98

Shadow Claw	2	7.2	8	3.60	4.00
Feint Attack	2	7.2	6	3.60	3.00
Drain Punch		*20*	*-40*	*0.50*	*D↑*
Power Gem		*85*	*-50*	*1.70*	
Shadow Sneak		60	-45	1.33	
Dazzling Gleam		*90*	*-55*	*1.64*	
Foul Play		72	-40	1.80	

750 CG 3 Gen III Hoenn

15/15/15·50 (1668)
0/15/15·49.5 (1499)

No evolution

Shadow Sableye — 169.2 113.333 137 139.84 137.98

#0893 Zarude — 242 215 233 230.00 229.72

Bite	1	4.8	2	4.80	2.00
Vine Whip	2	6	8	3.00	4.00
Dark Pulse		96	-50	1.92	
Power Whip		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

100 CG 4 Gen VIII Galar Mythical

0/11/14·24.5 (2499)
0/15/15·14.5 (1495)
No evolution

#0215 Sneasel — 189 146 146 160.33 159.12

Ice Shard	3	10.8	10	3.60	3.33
Feint Attack	2	7.2	6	3.60	3.00
Ice Punch		72	-40	1.80	
Avalanche		108	-45	2.40	
Foul Play		72	-40	1.80	
Triple Axel		72	-45	1.60	A↑

100 CG 2 Gen II Johto

15/15/15·50 (2319)
1/15/14·27.5 (1496)
Sneasel → Weavile (228)

Shadow Sneasel — 226.8 121.667 146 164.82 159.12

#0461 Weavile — 243 171 172 195.33 192.62

Ice Shard	3	10.8	10	3.60	3.33
Feint Attack	2	7.2	6	3.60	3.00
Snarl	3	6	13	2.00	4.33
Focus Blast		*150*	*-75*	*2.00*	
Avalanche		108	-45	2.40	
Foul Play		72	-40	1.80	
Triple Axel		72	-45	1.60	A↑

300 CG 2 Gen IV Sinnoh

0/14/15·32 (2500)
0/15/15·18.5 (1496)
Sneasel (228) → **Weavile**

Shadow Weavile — 291.6 142.5 172 202.03 192.62

#0019 Alolan Rattata — 103 70 102 91.67 90.26

Quick Attack	2	6	8	3.00	4.00
Tackle	1	3.6	3	3.60	3.00
Shadow Ball		*100*	*-55*	*1.82*	
Hyper Fang		96	-50	1.92	
Crunch		84	-45	1.87	20%OD↓

100 CG 1 Gen I Kanto

15/15/15·50 (830)
Alolan Rattata → Alolan Raticate (229)

Shadow Alolan Rattata — 123.6 58.3333 102 94.64 90.26

#0020 Alolan Raticate ✧ 135 154 181 156.67 155.54

Bite	1	4.8	2	4.80	2.00
Quick Attack	2	6	8	3.00	4.00
Hyper Beam		180	-80	2.25	
Hyper Fang		96	-50	1.92	
Crunch		84	-45	1.87	20%OD↓

300 CG 1 Gen I Kanto

15/15/15·50 (1927)
0/13/14·39 (1499)
Alolan Rattata (228) → **Alolan Raticate**

Shadow Alolan Raticate 162 128.333 181 157.11 155.54

#0263 Galarian Zigzagoon ✧ 58 80 116 84.67 81.34

Tackle	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Dig		*70*	*-50*	*1.40*	
Swift		66	-35	1.89	
Body Slam		66	-35	1.89	

100 CG 1 Gen III Hoenn

15/15/15·50 (575)
Galarian Zigzagoon
→ Galarian Linoone (229) → Obstagoon (230)

Shadow Galarian Zigzagoon 69.6 66.6667 116 84.09 81.34

#0264 Galarian Linoone ✧ 142 128 186 152.00 150.08

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Snarl	3	6	13	2.00	4.33
Dig		*70*	*-50*	*1.40*	
Gunk Shot		*130*	*-75*	*1.73*	
Body Slam		66	-35	1.89	

300 CG 1 Gen III Hoenn

15/15/15·50 (1879) 15/15/14·50 (1874)
0/15/14·40 (1499)
Galarian Zigzagoon (229) →
Galarian Linoone → Obstagoon (230)

Shadow Galarian Linoone 170.4 106.667 186 154.36 150.08

#0862 Obstagoon — 180 194 212 195.33 194.90

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Hyper Beam		180	-80	2.25	
Cross Chop		*55*	*-35*	*1.57*	
Night Slash		60	-35	1.71	
Gunk Shot		*130*	*-75*	*1.73*	
Obstruct		**18**	**-40**	**0.45**	**D↑OD↓**

500 CG 1 Gen VIII Galar

0/15/13·42 (2500)
0/14/15·21.5 (1500)
Galarian Zigzagoon (229) →
Galarian Linoone (229) → **Obstagoon**

Shadow Obstagoon 216 161.667 212 196.56 194.90

#0211 Hisuian Qwilfish — 184 151 163 166.00 165.45

Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Dark Pulse		96	-50	1.92	
Ice Beam		*90*	*-55*	*1.64*	
Aqua Tail		*55*	*-35*	*1.57*	
Shadow Ball		*100*	*-55*	*1.82*	
Sludge Bomb		96	-50	1.92	

100 CG 2 Gen II Johto

15/15/15·50 (2415)
0/15/15·26.5 (1495)
Hisuian Qwilfish → Overqwil (230)

#0904 Overqwil — 222 171 198 197.00 195.89

Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Dark Pulse		96	-50	1.92	
Ice Beam		*90*	*-55*	*1.64*	
Aqua Tail		*55*	*-35*	*1.57*	
Shadow Ball		*100*	*-55*	*1.82*	
Sludge Bomb		96	-50	1.92	

300 CG 3 Gen VIII Hisui

0/14/15·33.5 (2496)
0/15/15·19 (1498)
Hisuian Qwilfish (230) → **Overqwil**

#0686 Inkay — 98 95 142 111.67 109.75

Peck	*2*	*6*	*8*	*3.00*	*4.00*
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Psywave	1	3.6	4	3.60	4.00
Psybeam		84	-60	1.40	
Night Slash		60	-35	1.71	

100 CG 2 Gen VI Kalos

15/15/15·50 (1048) 15/15/14·50 (1045)
Inkay → Malamar (231)

Shadow Inkay 117.6 79.1667 142 112.92 109.75

#0687 Malamar — 177 165 200 180.67 180.09

Peck	*2*	*6*	*8*	*3.00*	*4.00*
Psycho Cut	2	3.6	9	1.80	4.50
Psywave	1	3.6	4	3.60	4.00
Hyper Beam		*150*	*-80*	*1.88*	
Psybeam		84	-60	1.40	
Foul Play		72	-40	1.80	
Superpower		*85*	*-40*	*2.12*	*A+D↓*

300 CG 2 Gen VI Kalos

3/15/15·50 (2500)
0/15/9·24.5 (1500)
Inkay (230) → **Malamar**

Shadow Malamar — 212.4 137.5 200 183.30 180.09

#0624 Pawniard — 154 114 128 132.00 130.98

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Night Slash		60	-35	1.71	
Iron Head		84	-50	1.68	
X-Scissor		*65*	*-40*	*1.62*	

100 CG 3 Gen V Unova

15/15/15·50 (1620)
2/15/15·50 (1496)
Pawniard → Bisharp (231) → Kingambit (231)

#0625 Bisharp — 232 176 163 190.33 188.10

Metal Claw	2	6	7	3.00	3.50
Snarl	3	6	13	2.00	4.33
Dark Pulse		96	-50	1.92	
Iron Head		84	-50	1.68	
X-Scissor		*65*	*-40*	*1.62*	
Focus Blast		*150*	*-75*	*2.00*	

300 CG 3 Gen V Unova

0/15/15·35.5 (2500)
1/15/15·19.5 (1494)
Pawniard (231) → **Bisharp** → Kingambit (231)

#0983 Kingambit — 238 203 225 222.00 221.52

Metal Claw	2	6	7	3.00	3.50
Snarl	3	6	13	2.00	4.33
Metal Sound	2	6	8	3.00	4.00
Dark Pulse		96	-50	1.92	
Iron Head		84	-50	1.68	
X-Scissor		*65*	*-40*	*1.62*	
Focus Blast		*150*	*-75*	*2.00*	
Foul Play		72	-40	1.80	

500 CG 3 Gen IX Paldea

0/15/10·26 (2499)
0/15/13·15.5 (1499)
Pawniard (231) → Bisharp (231) → **Kingambit**

#0147 Dratini — 119 91 121 110.33 109.43

Dragon Breath	1	3.6	4	3.60	4.00
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Wrap		*60*	*-45*	*1.33*	*D↑*
Aqua Tail		*55*	*-35*	*1.57*	
Twister		54	-45	1.20	

100 CG 3 Gen I Kanto

15/15/15·50 (1136)

Dratini → Dragonair (232) → Dragonite (236)

Shadow Dratini 142.8 75.8333 121 113.21 109.43

#0148 Dragonair — 163 135 156 151.33 150.85

Dragon Breath	1	3.6	4	3.60	4.00
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Wrap		*60*	*-45*	*1.33*	*D↑*
Aqua Tail		*55*	*-35*	*1.57*	
Dragon Pulse		108	-55	1.96	
Body Slam		*55*	*-35*	*1.57*	

300 CG 3 Gen I Kanto

15/15/15·50 (2012)
1/15/15·34 (1499)

Dratini (232) → **Dragonair** → Dragonite (236)

Shadow Dragonair 195.6 112.5 156 154.70 150.85

#0371 Bagon — 134 93 128 118.33 116.84

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Ember	*2*	*4*	*9*	*2.00*	*4.50*
Flamethrower		*90*	*-55*	*1.64*	
Twister		54	-45	1.20	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

100 CG 3 Gen III Hoenn

15/15/15·50 (1307)

Bagon → Shelgon (232) → Salamence (237)

Shadow Bagon 160.8 77.5 128 122.10 116.84

#0372 Shelgon — 172 155 163 163.33 163.19

Dragon Breath	1	3.6	4	3.60	4.00
Ember	*2*	*4*	*9*	*2.00*	*4.50*
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Flamethrower		*90*	*-55*	*1.64*	
Twister		54	-45	1.20	
Dragon Pulse		108	-55	1.96	

300 CG 3 Gen III Hoenn

15/15/15·50 (2296)
1/15/14·28 (1499)

Bagon (232) → **Shelgon** → Salamence (237)

Shadow Shelgon 206.4 129.167 163 166.19 163.19

#0610 Axew

154 101 130 128.33 126.45

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Aqua Tail		*55*	*-35*	*1.57*	
Dragon Pulse		108	-55	1.96	
Dragon Claw		96	-50	1.92	

100 CG 3 Gen V Unova

15/15/15·50 (1547) 15/15/14·50 (1542)
10/15/14·50 (1496)
Axew → Fraxure (233) → Haxorus (233)

#0611 Fraxure

212 123 165 166.67 162.65

Dragon Tail	3	10.8	12	3.60	4.00
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Night Slash		*50*	*-35*	*1.43*	
Aqua Tail		*55*	*-35*	*1.57*	
Dragon Claw		96	-50	1.92	

300 CG 3 Gen V Unova

12/15/15·50 (2492)
1/15/15·25 (1497)
Axew (233) → **Fraxure** → Haxorus (233)

#0612 Haxorus

284 172 183 213.00 207.54

Counter	*2*	*8*	*6*	*4.00*	*3.00*
Dragon Tail	3	10.8	12	3.60	4.00
Earthquake		*110*	*-65*	*1.69*	
Night Slash		*50*	*-35*	*1.43*	
Dragon Claw		96	-50	1.92	
Surf		*75*	*-45*	*1.67*	
Breaking Swipe		**60**	**-50**	**1.20**	OA↓

500 CG 3 Gen V Unova

1/15/15·25.5 (2495)
0/14/13·15.5 (1499)
Axew (233) → Fraxure (233) → **Haxorus**

#0621 Druddigon

213 170 184 189.00 188.17

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Dragon Tail	3	10.8	12	3.60	4.00
Rock Tomb		*80*	*-50*	*1.60*	OA↓
Hyper Beam		*150*	*-80*	*1.88*	
Night Slash		*50*	*-35*	*1.43*	
Dragon Claw		96	-50	1.92	

100 CG 3 Gen V Unova

0/15/15·38.5 (2497)
0/15/15·20.5 (1495)
No evolution

#0704 Goomy — 101 112 128 113.67 113.13

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Water Gun	*1*	*3*	*3*	*3.00*	*3.00*
Dragon Pulse		108	-55	1.96	
Sludge Wave		*110*	*-65*	*1.69*	
Muddy Water		*35*	*-35*	*1.00*	*30%OA↓*

15/15/15·50 (1103)

100 CG 3 Gen VI Kalos

Goomy → Sliggoo (234) → Goodra (234)

#0705 Sliggoo — 159 176 169 168.00 167.85

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Water Gun	*1*	*3*	*3*	*3.00*	*3.00*
Dragon Pulse		108	-55	1.96	
Sludge Wave		*110*	*-65*	*1.69*	
Water Pulse		*80*	*-50*	*1.60*	
Muddy Water		*35*	*-35*	*1.00*	*30%OA↓*

15/15/15·50 (2303)
1/15/15·28 (1498)

300 CG 3 Gen VI Kalos

Goomy (234) → **Sliggoo** → Goodra (234)

#0706 Goodra — 220 242 207 223.00 222.54

Dragon Breath	1	3.6	4	3.60	4.00
Water Gun	*1*	*3*	*3*	*3.00*	*3.00*
Aqua Tail		*55*	*-35*	*1.57*	
Thunder Punch		***60***	***-40***	***1.50***	
Sludge Wave		*110*	*-65*	*1.69*	
Power Whip		*90*	*-50*	*1.80*	
Draco Meteor		180	-65	2.77	A↓2
Muddy Water		*35*	*-35*	*1.00*	*30%OA↓*

0/12/12·27 (2500)
1/14/14·16 (1500)

500 CG 3 Gen VI Kalos

Goomy (234) → Sliggoo (234) → **Goodra**

#0782 Jangmo-o — 102 108 128 112.67 112.14

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Dragon Tail	3	10.8	12	3.60	4.00
Dragon Pulse		108	-55	1.96	
Dragon Claw		96	-50	1.92	
Brick Break		*40*	*-40*	*1.00*	*OD↓*

15/15/15·50 (1095)

100 CG 3 Gen VII Alola

Jangmo-o → Hakamo-o (235) → Kommo-o (235)

#0895 Regidrago — 202 101 400 234.33 201.33

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Dragon Breath	1	3.6	4	3.60	4.00
Hyper Beam		*150*	*-80*	*1.88*	
Dragon Pulse		108	-55	1.96	
Dragon Energy		120	-45	2.67	
Outrage		132	-60	2.20	
Breaking Swipe		60	-50	1.20	OA↓

0/14/15·33.5 (2500)
0/15/14·19 (1500)
No evolution

100 CG 4 Gen VIII Galar Legendary

#0644 Zekrom — 275 211 205 230.33 228.27

Dragon Breath	1	3.6	4	3.60	4.00
Charge Beam	3	6	11	2.00	3.67
Flash Cannon		*110*	*-70*	*1.57*	
Wild Charge		120	-45	2.67	D↓2
Outrage		132	-60	2.20	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Fusion Bolt		**108**	**-45**	**2.40**	

0/15/12·23 (2499)
0/13/8·14 (1500)
No evolution

100 CG 4 Gen V Unova Legendary

#0783 Hakamo-o — 145 162 146 151.00 150.80

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Dragon Tail	3	10.8	12	3.60	4.00
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Dragon Pulse		108	-55	1.96	
Dragon Claw		96	-50	1.92	
Brick Break		48	-40	1.20	OD↓

15/15/15·50 (1907)
0/13/15·39 (1498)
Jangmo-o (234) → **Hakamo-o** → Kommo-o (235)

300 CG 3 Gen VII Alola

#0784 Kommo-o — 222 240 181 214.33 212.85

Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Metal Sound	*2*	*5*	*8*	*2.50*	*4.00*
Dragon Tail	3	10.8	12	3.60	4.00
Boomburst		*150*	*-70*	*2.14*	
Close Combat		120	-45	2.67	D↓2
Brick Break		48	-40	1.20	OD↓
Upper Hand		84	-40	2.10	30%OD↓
Flamethrower		*90*	*-55*	*1.64*	
Dragon Claw		96	-50	1.92	
Clanging Scales		**144**	**-45**	**3.20**	**D↓**

0/11/14·28.5 (2497)
0/14/14·17 (1498)
Jangmo-o (234) → Hakamo-o (235) → **Kommo-o**

500 CG 3 Gen VII Alola

#0643 Reshiram — 275 211 205 230.33 228.27

Dragon Breath	1	3.6	4	3.60	4.00
Fire Fang	2	9.6	6	4.80	3.00
Stone Edge		*100*	*-55*	*1.82*	
Overheat		156	-55	2.84	A↓2
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Draco Meteor		180	-65	2.77	A↓2
Fusion Flare		**108**	**-45**	**2.40**	

0/15/12·23 (2499)
0/13/8·14 (1500)
No evolution

100 CG 4 Gen V Unova Legendary

#0149 Dragonite — 263 198 209 223.33 221.61

Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Dragon Tail	3	10.8	12	3.60	4.00
Dragon Breath	1	3.6	4	3.60	4.00
Hyper Beam		*150*	*-80*	*1.88*	
Superpower		*85*	*-40*	*2.12*	*A+D↓*
Hurricane		132	-65	2.03	
Thunder Punch		*60*	*-40*	*1.50*	
Outrage		132	-60	2.20	
Dragon Claw		96	-50	1.92	
Draco Meteor		**180**	**-65**	**2.77**	**A↓2**
Dragon Pulse		**108**	**-55**	**1.96**	

0/13/15·24.5 (2499)
3/15/14·14.5 (1500)
Dratini (232) → Dragonair (232) → **Dragonite**

500 CG 3 Gen I Kanto

Shadow Dragonite — 315.6 165 209 229.87 221.61

#0334 Altaria — 141 201 181 174.33 172.46

Dragon Breath	1	3.6	4	3.60	4.00
Peck	2	7.2	8	3.60	4.00
Flamethrower		*90*	*-55*	*1.64*	
Dragon Pulse		108	-55	1.96	
Dazzling Gleam		*90*	*-55*	*1.64*	
Moonblast		***110***	***-60***	***1.83***	***10%OA↓***
Sky Attack		90	-50	1.80	

15/15/15·50 (2266)
0/14/15·29 (1497)
Swablu (373) → **Altaria**

300 CG 1 Gen III Hoenn

#0373 Salamence ✧ — 277 168 216 220.33 215.81

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Fire Fang	*2*	*8*	*6*	*4.00*	*3.00*
Dragon Tail	3	10.8	12	3.60	4.00
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Fire Blast		*140*	*-80*	*1.75*	
Brutal Swing		*55*	*-35*	*1.57*	
Hydro Pump		*130*	*-75*	*1.73*	
Outrage		**132**	**-60**	**2.20**	
Draco Meteor		180	-65	2.77	A↓2
Fly		96	-45	2.13	

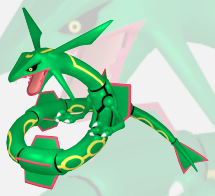
1/15/15·24.5 (2499) 1/15/14·24.5 (2493)
0/10/14·15 (1500)

500 CG 3 Gen III Hoenn

Bagon (232) → Shelgon (232) → **Salamence**

Shadow Salamence — 332.4 140 216 229.47 215.81

#0384 Rayquaza ✧ — 284 170 213 222.33 217.46



Dragon Tail	3	10.8	12	3.60	4.00
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Hurricane		**132**	**-65**	**2.03**	
Outrage		132	-60	2.20	
Breaking Swipe		**60**	**-50**	**1.20**	**OA↓**
Dragon Ascent		**180**	**-70**	**2.57**	**D↓**

0/15/15·24 (2498)
0/15/12·14.5 (1499)

100 CG 4 Gen III Hoenn Legendary

No evolution

#0885 Dreepy — 117 61 99 92.33 89.07

Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Astonish	3	14.4	10	4.80	3.33
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (867)

100 CG 3 Gen VIII Galar

Dreepy → Drakloak (237) → Dragapult (238)

#0886 Drakloak — 163 105 169 145.67 142.48

Dragon Tail	3	10.8	12	3.60	4.00
Astonish	3	14.4	10	4.80	3.33
Shadow Ball		120	-55	2.18	
Dragon Pulse		108	-55	1.96	
Outrage		132	-60	2.20	

15/15/15·50 (1867)
0/15/12·40 (1500)

300 CG 3 Gen VIII Galar

Dreepy (237) → **Drakloak** → Dragapult (238)

#0887 Dragapult — 266 170 204 213.33 209.73

Dragon Tail	3	10.8	12	3.60	4.00
Astonish	3	14.4	10	4.80	3.33
Shadow Ball		120	-55	2.18	
Dragon Pulse		108	-55	1.96	
Outrage		132	-60	2.20	
Breaking Swipe		60	-50	1.20	OA↓

1/15/15·26 (2493)
3/15/15·15.5 (1497)

500 CG 3 Gen VIII Galar

Dreepy (237) → Drakloak (237) → **Dragapult**

#0443 Gible — 124 84 151 119.67 116.29

Mud Shot	2	4.8	8	2.40	4.00
Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Dig		84	-50	1.68	
Twister		54	-45	1.20	
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (1258)

100 CG 3 Gen IV Sinnoh

Gible → Gabite (238) → Garchomp (238)

Shadow Gible — 148.8 70 151 123.27 116.29

#0444 Gabite — 172 125 169 155.33 153.74

Mud Shot	2	4.8	8	2.40	4.00
Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Flamethrower		*90*	*-55*	*1.64*	
Dig		84	-50	1.68	
Twister		54	-45	1.20	

15/15/15·50 (2119)
0/15/14·31 (1498)

300 CG 3 Gen IV Sinnoh

Gible (238) → **Gabite** → Garchomp (238)

Shadow Gabite — 206.4 104.167 169 159.86 153.74

#0445 Garchomp — 261 193 239 231.00 229.19

Mud Shot	2	4.8	8	2.40	4.00
Dragon Tail	3	10.8	12	3.60	4.00
Earthquake		132	-65	2.03	
Breaking Swipe		60	-50	1.20	OA↓
Fire Blast		*140*	*-80*	*1.75*	
Sand Tomb		30	-40	0.75	OD↓
Outrage		132	-60	2.20	
Earth Power		**108**	**-55**	**1.96**	**10%OD↓**

0/14/13·23.5 (2499)
0/15/15·14 (1498) 0/15/14·14 (1495)

500 CG 3 Gen IV Sinnoh

Gible (238) → Gabite (238) → **Garchomp**

Shadow Garchomp — 313.2 160.833 239 237.68 229.19

#0718 Zygarde 10% — 205 173 144 174.00 172.21

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Dragon Tail	3	10.8	12	3.60	4.00
Hyper Beam		*150*	*-80*	*1.88*	
Earthquake		132	-65	2.03	
Bulldoze		54	-45	1.20	50%OD↓
Outrage		132	-60	2.20	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

1/15/15·49.5 (2499)
0/14/12·24 (1499)

100 CG 4 Gen VI Kalos Legendary **Zygarde 10%** → Zygarde 50% (239) → Zygarde Complete (239)

#0718 Zygarde 50% — 203 232 239 224.67 224.11

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Dragon Tail	3	10.8	12	3.60	4.00
Hyper Beam		*150*	*-80*	*1.88*	
Earthquake		132	-65	2.03	
Bulldoze		54	-45	1.20	50%OD↓
Outrage		132	-60	2.20	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

1/14/14·27.5 (2497)
1/14/14·16.5 (1498)

300 CG 4 Gen VI Kalos Legendary Zygarde 10% (239) → **Zygarde 50%** → Zygarde Complete (239)

#0718 Zygarde Complete — 184 207 389 260.00 245.61

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Dragon Tail	3	10.8	12	3.60	4.00
Hyper Beam		*150*	*-80*	*1.88*	
Earthquake		132	-65	2.03	
Bulldoze		54	-45	1.20	50%OD↓
Outrage		132	-60	2.20	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

0/15/12·25.5 (2498)
3/15/15·15 (1499)

500 CG 4 Gen VI Kalos Legendary Zygarde 10% (239) → Zygarde 50% (239) → **Zygarde Complete**

#0646 Kyurem ✧ — 246 170 245 220.33 217.20

Dragon Breath	1	3.6	4	3.60	4.00
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Blizzard		168	-75	2.24	
Dragon Claw		96	-50	1.92	
Draco Meteor		180	-65	2.77	A↓2
Glaciate		**72**	**-40**	**1.80**	**OA↓**

0/14/15·26 (2496)
1/15/15·15.5 (1498) 1/15/14·15.5 (1495)

100 CG 4 Gen V Unova Legendary **Kyurem** → White Kyurem (240)

#0646 White Kyurem — 310 183 245 246.00 240.43

Dragon Breath	1	3.6	4	3.60	4.00
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Ice Fang	2	9.6	6	4.80	3.00
Blizzard		168	-75	2.24	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Dragon Pulse		108	-55	1.96	
Focus Blast		*150*	*-75*	*2.00*	
Fusion Flare		*90*	*-45*	*2.00*	
Ice Burn		144	-60	2.40	30%OD↓

0/15/13·20 (2500)
0/15/13·12 (1500)

300 CG 4 Gen V Unova Legendary

Kyurem (239) → **White Kyurem**

#0646 Black Kyurem — 310 183 245 246.00 240.43

Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Dragon Tail	3	10.8	12	3.60	4.00
Stone Edge		*100*	*-55*	*1.82*	
Blizzard		168	-75	2.24	
Iron Head		*70*	*-50*	*1.40*	
Outrage		132	-60	2.20	
Fusion Bolt		*90*	*-45*	*2.00*	
Freeze Shock		144	-60	2.40	30%OA↓

0/15/13·20 (2500)
0/15/13·12 (1500)

300 CG 4 Gen V Unova Legendary

Kyurem (239) → **Black Kyurem**

#0996 Frigibax — 134 86 163 127.67 123.39

Dragon Breath	1	3.6	4	3.60	4.00
Ice Fang	2	9.6	6	4.80	3.00
Dragon Claw		96	-50	1.92	
Icy Wind		72	-45	1.60	OA↓
Avalanche		108	-45	2.40	
Outrage		132	-60	2.20	

15/15/15·50 (1410)

100 CG 3 Gen IX Paldea

Frigibax → Arctibax (240) → Baxcalibur (241)

#0997 Arctibax — 173 128 207 169.33 166.11

Dragon Breath	1	3.6	4	3.60	4.00
Ice Fang	2	9.6	6	4.80	3.00
Dragon Claw		96	-50	1.92	
Icy Wind		72	-45	1.60	OA↓
Avalanche		108	-45	2.40	
Outrage		132	-60	2.20	

15/15/15·50 (2365)
0/14/13·27.5 (1500)

300 CG 3 Gen IX Paldea

Frigibax (240) → **Arctibax** → Baxcalibur (241)

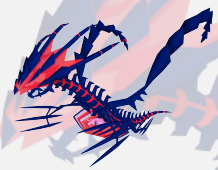
#0998 Baxcalibur — 254 168 229 217.00 213.79

Dragon Breath	1	3.6	4	3.60	4.00
Ice Fang	2	9.6	6	4.80	3.00
Blizzard		168	-75	2.24	
Dragon Claw		96	-50	1.92	
Icy Wind		72	-45	1.60	OA↓
Avalanche		108	-45	2.40	
Outrage		132	-60	2.20	

500 CG 3 Gen IX Paldea

1/15/15·26 (2500)
0/15/5·16 (1500)
Frigibax (240) → Arctibax (240) → **Baxcalibur**

#0890 Eternatus — 278 192 268 246.00 242.75



Dragon Tail	3	10.8	12	3.60	4.00
Poison Jab	2	8.4	7	4.20	3.50
Sludge Bomb		96	-50	1.92	
Dragon Pulse		108	-55	1.96	
Flamethrower		*90*	*-55*	*1.64*	
Dynamax Cannon		**96**	**-45**	**2.13**	

100 CG 4 Gen VIII Galar Legendary

0/13/13·21 (2500)
0/15/14·12.5 (1498)
No evolution

#0380 Latias — 228 246 190 221.33 220.06

Dragon Breath	1	3.6	4	3.60	4.00
Zen Headbutt	3	9.6	6	3.20	2.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Aura Sphere		*80*	*-40*	*2.00*	
Thunder		*100*	*-60*	*1.67*	
Psychic		90	-55	1.64	10%OD↓
Outrage		132	-60	2.20	
Mist Ball		**144**	**-60**	**2.40**	**50%OA↓**

100 CG 4 Gen III Hoenn Legendary

1/15/14·26.5 (2498)
0/14/14·16 (1499)
No evolution

Shadow Latias 273.6 205 190 222.87 220.06

#0381 Latios — 268 212 190 223.33 221.01

Dragon Breath	1	3.6	4	3.60	4.00
Zen Headbutt	3	9.6	6	3.20	2.00
Dragon Claw		96	-50	1.92	
Aura Sphere		*80*	*-40*	*2.00*	
Psychic		90	-55	1.64	10%OD↓
Solar Beam		*150*	*-80*	*1.88*	
Luster Purge		**144**	**-60**	**2.40**	**50%OD↓**

100 CG 4 Gen III Hoenn Legendary

2/15/15·24 (2494)
0/15/15·14.5 (1496)
No evolution

Shadow Latios 321.6 176.667 190 229.42 221.01

#0884 Duraludon — 239 185 172 198.67 196.65

Dragon Tail	3	10.8	12	3.60	4.00
Metal Claw	2	6	7	3.00	3.50
Flash Cannon		132	-70	1.89	
Dragon Claw		96	-50	1.92	
Hyper Beam		*150*	*-80*	*1.88*	

0/15/15·30.5 (2495)
3/15/14·18 (1499)
No evolution

100 CG 3 Gen VIII Galar

#0978 Tatsugiri — 226 166 169 187.00 185.08

Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Water Gun	1	3.6	3	3.60	3.00
Outrage		132	-60	2.20	
Surf		90	-45	2.00	
Hydro Pump		156	-75	2.08	
Muddy Water		42	-35	1.20	30%OA↓

0/13/14·38.5 (2500)
0/15/13·20.5 (1500)
No evolution

100 CG 3 Gen IX Paldea

#0025 Pikachu ✨ — 112 96 111 106.33 106.07

Thunder Shock	2	4.8	9	2.40	4.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Present	**3**	**3**	**12**	**1.00**	**4.00**
Discharge		66	-40	1.65	
Thunder		**120**	**-60**	**2.00**	
Thunderbolt		108	-55	1.96	
Wild Charge		120	-45	2.67	D↓2
Surf		***75***	***-45***	***1.67***	
Volt Tackle		108	-50	2.16	D↓

15/15/15·50 (1060) 15/15/14·50 (1056)
Pichu (244) → **Pikachu** → Raichu (242)

300 CG 1 Gen I Kanto

#0026 Raichu ✨ — 193 151 155 166.33 165.31

Thunder Shock	2	4.8	9	2.40	4.50
Spark	2	6	7	3.00	3.50
Volt Switch	4	16.8	16	4.20	4.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Thunder Punch		72	-40	1.80	
Thunder		**120**	**-60**	**2.00**	
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Wild Charge		120	-45	2.67	D↓2
Surf		*75*	*-45*	*1.67*	
Skull Bash		*130*	*-75*	*1.73*	*D↑*
Trailblaze		*65*	*-45*	*1.44*	*A↑*

15/15/15·50 (2467) 15/15/14·50 (2459)
0/15/14·26 (1499)
Pichu (244) → Pikachu (242) → **Raichu**

500 CG 1 Gen I Kanto

#0100 Voltorb ✧ — 109 111 120 113.33 113.23

Spark	2	6	7	3.00	3.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Discharge		66	-40	1.65	
Thunderbolt		108	-55	1.96	
Signal Beam		***75***	***-55***	***1.36***	***20%OA+D↓***
Gyro Ball		*80*	*-50*	*1.60*	

15/15/15·50 (1141)

100 CG 2 Gen I Kanto

Voltorb → Electrode (243)

Shadow Voltorb — 130.8 92.5 120 114.43 113.23

#0101 Electrode ✧ — 173 173 155 167.00 166.78

Spark	2	6	7	3.00	3.50
Tackle	**1**	**3**	**3**	**3.00**	**3.00**
Volt Switch	4	16.8	16	4.20	4.00
Hyper Beam		*150*	*-80*	*1.88*	
Discharge		66	-40	1.65	
Thunderbolt		108	-55	1.96	
Foul Play		*60*	*-40*	*1.50*	

15/15/15·50 (2373) 15/15/14·50 (2366)
1/15/15·27 (1498)

300 CG 2 Gen I Kanto

Voltorb (243) → **Electrode**

Shadow Electrode — 207.6 144.167 155 168.92 166.78

#0125 Electabuzz ✧ — 198 158 163 173.00 172.12

Thunder Shock	2	4.8	9	2.40	4.50
Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Thunder Punch		72	-40	1.80	
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	

5/15/15·49.5 (2500)
0/14/11·24.5 (1497)

300 CG 3 Gen I Kanto

Elekid (245) → **Electabuzz** → Electivire (247)

Shadow Electabuzz — 237.6 131.667 163 177.42 172.12

#0135 Jolteon ✧ — 232 182 163 192.33 190.22

Thunder Shock	2	4.8	9	2.40	4.50
Volt Switch	4	16.8	16	4.20	4.00
Discharge		66	-40	1.65	
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	
Zap Cannon		**180**	**-80**	**2.25**	**33%OA↓**
Last Resort		***90***	***-55***	***1.64***	

0/15/15·34.5 (2500)
0/12/15·19.5 (1500)

300 CG 3 Gen I Kanto

Eevee (353) → **Jolteon**

#0172 Pichu ✧ — 77 53 85 71.67 70.26

Thunder Shock	2	4.8	9	2.40	4.50
Thunder Punch		72	-40	1.80	
Thunderbolt		108	-55	1.96	
Disarming Voice		*70*	*-45*	*1.56*	

15/15/15·50 (535)

100 CG 1 Gen II Johto Baby

Pichu → Pikachu (242) → Raichu (242)

#0179 Mareep ✧ — 114 79 146 113.00 109.55

Thunder Shock	2	4.8	9	2.40	4.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Discharge		66	-40	1.65	
Thunderbolt		108	-55	1.96	
Body Slam		*55*	*-35*	*1.57*	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

15/15/15·50 (1120)

100 CG 3 Gen II Johto

Mareep → Flaaffy (244) → Ampharos (244)

Shadow Mareep — 136.8 65.8333 146 116.21 109.55

#0180 Flaaffy ✧ — 145 109 172 142.00 139.56

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Charge Beam	3	6	11	2.00	3.67
Discharge		66	-40	1.65	
Power Gem		*85*	*-50*	*1.70*	
Thunderbolt		108	-55	1.96	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

15/15/15·50 (1720)
0/15/14·47 (1499)

300 CG 3 Gen II Johto

Mareep (244) → **Flaaffy** → Ampharos (244)

Shadow Flaaffy — 174 90.8333 172 145.61 139.56

#0181 Ampharos ✧ — 211 169 207 195.67 194.71

Charge Beam	3	6	11	2.00	3.67
Volt Switch	4	16.8	16	4.20	4.00
Power Gem		*85*	*-50*	*1.70*	
Thunder Punch		72	-40	1.80	
Thunder		120	-60	2.00	
Dragon Pulse		***90***	***-55***	***1.64***	
Focus Blast		*150*	*-75*	*2.00*	
Zap Cannon		180	-80	2.25	33%OA↓
Brutal Swing		*55*	*-35*	*1.57*	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

0/13/15·36 (2497)
0/13/11·20 (1499)

500 CG 3 Gen II Johto

Mareep (244) → Flaaffy (244) → **Ampharos**

Shadow Ampharos — 253.2 140.833 207 200.34 194.71

#0239 Elekid ✧ — 135 101 128 121.33 120.40

Thunder Shock	2	4.8	9	2.40	4.50
Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Discharge		66	-40	1.65	
Thunder Punch		72	-40	1.80	
Thunderbolt		**108**	**-55**	**1.96**	
Brick Break		*40*	*-40*	*1.00*	*OD↓*

100 CG 1 Gen II Johto Baby

15/15/15·50 (1364)

Elekid → Electabuzz (243) → Electivire (247)

Shadow Elekid — 162 84.1667 128 124.72 120.40

#0243 Raikou ✧ — 241 195 207 214.33 213.47

Thunder Shock	2	4.8	9	2.40	4.50
Volt Switch	4	16.8	16	4.20	4.00
Aura Sphere		*80*	*-40*	*2.00*	
Shadow Ball		*100*	*-55*	*1.82*	
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	
Wild Charge		120	-45	2.67	D↓2

100 CG 4 Gen II Johto Legendary

1/15/12·27 (2500)
3/15/14·16 (1500)
No evolution

Shadow Raikou — 289.2 162.5 207 219.57 213.47

#0309 Electrike ✧ — 123 78 120 107.00 104.81

Spark	2	6	7	3.00	3.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Discharge		66	-40	1.65	
Thunderbolt		108	-55	1.96	
Swift		*55*	*-35*	*1.57*	

100 CG 2 Gen III Hoenn

15/15/15·50 (1091)

Electrike → Manectric (245)

Shadow Electrike — 147.6 65 120 110.87 104.81

#0310 Manectric ✧ — 215 127 172 171.33 167.46

Charge Beam	3	6	11	2.00	3.67
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Thunder Fang	2	9.6	6	4.80	3.00
Thunder		120	-60	2.00	
Flame Burst		*70*	*-55*	*1.27*	
Wild Charge		120	-45	2.67	D↓2
Overheat		*130*	*-55*	*2.36*	*A↓2*
Psychic Fangs		*40*	*-35*	*1.14*	*OD↓*

300 CG 2 Gen III Hoenn

2/15/15·50 (2496)
0/15/15·24 (1500)

Electrike (245) → **Manectric**

Shadow Manectric — 258 105.833 172 178.61 167.46

#0311 Plusle ✧ — 167 129 155 150.33 149.47

Spark	2	6	7	3.00	3.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Discharge		66	-40	1.65	
Thunderbolt		108	-55	1.96	
Swift		*55*	*-35*	*1.57*	
Grass Knot		*90*	*-50*	*1.80*	

15/15/15·50 (2010) 15/15/14·50 (2004)
0/15/14·34.5 (1499)
No evolution

100 CG 2 Gen III Hoenn

#0312 Minun ✧ — 147 150 155 150.67 150.63

Spark	2	6	7	3.00	3.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Discharge		66	-40	1.65	
Thunderbolt		108	-55	1.96	
Swift		*55*	*-35*	*1.57*	
Grass Knot		*90*	*-50*	*1.80*	

15/15/15·50 (1915) 15/15/14·50 (1910)
0/15/14·38.5 (1500)
No evolution

100 CG 2 Gen III Hoenn

#0403 Shinx ✧ — 117 64 128 103.00 98.60

Spark	2	6	7	3.00	3.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Discharge		66	-40	1.65	
Thunderbolt		108	-55	1.96	
Swift		*55*	*-35*	*1.57*	

15/15/15·50 (990)
Shinx → Luxio (246) → Luxray (247)

100 CG 3 Gen IV Sinnoh

Shadow Shinx — 140.4 53.3333 128 107.24 98.60

#0404 Luxio ✧ — 159 95 155 136.33 132.79

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Spark	2	6	7	3.00	3.50
Thunderbolt		108	-55	1.96	
Wild Charge		120	-45	2.67	D↓2
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1680) 15/15/14·50 (1675)
0/15/15·48 (1498)
Shinx (246) → **Luxio** → Luxray (247)

300 CG 3 Gen IV Sinnoh

Shadow Luxio — 190.8 79.1667 155 141.66 132.79

#0405 Luxray ✧ — 232 156 190 192.67 190.16

Spark	2	6	7	3.00	3.50
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Hidden Power	3	10.8	8	3.60	2.67
Hyper Beam		*150*	*-80*	*1.88*	
Wild Charge		120	-45	2.67	D↓2
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Psychic Fangs		***40***	***-35***	***1.14***	***OD↓***

0/15/15·34.5 (2499)
0/15/12·19.5 (1500)

500 CG 3 Gen IV Sinnoh

Shinx (246) → Luxio (246) → **Luxray**

Shadow Luxray — 278.4 130 190 199.47 190.16

#0417 Pachirisu ✧ — 94 172 155 140.33 135.83

Spark	2	6	7	3.00	3.50
Volt Switch	4	16.8	16	4.20	4.00
Thunder Punch		72	-40	1.80	
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	
Hyper Fang		*80*	*-50*	*1.60*	

15/15/15·50 (1372) 15/15/14·50 (1368)

100 CG 3 Gen IV Sinnoh

No evolution

#0466 Electivire ✧ — 249 163 181 197.67 194.40

Thunder Shock	2	4.8	9	2.40	4.50
Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Flamethrower		***90***	***-55***	***1.64***	
Ice Punch		*60*	*-40*	*1.50*	
Thunder Punch		72	-40	1.80	
Thunder		120	-60	2.00	
Wild Charge		120	-45	2.67	D↓2

1/15/15·30 (2500)
1/15/15·18 (1499)

500 CG 3 Gen IV Sinnoh

Elekid (245) → Electabuzz (243) → **Electivire**

Shadow Electivire — 298.8 135.833 181 205.21 194.40

#0522 Blitzle ✧ — 118 64 128 103.33 98.88

Spark	2	6	7	3.00	3.50
Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Discharge		66	-40	1.65	
Flame Charge		*65*	*-50*	*1.30*	*A↑*
Wild Charge		120	-45	2.67	D↓2

15/15/15·50 (998)

100 CG 2 Gen V Unova

Blitzle → Zebstrika (248)

Shadow Blitzle — 141.6 53.3333 128 107.64 98.88

#0523 Zebstrika ✧ — 211 136 181 176.00 173.18

Spark	2	6	7	3.00	3.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Discharge		66	-40	1.65	
Thunderbolt		108	-55	1.96	
Flame Charge		*65*	*-50*	*1.30*	*A↑*

0/13/15·48.5 (2500)
0/15/9·23.5 (1498)
Blitzle (247) → **Zebstrika**

300 CG 2 Gen V Unova

Shadow Zebstrika — 253.2 113.333 181 182.51 173.18

#0602 Tynamo ✧ — 105 78 111 98.00 96.87

Spark	2	6	7	3.00	3.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (917) 15/15/14·50 (913)
Tynamo → Eelektrik (248) → Eelektross (248)

100 CG 1 Gen V Unova

#0603 Eelektrik ✧ — 156 130 163 149.67 148.97

Spark	2	6	7	3.00	3.50
Acid	*2*	*6*	*8*	*3.00*	*4.00*
Discharge		66	-40	1.65	
Thunderbolt		108	-55	1.96	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1939)
0/13/15·37.5 (1498)
Tynamo (248) → **Eelektrik** → Eelektross (248)

300 CG 1 Gen V Unova

#0604 Eelektross ✧ — 217 152 198 189.00 186.92

Spark	2	6	7	3.00	3.50
Acid	*2*	*6*	*8*	*3.00*	*4.00*
Volt Switch	**4**	**16.8**	**16**	**4.20**	**4.00**
Thunderbolt		108	-55	1.96	
Dragon Claw		*80*	*-50*	*1.60*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Acid Spray		*20*	*-45*	*0.44*	*OD↓2*
Liquidation		*70*	*-45*	*1.56*	*30%OD↓*

2/15/14·38 (2500)
1/15/14·20.5 (1500)
Tynamo (248) → Eelektrik (248) → **Eelektross**

500 CG 1 Gen V Unova

#0796 Xurkitree ✧ — 330 144 195 223.00 210.04

Thunder Shock	2	4.8	9	2.40	4.50
Spark	2	6	7	3.00	3.50
Discharge		66	-40	1.65	
Thunder		120	-60	2.00	
Dazzling Gleam		*90*	*-55*	*1.64*	
Power Whip		*90*	*-50*	*1.80*	

0/12/14·23.5 (2498)
0/14/14·14 (1498)
No evolution

100 CG 4 Gen VII Alola Ultra Beast

#0835 Yamper — 80 90 153 107.67 103.28

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Spark	2	6	7	3.00	3.50
Thunder		120	-60	2.00	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (890)
No evolution

100 CG 2 Gen VIII Galar

#0836 Boltund — 197 131 170 166.00 163.71

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Spark	2	6	7	3.00	3.50
Thunder		120	-60	2.00	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (2460)
0/14/15·26 (1497)
No evolution

100 CG 2 Gen VIII Galar

#0894 Regieleki ✧ — 250 125 190 188.33 181.08

Thunder Shock	2	4.8	9	2.40	4.50
Volt Switch	4	16.8	16	4.20	4.00
Lock On	*1*	*1*	*5*	*1.00*	*5.00*
Hyper Beam		*150*	*-80*	*1.88*	
Thunder		120	-60	2.00	
Zap Cannon		180	-80	2.25	33%OA↓

0/15/13·36.5 (2500)
0/13/15·20 (1500)
No evolution

100 CG 4 Gen VIII Galar Legendary

Shadow Regieleki — 300 104.167 190 198.06 181.08

#0921 Pawmi ✧ — 95 45 128 89.33 81.79

Thunder Shock	2	4.8	9	2.40	4.50
Spark	2	6	7	3.00	3.50
Charge Beam	3	6	11	2.00	3.67
Discharge		66	-40	1.65	
Thunderbolt		108	-55	1.96	
Wild Charge		120	-45	2.67	D↓2

15/15/15·50 (719)

100 CG 3 Gen IX Paldea

Pawmi → Pawmo (251) → Pawmot (251)

#0938 Tadbulb — 104 73 156 111.00 105.80

Thunder Shock	2	4.8	9	2.40	4.50
Water Gun	*1*	*3*	*3*	*3.00*	*3.00*
Discharge		66	-40	1.65	
Parabolic Charge		84	-50	1.68	66%D↑
Zap Cannon		180	-80	2.25	33%OA↓

15/15/15·50 (1030)

100 CG 2 Gen IX Paldea

Tadbulb → Bellibolt (250)

#0939 Bellibolt — 184 165 240 196.33 193.87

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Thunder Shock	2	4.8	9	2.40	4.50
Water Gun	*1*	*3*	*3*	*3.00*	*3.00*
Discharge		66	-40	1.65	
Parabolic Charge		84	-50	1.68	66%D↑
Zap Cannon		180	-80	2.25	33%OA↓

0/15/10·42 (2499)
0/14/12·21.5 (1499)

300 CG 2 Gen IX Paldea

Tadbulb (250) → **Bellibolt**

#0877 Morpeko ✧ — 192 121 151 154.67 151.95

Bite	1	4.8	2	4.80	2.00
Thunder Shock	2	4.8	9	2.40	4.50
Charge Beam	3	6	11	2.00	3.67
Seed Bomb		*55*	*-40*	*1.38*	
Outrage		*110*	*-60*	*1.83*	
Psychic Fangs		*40*	*-35*	*1.14*	*OD↓*
Aura Wheel		120	-45	2.67	A↑

15/15/15·50 (2196)
1/15/15·29 (1500)

100 CG 2 Gen VIII Galar

No evolution

#0702 Dedenne ✧ — 164 134 167 155.00 154.25

Thunder Shock	2	4.8	9	2.40	4.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Discharge		66	-40	1.65	
Parabolic Charge		84	-50	1.68	66%D↑
Play Rough		108	-60	1.80	

15/15/15·50 (2081) 15/15/14·50 (2075)
0/14/12·33 (1500)
No evolution

100 CG 2 Gen VI Kalos

#0785 Tapu Koko ✧ — 250 181 172 201.00 198.18

Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Volt Switch	4	16.8	16	4.20	4.00
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	
Dazzling Gleam		108	-55	1.96	
Brave Bird		*130*	*-55*	*2.36*	*D↓3*
Nature's Madness		**96**	**-50**	**1.92**	**OD↓**

0/14/13·29.5 (2499)
1/15/15·17.5 (1500)
No evolution

100 CG 4 Gen VII Alola Legendary

#0922 Pawmo ✧ — 147 82 155 128.00 123.17

Thunder Shock	2	4.8	9	2.40	4.50
Spark	2	6	7	3.00	3.50
Charge Beam	3	6	11	2.00	3.67
Discharge		66	-40	1.65	
Thunder Punch		72	-40	1.80	
Thunderbolt		108	-55	1.96	
Wild Charge		120	-45	2.67	D↓2

15/15/15·50 (1468) 15/15/14·50 (1464)
Pawmi (250) → **Pawmo** → Pawmot (251)

300 CG 3 Gen IX Paldea

#0923 Pawmot ✧ — 232 141 172 181.67 177.86

Thunder Shock	2	4.8	9	2.40	4.50
Spark	2	6	7	3.00	3.50
Low Kick	2	4.8	5	2.40	2.50
Charge Beam	3	6	11	2.00	3.67
Discharge		66	-40	1.65	
Thunder Punch		72	-40	1.80	
Thunderbolt		108	-55	1.96	
Brick Break		**48**	**-40**	**1.20**	**OD↓**
Close Combat		120	-45	2.67	D↓2
Wild Charge		120	-45	2.67	D↓2

0/15/15·40.5 (2490)
2/15/15·21 (1497)
Pawmi (250) → Pawmo (251) → **Pawmot**

500 CG 3 Gen IX Paldea

#0479 Heat Rotom — 204 219 137 186.67 182.92

Thunder Shock	2	4.8	9	2.40	4.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	
Overheat		156	-55	2.84	A↓2

0/15/15·43 (2495)
0/12/15·22 (1500)
No evolution

100 CG 3 Gen IV Sinnoh

#0145 Zapdos ✧ — 253 185 207 215.00 213.18

Thunder Shock	**2**	**4.8**	**9**	**2.40**	**4.50**
Charge Beam	3	6	11	2.00	3.67
Drill Peck		84	-40	2.10	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	
Zap Cannon		180	-80	2.25	33%OA↓

0/13/13·26.5 (2497)
0/12/12·16 (1500)
No evolution

100 CG 4 Gen I Kanto Legendary

Shadow Zapdos — 303.6 154.167 207 221.59 213.18

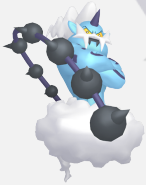
#0587 Emolga ✧ — 158 127 146 143.67 143.09

Thunder Shock	2	4.8	9	2.40	4.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Discharge		66	-40	1.65	
Aerial Ace		72	-45	1.60	
Thunderbolt		108	-55	1.96	
Acrobatics		132	-55	2.40	12.5%A↑2

15/15/15·50 (1847)
0/13/15·41 (1500)
No evolution

100 CG 1 Gen V Unova

#0642 Incarnate Form Thundurus ✧ — 266 164 188 206.00 201.66



Thunder Shock	2	4.8	9	2.40	4.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Thunder Punch		72	-40	1.80	
Thunder		120	-60	2.00	
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

1/15/15·27.5 (2497)
1/15/15·16.5 (1498)
No evolution

100 CG 4 Gen V Unova Legendary

#0642 Therian Form Thundurus ✧ 295 161 188 214.67 207.46

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Volt Switch	4	16.8	16	4.20	4.00
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	
Sludge Wave		*110*	*-65*	*1.69*	
Focus Blast		*150*	*-75*	*2.00*	
Wildbolt Storm		**72**	**-45**	**1.60**	**OA↓**

1/15/15·25 (2496)
1/15/15·15 (1497)
No evolution

100 CG 4 Gen V Unova Legendary

#0741 Oricorio (Pom-Pom) ✧ 196 145 181 174.00 172.62

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Air Cutter		54	-35	1.54	30%A↑
Hurricane		132	-65	2.03	

4/15/15·50 (2500)
0/13/13·24.5 (1500)
No evolution

100 CG 3 Gen VII Alola

#0479 Rotom 185 159 137 160.33 159.13

Thunder Shock	2	4.8	9	2.40	4.50
Astonish	3	14.4	10	4.80	3.33
Ominous Wind		54	-45	1.20	10%A+D↑
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	

15/15/15·50 (2296)
0/14/15·28 (1499)
No evolution

100 CG 3 Gen IV Sinnoh

#0100 Hisuian Voltorb ✧ 109 111 120 113.33 113.23

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Charge Beam	3	6	11	2.00	3.67
Thunderbolt		108	-55	1.96	
Swift		*55*	*-35*	*1.57*	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (1141)
Hisuian Voltorb → Hisuian Electrode (254)

100 CG 2 Gen I Kanto

Shadow Hisuian Voltorb 130.8 92.5 120 114.43 113.23

#0101 Hisuian Electrode ✧ — 176 176 155 169.00 168.70

Thunder Shock	2	4.8	9	2.40	4.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Swift		*55*	*-35*	*1.57*	
Wild Charge		120	-45	2.67	D↓2
Energy Ball		108	-55	1.96	10%OD↓

300 CG 2 Gen I Kanto

15/15/15·50 (2430) 15/15/14·50 (2423)
1/14/14·26.5 (1499)
Hisuian Voltorb (253) → **Hisuian Electrode**

Shadow Hisuian Electrode — 211.2 146.667 155 170.96 168.70

#0479 Mow Rotom — 204 219 137 186.67 182.92

Thunder Shock	2	4.8	9	2.40	4.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Ominous Wind		*45*	*-45*	*1.00*	*10%A+D↑*
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	

100 CG 3 Gen IV Sinnoh

0/15/15·43 (2495)
0/12/15·22 (1500)
No evolution

#0479 Frost Rotom — 204 219 137 186.67 182.92

Thunder Shock	2	4.8	9	2.40	4.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Blizzard		168	-75	2.24	
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	

100 CG 3 Gen IV Sinnoh

0/15/15·43 (2495)
0/12/15·22 (1500)
No evolution

#0694 Helioptile ✧ — 115 78 127 106.67 104.44

Thunder Shock	2	4.8	9	2.40	4.50
Quick Attack	2	6	8	3.00	4.00
Parabolic Charge		84	-50	1.68	66%D↑
Thunderbolt		108	-55	1.96	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*

100 CG 2 Gen VI Kalos

15/15/15·50 (1054)
Helioptile → Heliolisk (255)

#0695 Heliolisk ✧ — 219 168 158 181.67 179.81

Quick Attack	2	6	8	3.00	4.00
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Volt Switch	4	16.8	16	4.20	4.00
Parabolic Charge		84	-50	1.68	66%D↑
Thunderbolt		108	-55	1.96	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*
Grass Knot		*90*	*-50*	*1.80*	
Breaking Swipe		*50*	*-50*	*1.00*	*OA↓*

0/14/14·42.5 (2497)
0/15/15·21.5 (1494)

300 CG 2 Gen VI Kalos

Helioptile (254) → **Heliolisk**

#0848 Toxel ✧ — 97 65 120 94.00 91.12

Acid	2	7.2	8	3.60	4.00
Power-Up Punch		*20*	*-35*	*0.57*	*A↑*

15/15/15·50 (821)

100 CG 3 Gen VIII Galar

Toxel → Toxtricity (255)

#0849 Toxtricity ✧ — 224 140 181 181.67 178.38

Spark	2	6	7	3.00	3.50
Poison Jab	2	8.4	7	4.20	3.50
Acid	2	7.2	8	3.60	4.00
Discharge		66	-40	1.65	
Wild Charge		120	-45	2.67	D↓2
Acid Spray		24	-45	0.53	OD↓2
Power-Up Punch		*20*	*-35*	*0.57*	*A↑*

0/15/15·42 (2500) 0/15/14·42 (2494)
0/15/15·21.5 (1497)

300 CG 3 Gen VIII Galar

Toxel (255) → **Toxtricity**

Shadow Toxtricity — 268.8 116.667 181 188.82 178.38

#0026 Alolan Raichu ✧ — 201 154 155 170.00 168.66

Thunder Shock	2	4.8	9	2.40	4.50
Spark	2	6	7	3.00	3.50
Volt Switch	4	16.8	16	4.20	4.00
Thunder Punch		72	-40	1.80	
Psyshock		84	-40	2.10	
Psychic		90	-55	1.64	10%OD↓
Wild Charge		120	-45	2.67	D↓2
Grass Knot		*90*	*-50*	*1.80*	
Surf		*75*	*-45*	*1.67*	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

8/15/14·50 (2494)
1/15/15·24.5 (1496)

100 CG 1 Gen I Kanto

No evolution

#0081 Magnemite ✧ — 165 121 93 126.33 122.91

Thunder Shock	2	4.8	9	2.40	4.50
Spark	2	6	7	3.00	3.50
Volt Switch	4	16.8	16	4.20	4.00
Metal Sound	2	6	8	3.00	4.00
Discharge		66	-40	1.65	
Magnet Bomb		84	-45	1.87	
Thunderbolt		108	-55	1.96	

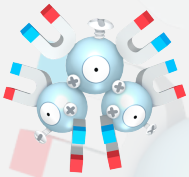
15/15/15·50 (1540)
12/15/13·50 (1500)

100 CG 2 Gen I Kanto

Magnemite → Magneton (256) → Magnezone (256)

Shadow Magnemite — 198 100.833 93 130.61 122.91

#0082 Magneton ✧ — 223 169 137 176.33 172.84



Thunder Shock	2	4.8	9	2.40	4.50
Spark	2	6	7	3.00	3.50
Charge Beam	3	6	11	2.00	3.67
Volt Switch	4	16.8	16	4.20	4.00
Metal Sound	2	6	8	3.00	4.00
Discharge		66	-40	1.65	
Flash Cannon		132	-70	1.89	
Magnet Bomb		84	-45	1.87	
Zap Cannon		180	-80	2.25	33%OA↓

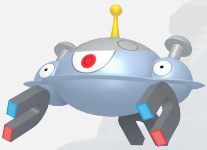
0/15/15·45.5 (2494)
0/15/15·22.5 (1497)

300 CG 2 Gen I Kanto

Magnemite (256) → **Magneton** → Magnezone (256)

Shadow Magneton — 267.6 140.833 137 181.81 172.84

#0462 Magnezone ✧ — 238 205 172 205.00 203.21



Spark	2	6	7	3.00	3.50
Charge Beam	3	6	11	2.00	3.67
Volt Switch	4	16.8	16	4.20	4.00
Metal Sound	2	6	8	3.00	4.00
Flash Cannon		132	-70	1.89	
Wild Charge		120	-45	2.67	D↓2
Zap Cannon		180	-80	2.25	33%OA↓
Mirror Shot		42	-35	1.20	30%OA↓

0/15/15·29 (2498)
0/13/15·17.5 (1500)

500 CG 2 Gen IV Sinnoh

Magnemite (256) → Magneton (256) → **Magnezone**

Shadow Magnezone — 285.6 170.833 172 209.48 203.21

#0777 Togedemaru — 190 145 163 166.00 164.98

Thunder Shock	2	4.8	9	2.40	4.50
Spark	2	6	7	3.00	3.50
Wild Charge		120	-45	2.67	D↓2
Gyro Ball		96	-50	1.92	
Fell Stinger		*20*	*-35*	*0.57*	A↑

15/15/15·50 (2442)
0/13/13·26.5 (1498)

100 CG 2 Gen VII Alola

No evolution

#0479 Wash Rotom — 204 219 137 186.67 182.92

Thunder Shock	2	4.8	9	2.40	4.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	
Hydro Pump		156	-75	2.08	

0/15/15·43 (2495)
0/12/15·22 (1500)
No evolution

100 CG 3 Gen IV Sinnoh

#0035 Clefairy — 107 108 172 129.00 125.73

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Disarming Voice		84	-45	1.87	
Moonblast		132	-60	2.20	10%OA↓
Swift		*55*	*-35*	*1.57*	
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (1306)

300 CG 1 Gen I Kanto

Cleffa (257) → **Clefairy** → Clefable (257)

#0036 Clefable — 178 162 216 185.33 183.99

Pound	**2**	**4**	**4**	**2.00**	**2.00**
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Charm	3	15.6	8	5.20	2.67
Fairy Wind	2	4.8	9	2.40	4.50
Draining Kiss		72	-55	1.31	
Dazzling Gleam		108	-55	1.96	
Moonblast		132	-60	2.20	10%OA↓
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Swift		*55*	*-35*	*1.57*	
Meteor Mash		*100*	*-50*	*2.00*	

0/15/13·49 (2500)
0/13/15·23.5 (1500)

500 CG 1 Gen I Kanto

Cleffa (257) → Clefairy (257) → **Clefable**

#0173 Cleffa — 75 79 137 97.00 93.28

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Psyshock		*70*	*-40*	*1.75*	
Signal Beam		*75*	*-55*	*1.36*	*20%OA+D↓*
Psychic		***75***	***-55***	***1.36***	***10%OD↓***
Swift		*55*	*-35*	*1.57*	
Body Slam		***55***	***-35***	***1.57***	
Grass Knot		*90*	*-50*	*1.80*	

15/15/15·50 (759)

100 CG 1 Gen II Johto Baby

Cleffa → Clefairy (257) → Clefable (257)

#0175 Togepi ✧ — 67 116 111 98.00 95.20

Peck	*2*	*6*	*8*	*3.00*	*4.00*
Zen Headbutt	**3**	**8**	**6**	**2.67**	**2.00**
Hidden Power	3	10.8	8	3.60	2.67
Psyshock		*70*	*-40*	*1.75*	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Dazzling Gleam		108	-55	1.96	

15/15/15·50 (743) 15/15/14·50 (740)

100 CG 1 Gen II Johto Baby

Togepi → Togetic (262) → Togekiss (262)

#0209 Snubbull ✧ — 137 85 155 125.67 121.76

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Dazzling Gleam		108	-55	1.96	
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1399) 15/15/14·50 (1395)

100 CG 2 Gen II Johto

Snubbull → Granbull (258)

Shadow Snubbull — 164.4 70.8333 155 130.08 121.76

#0210 Granbull ✧ — 212 131 207 183.33 179.14

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Charm	3	15.6	8	5.20	2.67
Play Rough		108	-60	1.80	
Close Combat		*100*	*-45*	*2.22*	*D↓2*
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

0/15/14·44 (2500)
0/15/15·22 (1498)

300 CG 2 Gen II Johto

Snubbull (258) → **Granbull**

Shadow Granbull — 254.4 109.167 207 190.19 179.14

#0669 Flabébé ✧ — 108 120 127 118.33 118.07

Vine Whip	*2*	*5*	*8*	*2.50*	*4.00*
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Petal Blizzard		*110*	*-65*	*1.69*	
Dazzling Gleam		108	-55	1.96	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Chilling Water		***60***	***-45***	***1.33***	***OA↓***

15/15/15·50 (1202)

100 CG 2 Gen VI Kalos

Flabébé → Floette (259) → Florges (259)

#0670 Floette ✧ — 136 151 144 143.67 143.54

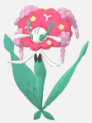
Vine Whip	*2*	*5*	*8*	*2.50*	*4.00*
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Petal Blizzard		*110*	*-65*	*1.69*	
Dazzling Gleam		108	-55	1.96	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

15/15/15·50 (1732)
0/14/15·47 (1500)

300 CG 2 Gen VI Kalos

Flabébé (258) → **Floette** → Florges (259)

#0671 Florges ✧ — 212 244 186 214.00 212.69



Vine Whip	*2*	*5*	*8*	*2.50*	*4.00*
Razor Leaf	*2*	*9*	*4*	*4.50*	*2.00*
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Fairy Wind	2	4.8	9	2.40	4.50
Petal Blizzard		*110*	*-65*	*1.69*	
Disarming Voice		84	-45	1.87	
Moonblast		132	-60	2.20	10%OA↓
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Trailblaze		*65*	*-45*	*1.44*	*A↑*

0/14/15·29 (2498)
0/14/13·17.5 (1500)

500 CG 2 Gen VI Kalos

Flabébé (258) → Floette (259) → **Florges**

#0682 Spritzee ✧ — 110 113 186 136.33 132.23

Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Charm	3	15.6	8	5.20	2.67
Thunderbolt		*90*	*-55*	*1.64*	
Draining Kiss		72	-55	1.31	

15/15/15·50 (1415) 15/15/14·50 (1412)

100 CG 2 Gen VI Kalos

Spritzee → Aromatisse (259)

#0683 Aromatisse ✧ — 173 150 226 183.00 180.34

Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Charm	3	15.6	8	5.20	2.67
Thunderbolt		*90*	*-55*	*1.64*	
Psyshock		*70*	*-40*	*1.75*	
Draining Kiss		72	-55	1.31	
Moonblast		132	-60	2.20	10%OA↓
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

6/15/14·49.5 (2500)
0/13/15·24.5 (1499)

300 CG 2 Gen VI Kalos

Spritzee (259) → **Aromatisse**

#0684 Swirlix ✧ — 109 119 158 128.67 127.02

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Draining Kiss		72	-55	1.31	
Energy Ball		*90*	*-55*	*1.64*	*10%OD↓*

15/15/15·50 (1333)

100 CG 2 Gen VI Kalos

Swirlix → Slurpuff (260)

#0685 Slurpuff ✧ — 168 163 193 174.67 174.19

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Charm	3	15.6	8	5.20	2.67
Fairy Wind	2	4.8	9	2.40	4.50
Flamethrower		*90*	*-55*	*1.64*	
Draining Kiss		72	-55	1.31	
Play Rough		108	-60	1.80	
Energy Ball		*90*	*-55*	*1.64*	*10%OD↓*

15/15/15·50 (2486)
1/14/14·26 (1500)

300 CG 2 Gen VI Kalos

Swirlix (260) → **Slurpuff**

#0700 Sylveon ✧ — 203 205 216 208.00 207.92

Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Charm	3	15.6	8	5.20	2.67
Psyshock		***70***	***-40***	***1.75***	
Draining Kiss		72	-55	1.31	
Dazzling Gleam		108	-55	1.96	
Moonblast		132	-60	2.20	10%OA↓
Last Resort		***90***	***-55***	***1.64***	

0/13/15·31.5 (2499)
0/15/12·18.5 (1500)

300 CG 3 Gen VI Kalos

Eevee (353) → **Sylveon**

#0716 Xerneas ✧ — 250 185 246 227.00 224.91

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Geomancy	**3**	**4.8**	**13**	**1.60**	**4.33**
Megahorn		*110*	*-55*	*2.00*	
Thunder		*100*	*-60*	*1.67*	
Moonblast		132	-60	2.20	10%OA↓
Close Combat		*100*	*-45*	*2.22*	*D↓2*
Giga Impact		*150*	*-80*	*1.88*	

0/15/15·24.5 (2497)
0/9/13·15 (1500)

100 CG 4 Gen VI Kalos Legendary

No evolution

#0764 Comfey — 165 215 139 173.00 170.21

Vine Whip	*2*	*5*	*8*	*2.50*	*4.00*
Hidden Power	3	10.8	8	3.60	2.67
Petal Blizzard		*110*	*-65*	*1.69*	
Draining Kiss		72	-55	1.31	
Grass Knot		*90*	*-50*	*1.80*	

15/15/15·50 (2392)
1/15/14·27 (1500)
No evolution

100 CG 2 Gen VII Alola

#0888 Zacian ✨ — 254 236 192 227.33 225.78

Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Fire Fang	*2*	*8*	*6*	*4.00*	*3.00*
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Iron Head		*70*	*-50*	*1.40*	
Play Rough		108	-60	1.80	
Close Combat		*100*	*-45*	*2.22*	*D↓2*
Wild Charge		*100*	*-45*	*2.22*	*D↓2*

0/10/14·24.5 (2499)
0/15/15·14.5 (1498)
Zacian → Crowned Sword Zacian (262)

100 CG 4 Gen VIII Galar Legendary

#0926 Fidough — 102 126 114 114.00 113.58

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Charm	3	15.6	8	5.20	2.67
Play Rough		108	-60	1.80	
Body Slam		*55*	*-35*	*1.57*	
Psychic Fangs		*40*	*-35*	*1.14*	*OD↓*

15/15/15·50 (1114)
Fidough → Dachsbun (261)

100 CG 2 Gen IX Paldea

#0927 Dachsbun — 159 212 149 173.33 171.25

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Charm	3	15.6	8	5.20	2.67
Play Rough		108	-60	1.80	
Body Slam		*55*	*-35*	*1.57*	
Psychic Fangs		*40*	*-35*	*1.14*	*OD↓*

15/15/15·50 (2370)
0/15/14·27.5 (1500)
Fidough (261) → **Dachsbun**

300 CG 2 Gen IX Paldea

#0176 Togetic ✧ — 139 181 146 155.33 154.29

Zen Headbutt	**3**	**8**	**6**	**2.67**	**2.00**
Steel Wing	**2**	**7**	**5**	**3.50**	**2.50**
Extrasensory	*3*	*8*	*10*	*2.67*	*3.33*
Hidden Power	*3*	*9*	*8*	*3.00*	*2.67*
Fairy Wind	2	4.8	9	2.40	4.50
Aerial Ace		72	-45	1.60	
Psyshock		*70*	*-40*	*1.75*	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Draining Kiss		72	-55	1.31	
Dazzling Gleam		108	-55	1.96	

15/15/15·50 (1931)
0/14/14·38.5 (1500)

300 CG 2 Gen II Johto

Togepi (258) → **Togetic** → Togekiss (262)

#0468 Togekiss ✧ — 225 217 198 213.33 213.03

Air Slash	3	10.8	9	3.60	3.00
Hidden Power	*3*	*9*	*8*	*3.00*	*2.67*
Charm	3	15.6	8	5.20	2.67
Peck	2	7.2	8	3.60	4.00
Flamethrower		*90*	*-55*	*1.64*	
Aerial Ace		72	-45	1.60	
Psyshock		*70*	*-40*	*1.75*	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Dazzling Gleam		108	-55	1.96	
Aura Sphere		***80***	***-40***	***2.00***	

0/15/15·28 (2499)
0/14/11·17 (1499)

500 CG 2 Gen IV Sinnoh

Togepi (258) → Togetic (262) → **Togekiss**

#0905 Incarnate Form Enamorus — 281 162 179 207.33 201.23

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Fairy Wind	2	4.8	9	2.40	4.50
Dazzling Gleam		108	-55	1.96	
Grass Knot		*90*	*-50*	*1.80*	
Fly		96	-45	2.13	

0/15/13·27 (2495)
3/15/14·16 (1498)

100 CG 4 Gen VIII Hisui Legendary

No evolution

#0888 Crowned Sword Zacian ✧ — 332 240 192 254.67 248.25

Metal Claw	2	6	7	3.00	3.50
Air Slash	*3*	*9*	*9*	*3.00*	*3.00*
Play Rough		108	-60	1.80	
Close Combat		*100*	*-45*	*2.22*	*D↓2*
Giga Impact		*150*	*-80*	*1.88*	
Behemoth Blade		120	-55	2.18	

0/15/12·18.5 (2499)
1/15/14·11 (1498)

300 CG 4 Gen VIII Galar Legendary

Zacian (261) → **Crowned Sword Zacian**

#0957 Tinkatink — 85 110 137 110.67 108.60

Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Fairy Wind	2	4.8	9	2.40	4.50
Flash Cannon		132	-70	1.89	
Play Rough		108	-60	1.80	

15/15/15·50 (973)

100 CG 3 Gen IX Paldea

Tinkatink → Tinkatuff (263) → Tinkaton (263)

#0958 Tinkatuff — 109 145 163 139.00 137.09

Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Fairy Wind	2	4.8	9	2.40	4.50
Flash Cannon		132	-70	1.89	
Play Rough		108	-60	1.80	

15/15/15·50 (1477)

300 CG 3 Gen IX Paldea

Tinkatink (263) → **Tinkatuff** → Tinkaton (263)

#0959 Tinkaton — 155 196 198 183.00 181.87

Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Fairy Wind	2	4.8	9	2.40	4.50
Flash Cannon		132	-70	1.89	
Play Rough		108	-60	1.80	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*
Heavy Slam		84	-50	1.68	

13/15/15·49.5 (2499)
1/14/14·25.5 (1497)

500 CG 3 Gen IX Paldea

Tinkatink (263) → Tinkatuff (263) → **Tinkaton**

#0056 Mankey — 148 82 120 116.67 113.35

Karate Chop	2	6	9	3.00	4.50
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Cross Chop		66	-35	1.89	
Low Sweep		48	-40	1.20	
Brick Break		48	-40	1.20	OD↓

15/15/15·50 (1317)

100 CG 2 Gen I Kanto

Mankey → Primeape (264) → Annihilape (272)

Shadow Mankey — 177.6 68.3333 120 121.98 113.35

#0057 Primeape ✧ — 207 138 163 169.33 166.99

Low Kick	2	4.8	5	2.40	2.50
Karate Chop	**2**	**6**	**9**	**3.00**	**4.50**
Counter	2	9.6	6	4.80	3.00
Cross Chop		**66**	**-35**	**1.89**	
Ice Punch		*60*	*-40*	*1.50*	
Night Slash		*50*	*-35*	*1.43*	
Low Sweep		48	-40	1.20	
Close Combat		120	-45	2.67	D↓2
Rage Fist		***50***	***-35***	***1.43***	***A↑***

7/15/15·50 (2493)
1/15/15·24.5 (1500) 1/15/14·24.5 (1496)
Mankey (263) → **Primeape** → Annihilape (272)

300 CG 2 Gen I Kanto

Shadow Primeape — 248.4 115 163 175.47 166.99

#0066 Machop ✧ — 137 82 172 130.33 124.55

Low Kick	**2**	**4.8**	**5**	**2.40**	**2.50**
Karate Chop	2	6	9	3.00	4.50
Rock Smash	3	10.8	7	3.60	2.33
Cross Chop		66	-35	1.89	
Low Sweep		48	-40	1.20	
Brick Break		48	-40	1.20	OD↓

15/15/15·50 (1445)
Machop → Machoke (264) → Machamp (265)

100 CG 2 Gen I Kanto

Shadow Machop — 164.4 68.3333 172 134.91 124.55

#0067 Machoke ✧ — 177 125 190 164.00 161.39

Low Kick	2	4.8	5	2.40	2.50
Karate Chop	2	6	9	3.00	4.50
Cross Chop		**66**	**-35**	**1.89**	
Submission		72	-50	1.44	
Brick Break		48	-40	1.20	OD↓
Dynamic Punch		108	-45	2.40	

15/15/15·50 (2296)
0/15/15·28 (1498) 0/15/14·28 (1494)
Machop (264) → **Machoke** → Machamp (265)

300 CG 2 Gen I Kanto

Shadow Machoke — 212.4 104.167 190 168.86 161.39

#0068 Machamp — 234 159 207 200.00 197.48

Karate Chop	**2**	**6**	**9**	**3.00**	**4.50**
Bullet Punch	*2*	*8*	*7*	*4.00*	*3.50*
Counter	2	9.6	6	4.80	3.00
Cross Chop		66	-35	1.89	
Stone Edge		***100***	***-55***	***1.82***	
Submission		**72**	**-50**	**1.44**	
Rock Slide		*75*	*-45*	*1.67*	
Close Combat		120	-45	2.67	D↓2
Dynamic Punch		108	-45	2.40	
Heavy Slam		*70*	*-50*	*1.40*	
Payback		***110***	***-60***	***1.83***	

0/15/14·31 (2497)
0/14/11·18.5 (1500)

500 CG 2 Gen I Kanto

Machop (264) → Machoke (264) → **Machamp**

Shadow Machamp — 280.8 132.5 207 206.77 197.48

#0083 Galarian Farfetch'd — 174 114 141 143.00 140.89

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Rock Smash	3	10.8	7	3.60	2.33
Leaf Blade		*70*	*-35*	*2.00*	
Brick Break		48	-40	1.20	OD↓
Brave Bird		*130*	*-55*	*2.36*	*D↓3*

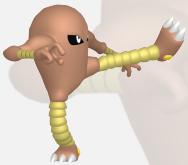
15/15/15·50 (1893)
0/15/15·38 (1497)

100 CG 2 Gen I Kanto

Galarian Farfetch'd → Sirfetch'd (270)

Shadow Galarian Farfetch'd — 208.8 95 141 148.27 140.89

#0106 Hitmonlee — 224 181 137 180.67 177.10



Low Kick	2	4.8	5	2.40	2.50
Rock Smash	3	10.8	7	3.60	2.33
Double Kick	3	9.6	12	3.20	4.00
Stone Edge		*100*	*-55*	*1.82*	
Low Sweep		48	-40	1.20	
Brick Break		**48**	**-40**	**1.20**	**OD↓**
Stomp		***55***	***-40***	***1.38***	
Close Combat		120	-45	2.67	D↓2
Blaze Kick		*60*	*-40*	*1.50*	

0/14/15·43 (2500)
2/15/15·21.5 (1496)

300 CG 3 Gen I Kanto

Tyrogue (266) → **Hitmonlee**

Shadow Hitmonlee — 268.8 150.833 137 185.54 177.10

#0107 Hitmonchan — 193 197 137 175.67 173.35

Bullet Punch	*2*	*8*	*7*	*4.00*	*3.50*
Rock Smash	**3**	**10.8**	**7**	**3.60**	**2.33**
Counter	2	9.6	6	4.80	3.00
Ice Punch		*60*	*-40*	*1.50*	
Thunder Punch		*60*	*-40*	*1.50*	
Fire Punch		*60*	*-40*	*1.50*	
Brick Break		**48**	**-40**	**1.20**	**OD↓**
Close Combat		120	-45	2.67	D↓2
Power-Up Punch		24	-35	0.69	A↑

4/15/15·50 (2497)
0/11/15·24.5 (1500)

300 CG 3 Gen I Kanto

Tyrogue (266) → **Hitmonchan**

Shadow Hitmonchan 231.6 164.167 137 177.59 173.35

#0128 Paldean Combat Tauros — 210 193 181 194.67 194.31

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Double Kick	3	9.6	12	3.20	4.00
Earthquake		*110*	*-65*	*1.69*	
Iron Head		*70*	*-50*	*1.40*	
Close Combat		120	-45	2.67	D↓2
Trailblaze		*65*	*-45*	*1.44*	A↑

0/15/15·36 (2497)
0/11/15·20 (1498)

100 CG 2 Gen I Kanto

No evolution

#0236 Tyrogue — 64 64 111 79.67 76.89

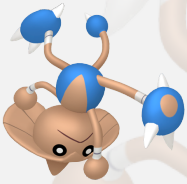
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Rock Smash	3	10.8	7	3.60	2.33
Low Sweep		48	-40	1.20	
Rock Slide		*75*	*-45*	*1.67*	
Brick Break		48	-40	1.20	OD↓

15/15/15·50 (556) 15/15/14·50 (554)

100 CG 1 Gen II Johto Baby

Tyrogue → Hitmonlee (265)

#0237 Hitmontop — 173 207 137 172.33 169.92



Rock Smash	3	10.8	7	3.60	2.33
Counter	2	9.6	6	4.80	3.00
Stone Edge		*100*	*-55*	*1.82*	
Close Combat		120	-45	2.67	D↓2
Gyro Ball		*80*	*-50*	*1.60*	
Triple Axel		*60*	*-45*	*1.33*	A↑

15/15/15·50 (2438)
0/14/15·26.5 (1499)

300 CG 3 Gen II Johto

Tyrogue (266) → **Hitmontop**

Shadow Hitmontop 207.6 172.5 137 172.37 169.92

#0296 Makuhita ✧ 99 54 176 109.67 97.99

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Rock Smash	3	10.8	7	3.60	2.33
Cross Chop		66	-35	1.89	
Low Sweep		48	-40	1.20	
Heavy Slam		*70*	*-50*	*1.40*	
Upper Hand		84	-40	2.10	30%OD↓

15/15/15·50 (924)

100 CG 2 Gen III Hoenn

Makuhita → Hariyama (267)

Shadow Makuhita 118.8 45 176 113.27 97.99

#0297 Hariyama ✧ 209 114 302 208.33 193.06

Bullet Punch	*2*	*8*	*7*	*4.00*	*3.50*
Counter	2	9.6	6	4.80	3.00
Force Palm	3	15.6	10	5.20	3.33
Close Combat		120	-45	2.67	D↓2
Dynamic Punch		108	-45	2.40	
Heavy Slam		*70*	*-50*	*1.40*	
Superpower		102	-40	2.55	A+D↓
Upper Hand		84	-40	2.10	30%OD↓

1/15/15·36 (2500)
0/14/14·20 (1500) 0/14/13·20 (1497)

300 CG 2 Gen III Hoenn

Makuhita (267) → **Hariyama**

Shadow Hariyama 250.8 95 302 215.93 193.06

#0447 Riolu ✧ 127 78 120 108.33 105.93

Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Counter	2	9.6	6	4.80	3.00
Cross Chop		66	-35	1.89	
Low Sweep		48	-40	1.20	
Thunder Punch		*60*	*-40*	*1.50*	
Brick Break		48	-40	1.20	OD↓
Blaze Kick		*60*	*-40*	*1.50*	

15/15/15·50 (1123)

100 CG 1 Gen IV Sinnoh Baby

Riolu → Lucario (274)

#0532 Timburr ✧ 134 87 181 134.00 128.26

Low Kick	2	4.8	5	2.40	2.50
Pound	*2*	*4*	*4*	*2.00*	*2.00*
Low Sweep		48	-40	1.20	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Brick Break		48	-40	1.20	OD↓

15/15/15·50 (1487)

100 CG 3 Gen V Unova

Timburr → Gurdurr (268) → Conkeldurr (268)

Shadow Timburr 160.8 72.5 181 138.10 128.26

#0533 Gurdurr — 180 134 198 170.67 168.40

Low Kick	2	4.8	5	2.40	2.50
Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Stone Edge		*100*	*-55*	*1.82*	
Low Sweep		48	-40	1.20	
Brick Break		48	-40	1.20	OD↓

300 CG 3 Gen V Unova

15/15/15·50 (2452) 15/15/14·50 (2447)
1/15/15·26 (1496)
Timburr (267) → **Gurdurr** → Conkeldurr (268)

Shadow Gurdurr — 216 111.667 198 175.22 168.40

#0534 Conkeldurr — 243 158 233 211.33 207.59

Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Counter	2	9.6	6	4.80	3.00
Stone Edge		*100*	*-55*	*1.82*	
Dynamic Punch		108	-45	2.40	
Focus Blast		180	-75	2.40	
Brutal Swing		***55***	***-35***	***1.57***	

500 CG 3 Gen V Unova

0/15/12·28 (2499)
3/15/15·16.5 (1500) 3/15/14·16.5 (1497)
Timburr (267) → Gurdurr (268) → **Conkeldurr**

Shadow Conkeldurr — 291.6 131.667 233 218.76 207.59

#0538 Throh — 172 160 260 197.33 192.70

Low Kick	2	4.8	5	2.40	2.50
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Low Sweep		48	-40	1.20	
Brick Break		48	-40	1.20	OD↓
Body Slam		*55*	*-35*	*1.57*	
Focus Blast		180	-75	2.40	

100 CG 3 Gen V Unova

0/14/15·45 (2500)
2/15/15·22 (1498)
No evolution

Shadow Throh — 206.4 133.333 260 199.91 192.70

#0539 Sawk — 231 153 181 188.33 185.64

Low Kick	2	4.8	5	2.40	2.50
Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Low Sweep		48	-40	1.20	
Brick Break		48	-40	1.20	OD↓
Body Slam		*55*	*-35*	*1.57*	
Focus Blast		180	-75	2.40	

100 CG 3 Gen V Unova

0/15/11·37.5 (2498)
0/15/15·20 (1495)
No evolution

Shadow Sawk — 277.2 127.5 181 195.23 185.64

#0619 Mienfoo — 160 98 128 128.67 126.14

Low Kick	2	4.8	5	2.40	2.50
Pound	*2*	*4*	*4*	*2.00*	*2.00*
Low Sweep		48	-40	1.20	
Drain Punch		24	-40	0.60	D↑
Brick Break		48	-40	1.20	OD↓
Focus Blast		180	-75	2.40	
High Jump Kick		**132**	**-55**	**2.40**	**10%D↓4**

100 CG 2 Gen V Unova

15/15/15·50 (1570)
7/15/15·50 (1498)
Mienfoo → Mienshao (269)

#0620 Mienshao — 258 127 163 182.67 174.80

Low Kick	2	4.8	5	2.40	2.50
Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Force Palm	3	15.6	10	5.20	3.33
Drain Punch		24	-40	0.60	D↑
Stone Edge		*100*	*-55*	*1.82*	
Brick Break		48	-40	1.20	OD↓
Grass Knot		*90*	*-50*	*1.80*	
Blaze Kick		*60*	*-40*	*1.50*	
Brutal Swing		*55*	*-35*	*1.57*	

300 CG 2 Gen V Unova

0/14/15·38.5 (2498)
0/15/15·20.5 (1500) 0/15/14·20.5 (1496)
Mienfoo (269) → **Mienshao**

#0674 Pancham — 145 107 167 139.67 137.35

Low Kick	2	4.8	5	2.40	2.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Low Sweep		48	-40	1.20	
Body Slam		*55*	*-35*	*1.57*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

100 CG 2 Gen VI Kalos

15/15/15·50 (1683) 15/15/14·50 (1678)
1/15/15·48 (1499)
Pancham → Pangoro (271)

#0739 Crabrawler — 150 104 132 128.67 127.22

Bubble	*3*	*8*	*11*	*2.67*	*3.67*
Rock Smash	3	10.8	7	3.60	2.33
Brick Break		48	-40	1.20	OD↓
Crabhammer		*85*	*-50*	*1.70*	*12.5%A↑2*
Power-Up Punch		24	-35	0.69	A↑
Payback		*110*	*-60*	*1.83*	

100 CG 2 Gen VII Alola

15/15/15·50 (1540)
11/15/15·49.5 (1494)
Crabrawler → Crabominable (273)

#0766 Passimian — 222 160 225 202.33 199.93

Rock Smash	3	10.8	7	3.60	2.33
Counter	2	9.6	6	4.80	3.00
Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Drain Punch		24	-40	0.60	D↑
Brick Break		48	-40	1.20	OD↓
Close Combat		120	-45	2.67	D↓2
Superpower		102	-40	2.55	A+D↓
Brutal Swing		*55*	*-35*	*1.57*	

0/14/13·32 (2499)
0/15/14·18.5 (1498)
No evolution

100 CG 3 Gen VII Alola

#0865 Sirfetch'd — 248 176 158 194.00 190.34

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Counter	2	9.6	6	4.80	3.00
Night Slash		*50*	*-35*	*1.43*	
Leaf Blade		*70*	*-35*	*2.00*	
Close Combat		120	-45	2.67	D↓2
Brave Bird		*130*	*-55*	*2.36*	*D↓3*

0/13/15·32.5 (2500)
2/15/15·18.5 (1500)
Galarian Farfetch'd (265) → **Sirfetch'd**

300 CG 2 Gen VIII Galar

Shadow Sirfetch'd — 297.6 146.667 158 200.76 190.34

#0870 Falinks — 193 170 163 175.33 174.88

Rock Smash	3	10.8	7	3.60	2.33
Counter	2	9.6	6	4.80	3.00
Megahorn		*110*	*-55*	*2.00*	
Brick Break		48	-40	1.20	OD↓
Superpower		102	-40	2.55	A+D↓

2/15/15·50 (2498)
0/15/15·24 (1499)
No evolution

100 CG 3 Gen VIII Galar

#0889 Zamazenta — 254 236 192 227.33 225.78

Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Ice Fang	*2*	*8*	*6*	*4.00*	*3.00*
Iron Head		*70*	*-50*	*1.40*	
Moonblast		*110*	*-60*	*1.83*	*10%OA↓*
Close Combat		120	-45	2.67	D↓2
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

0/10/14·24.5 (2499)
0/15/15·14.5 (1498)
Zamazenta → Crowned Shield Zamazenta (274)

100 CG 4 Gen VIII Galar Legendary

#0891 Kubfu — 170 112 155 145.67 143.44

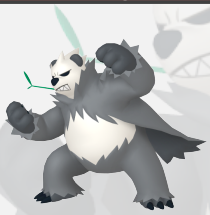
Rock Smash	3	10.8	7	3.60	2.33
Counter	2	9.6	6	4.80	3.00
Brick Break		48	-40	1.20	OD↓
Close Combat		120	-45	2.67	D↓2
Dynamic Punch		108	-45	2.40	

15/15/15·50 (1919) 15/15/14·50 (1913)
0/15/14·37.5 (1499)

100 CG 4 Gen VIII Galar Legendary

Kubfu → Single Strike Style Urshifu (271)

#0675 Pangoro ✧ — 226 146 216 196.00 192.44



Low Kick	2	4.8	5	2.40	2.50
Karate Chop	2	6	9	3.00	4.50
Bullet Punch	*2*	*8*	*7*	*4.00*	*3.50*
Snarl	3	6	13	2.00	4.33
Night Slash		60	-35	1.71	
Rock Slide		*75*	*-45*	*1.67*	
Iron Head		*70*	*-50*	*1.40*	
Close Combat		120	-45	2.67	D↓2

0/14/15·34.5 (2500)
0/13/13·19.5 (1500)

300 CG 2 Gen VI Kalos

Pancham (269) → **Pangoro**

#0892 Single Strike Style Urshifu — 254 177 225 218.67 216.27

Sucker Punch	2	9.6	7	4.80	3.50
Rock Smash	3	10.8	7	3.60	2.33
Counter	2	9.6	6	4.80	3.00
Brick Break		48	-40	1.20	OD↓
Close Combat		120	-45	2.67	D↓2
Dynamic Punch		108	-45	2.40	
Payback		132	-60	2.20	

0/12/13·26 (2499)
0/13/15·15.5 (1500)

300 CG 4 Gen VIII Galar Legendary

Kubfu (271) → **Single Strike Style Urshifu**

#0128 Paldean Blaze Tauros — 210 193 181 194.67 194.31

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Double Kick	3	9.6	12	3.20	4.00
Earthquake		*110*	*-65*	*1.69*	
Iron Head		*70*	*-50*	*1.40*	
Flame Charge		78	-50	1.56	A↑
Trailblaze		*65*	*-45*	*1.44*	A↑

0/15/15·36 (2497)
0/11/15·20 (1498)

100 CG 2 Gen I Kanto

No evolution

#0145 Galarian Zapdos — 252 189 207 216.00 214.43

Counter	2	9.6	6	4.80	3.00
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Close Combat		120	-45	2.67	D↓2
Brave Bird		156	-55	2.84	D↓3
Fly		96	-45	2.13	

1/15/15·26 (2498)
3/15/14·15.5 (1497)
No evolution

100 CG 4 Gen I Kanto Legendary

Shadow Galarian Zapdos 302.4 157.5 207 222.30 214.43

#0701 Hawlucha — 195 153 186 178.00 177.04

Low Kick	2	4.8	5	2.40	2.50
Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Aerial Ace		72	-45	1.60	
X-Scissor		*65*	*-40*	*1.62*	
Power-Up Punch		24	-35	0.69	A↑
Flying Press		108	-40	2.70	

0/15/15·49 (2500) 0/15/14·49 (2493)
0/14/15·23.5 (1498)
No evolution

100 CG 3 Gen VI Kalos

#0802 Marshadow — 265 190 207 220.67 218.44

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Counter	2	9.6	6	4.80	3.00
Ice Punch		*60*	*-40*	*1.50*	
Rock Slide		*75*	*-45*	*1.67*	
Thunder Punch		*60*	*-40*	*1.50*	
Fire Punch		*60*	*-40*	*1.50*	
Close Combat		120	-45	2.67	D↓2

0/14/12·25 (2498)
0/14/12·15 (1499)
No evolution

100 CG 4 Gen VII Alola Mythical

#0979 Annihilape — 220 178 242 213.33 211.62

Low Kick	2	4.8	5	2.40	2.50
Counter	2	9.6	6	4.80	3.00
Ice Punch		*60*	*-40*	*1.50*	
Night Slash		*50*	*-35*	*1.43*	
Low Sweep		48	-40	1.20	
Shadow Ball		120	-55	2.18	
Close Combat		120	-45	2.67	D↓2
Rage Fist		**60**	**-35**	**1.71**	**A↑**

0/15/15·28.5 (2492)
2/15/15·17 (1499) 2/15/14·17 (1497)
Mankey (263) → Primeape (264) → **Annihilape**

500 CG 2 Gen IX Paldea

Shadow Annihilape 264 148.333 242 218.11 211.62

#0740 Crabominable ✧ 231 138 219 196.00 191.12

Bubble	*3*	*8*	*11*	*2.67*	*3.67*
Rock Smash	3	10.8	7	3.60	2.33
Ice Punch		72	-40	1.80	
Brick Break		48	-40	1.20	OD↓
Crabhammer		*85*	*-50*	*1.70*	*12.5%A↑2*
Power-Up Punch		24	-35	0.69	A↑
Payback		*110*	*-60*	*1.83*	

0/15/12·34.5 (2499)
0/11/15·19.5 (1500)
Crabrawler (269) → **Crabominable**

300 CG 2 Gen VII Alola

#0215 Hisuian Sneasel ✧ 189 146 146 160.33 159.12

Poison Jab	2	8.4	7	4.20	3.50
Rock Smash	3	10.8	7	3.60	2.33
Aerial Ace		*60*	*-45*	*1.33*	
X-Scissor		*65*	*-40*	*1.62*	
Close Combat		120	-45	2.67	D↓2

15/15/15·50 (2319)
1/15/14·27.5 (1496)
Hisuian Sneasel → Sneasler (273)

100 CG 2 Gen II Johto

Shadow Hisuian Sneasel 226.8 121.667 146 164.82 159.12

#0903 Sneasler ✧ 259 158 190 202.33 198.11

Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Poison Jab	2	8.4	7	4.20	3.50
Rock Smash	3	10.8	7	3.60	2.33
Aerial Ace		*60*	*-45*	*1.33*	
X-Scissor		*65*	*-40*	*1.62*	
Close Combat		120	-45	2.67	D↓2

2/15/15·28.5 (2499)
0/15/9·17.5 (1500)
Hisuian Sneasel (273) → **Sneasler**

300 CG 3 Gen VIII Hisui

Shadow Sneasler 310.8 131.667 190 210.82 198.11

#0307 Meditite ✧ 78 107 102 95.67 94.77

Confusion	4	19.2	14	4.80	3.50
Rock Smash	3	10.8	7	3.60	2.33
Ice Punch		*60*	*-40*	*1.50*	
Low Sweep		48	-40	1.20	
Psyshock		84	-40	2.10	

15/15/15·50 (784)
Meditite → Medicham (274)

100 CG 2 Gen III Hoenn

#0308 Medicham — 121 152 155 142.67 141.79

Psycho Cut	2	3.6	9	1.80	4.50
Counter	2	9.6	6	4.80	3.00
Ice Punch		*60*	*-40*	*1.50*	
Psychic		90	-55	1.64	10%OD↓
Dynamic Punch		108	-45	2.40	
Power-Up Punch		24	-35	0.69	A↑

300 CG 2 Gen III Hoenn

15/15/15·50 (1618) 15/15/14·50 (1613)
5/15/15·50 (1499) 5/15/14·50 (1494)
Meditite (273) → **Medicham**

#0448 Lucario — 236 144 172 184.00 180.14

Bullet Punch	2	9.6	7	4.80	3.50
Counter	2	9.6	6	4.80	3.00
Force Palm	**3**	**15.6**	**10**	**5.20**	**3.33**
Flash Cannon		132	-70	1.89	
Shadow Ball		*100*	*-55*	*1.82*	
Thunder Punch		*60*	*-40*	*1.50*	
Close Combat		120	-45	2.67	D↓2
Blaze Kick		*60*	*-40*	*1.50*	
Power-Up Punch		24	-35	0.69	A↑
Aura Sphere		96	-40	2.40	

300 CG 3 Gen IV Sinnoh

1/15/15·38.5 (2497)
1/15/15·20.5 (1494)
Riolu (267) → **Lucario**

#0889 Crowned Zamazenta — 250 292 192 244.67 241.11

Metal Claw	2	6	7	3.00	3.50
Ice Fang	*2*	*8*	*6*	*4.00*	*3.00*
Moonblast		*110*	*-60*	*1.83*	*10%OA↓*
Close Combat		120	-45	2.67	D↓2
Giga Impact		*150*	*-80*	*1.88*	
Behemoth Bash		96	-45	2.13	

300 CG 4 Gen VIII Galar Legendary

0/12/12·22.5 (2499)
0/9/14·13.5 (1499)
Zamazenta (270) → **Crowned Shield Zamazenta**

#0128 Paldean Aqua Tauros — 210 193 181 194.67 194.31

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Double Kick	3	9.6	12	3.20	4.00
Earthquake		*110*	*-65*	*1.69*	
Aqua Jet		84	-40	2.10	
Iron Head		*70*	*-50*	*1.40*	
Horn Attack		*40*	*-35*	*1.14*	
Trailblaze		*65*	*-45*	*1.44*	A↑

100 CG 2 Gen I Kanto

0/15/15·36 (2497)
0/11/15·20 (1498)
No evolution

#0892 Rapid Strike Style Urshifu 254 177 225 218.67 216.27

Rock Smash	3	10.8	7	3.60	2.33
Counter	2	9.6	6	4.80	3.00
Waterfall	3	14.4	8	4.80	2.67
Aqua Jet		84	-40	2.10	
Brick Break		48	-40	1.20	OD↓
Close Combat		120	-45	2.67	D↓2
Dynamic Punch		108	-45	2.40	

0/12/13·26 (2499)
0/13/15·15.5 (1500)

300 CG 4 Gen VIII Galar Legendary

Kubfu (271) → **Rapid Strike Style Urshifu**

#0004 Charmander 116 93 118 109.00 108.38

Ember	2	4.8	9	2.40	4.50
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑
Flame Burst		84	-55	1.53	

15/15/15·50 (1108)

100 CG 1 Gen I Kanto

Charmander → Charmeleon (275) → Charizard (287)

Shadow Charmander 139.2 77.5 118 111.57 108.38

#0005 Charmeleon 158 126 151 145.00 144.32

Ember	2	4.8	9	2.40	4.50
Scratch	**1**	**4**	**2**	**4.00**	**2.00**
Fire Fang	2	9.6	6	4.80	3.00
Flamethrower		108	-55	1.96	
Flame Burst		84	-55	1.53	
Fire Punch		72	-40	1.80	

15/15/15·50 (1868)
0/13/15·40 (1499)

300 CG 1 Gen I Kanto

Charmander (275) → **Charmeleon** → Charizard (287)

Shadow Charmeleon 189.6 105 151 148.53 144.32

#0037 Vulpix 96 109 116 107.00 106.67

Ember	2	4.8	9	2.40	4.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑
Body Slam		*55*	*-35*	*1.57*	
Weather Ball (Fire)		72	-35	2.06	

15/15/15·50 (998)

100 CG 2 Gen I Kanto

Vulpix → Ninetales (276)

Shadow Vulpix 115.2 90.8333 116 107.34 106.67

#0038 Ninetales ✧ — 169 190 177 178.67 178.46

Ember	**2**	**4.8**	**9**	**2.40**	**4.50**
Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		**108**	**-55**	**1.96**	
Heat Wave		114	-75	1.52	
Psyshock		*70*	*-40*	*1.75*	
Fire Blast		**168**	**-80**	**2.10**	
Solar Beam		*150*	*-80*	*1.88*	
Overheat		156	-55	2.84	A↓2
Weather Ball (Fire)		72	-35	2.06	
Scorching Sands		*80*	*-50*	*1.60*	*10%OA↓*

9/15/15·50 (2493)
0/15/15·25 (1495)

300 CG 2 Gen I Kanto

Vulpix (275) → **Ninetales**

Shadow Ninetales — 202.8 158.333 177 179.38 178.46

#0058 Growlithe ✧ — 136 93 146 125.00 122.69

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Ember	2	4.8	9	2.40	4.50
Flame Wheel		96	-45	2.13	
Flamethrower		108	-55	1.96	
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (1405)

100 CG 2 Gen I Kanto

Growlithe → Arcanine (276)

Shadow Growlithe — 163.2 77.5 146 128.90 122.69

#0059 Arcanine ✧ — 227 166 207 200.00 198.32

Bite	**1**	**4**	**2**	**4.00**	**2.00**
Fire Fang	2	9.6	6	4.80	3.00
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Thunder Fang	*2*	*8*	*6*	*4.00*	*3.00*
Flamethrower		108	-55	1.96	
Bulldoze		***45***	***-45***	***1.00***	***50%OD↓***
Fire Blast		168	-80	2.10	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Psychic Fangs		*40*	*-35*	*1.14*	*OD↓*
Scorching Sands		*80*	*-50*	*1.60*	*10%OA↓*

0/15/15·31.5 (2497)
0/14/15·18.5 (1498)

300 CG 2 Gen I Kanto

Growlithe (276) → **Arcanine**

Shadow Arcanine — 272.4 138.333 207 205.91 198.32

#0077 Ponyta ✧ — 170 127 137 144.67 143.55

Ember	2	4.8	9	2.40	4.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Flame Wheel		96	-45	2.13	
Flame Charge		78	-50	1.56	A↑
Fire Blast		**168**	**-80**	**2.10**	
Stomp		*55*	*-40*	*1.38*	

15/15/15·50 (1919)
0/15/14·37.5 (1499)
Ponyta → Rapidash (277)

100 CG 2 Gen I Kanto

Shadow Ponyta — 204 105.833 137 148.94 143.55

#0078 Rapidash ✧ — 207 162 163 177.33 176.15

Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Ember	**2**	**4.8**	**9**	**2.40**	**4.50**
Fire Spin	3	13.2	10	4.40	3.33
Incinerate	5	24	20	4.80	4.00
Heat Wave		114	-75	1.52	
Drill Run		*80*	*-45*	*1.78*	
Flame Charge		78	-50	1.56	A↑
Fire Blast		168	-80	2.10	
Wild Charge		***100***	***-45***	***2.22***	***D↓2***
Scorching Sands		*80*	*-50*	*1.60*	*10%OA↓*

0/15/14·47 (2495)
0/13/15·23 (1499)
Ponyta (277) → **Rapidash**

300 CG 2 Gen I Kanto

Shadow Rapidash — 248.4 135 163 182.13 176.15

#0126 Magmar ✧ — 206 154 163 174.33 172.93

Karate Chop	*2*	*5*	*9*	*2.50*	*4.50*
Ember	2	4.8	9	2.40	4.50
Flamethrower		108	-55	1.96	
Fire Blast		168	-80	2.10	
Fire Punch		72	-40	1.80	
Scorching Sands		*80*	*-50*	*1.60*	*10%OA↓*

0/14/15·49.5 (2500)
0/15/15·23.5 (1498)
Magmar → Magmortar (280)

100 CG 3 Gen I Kanto

Shadow Magmar — 247.2 128.333 163 179.51 172.93

#0136 Flareon ✧ — 246 179 163 196.00 192.90

Ember	2	4.8	9	2.40	4.50
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		108	-55	1.96	
Heat Wave		**114**	**-75**	**1.52**	
Fire Blast		168	-80	2.10	
Overheat		156	-55	2.84	A↓2
Last Resort		***90***	***-55***	***1.64***	
Superpower		***85***	***-40***	***2.12***	***A+D↓***

1/15/15·31 (2498)
0/15/13·18.5 (1500)
Eevee (353) → **Flareon**

300 CG 3 Gen I Kanto

#0155 Cyndaquil ✧ — 116 93 118 109.00 108.38

Ember	2	4.8	9	2.40	4.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑
Swift		*55*	*-35*	*1.57*	

100 CG 1 Gen II Johto

15/15/15·50 (1108)

Cyndaquil → Quilava (278) → Typhlosion (278)

Shadow Cyndaquil — 139.2 77.5 118 111.57 108.38

#0156 Quilava ✧ — 158 126 151 145.00 144.32

Ember	2	4.8	9	2.40	4.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Flamethrower		108	-55	1.96	
Dig		*70*	*-50*	*1.40*	
Flame Charge		78	-50	1.56	A↑

300 CG 1 Gen II Johto

15/15/15·50 (1868)
0/13/15·40 (1499)

Cyndaquil (278) → **Quilava** → Typhlosion (278)

Shadow Quilava — 189.6 105 151 148.53 144.32

#0157 Typhlosion ✧ — 223 173 186 194.00 192.88

Ember	2	4.8	9	2.40	4.50
Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Incinerate	5	24	20	4.80	4.00
Thunder Punch		*60*	*-40*	*1.50*	
Fire Blast		168	-80	2.10	
Solar Beam		*150*	*-80*	*1.88*	
Overheat		156	-55	2.84	A↓2
Blast Burn		**132**	**-50**	**2.64**	

500 CG 1 Gen II Johto

0/13/15·35 (2500)
0/15/13·19.5 (1500)

Cyndaquil (278) → Quilava (278) → **Typhlosion**

Shadow Typhlosion — 267.6 144.167 186 199.26 192.88

#0218 Slugma ✧ — 118 71 120 103.00 100.18

Ember	2	4.8	9	2.40	4.50
Rock Throw	*2*	*8*	*5*	*4.00*	*2.50*
Rock Slide		*75*	*-45*	*1.67*	
Flame Charge		78	-50	1.56	A↑
Flame Burst		84	-55	1.53	

100 CG 1 Gen II Johto

15/15/15·50 (1011)

Slugma → Magcargo (293)

#0240 Magby ✧ — 151 99 128 126.00 124.15

Karate Chop	*2*	*5*	*9*	*2.50*	*4.50*
Ember	2	4.8	9	2.40	4.50
Flamethrower		**108**	**-55**	**1.96**	
Flame Burst		84	-55	1.53	
Fire Punch		72	-40	1.80	
Brick Break		*40*	*-40*	*1.00*	*OD↓*

100 CG 1 Gen II Johto Baby

15/15/15·50 (1496)
No evolution

Shadow Magby — 181.2 82.5 128 130.57 124.15

#0244 Entei ✧ — 235 171 251 219.00 216.06

Fire Fang	2	9.6	6	4.80	3.00
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		108	-55	1.96	
Iron Head		*70*	*-50*	*1.40*	
Flame Charge		78	-50	1.56	A↑
Fire Blast		168	-80	2.10	
Overheat		156	-55	2.84	A↓2
Scorching Sands		*80*	*-50*	*1.60*	*10%OA↓*

100 CG 4 Gen II Johto Legendary

0/12/15·27 (2498) 0/13/14·27 (2500) (1 more)
1/15/15·16 (1498)
No evolution

#0255 Torchic ✧ — 130 87 128 115.00 113.12

Ember	2	4.8	9	2.40	4.50
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Flamethrower		108	-55	1.96	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Flame Charge		78	-50	1.56	A↑

100 CG 1 Gen III Hoenn

15/15/15·50 (1236)
Torchic → Combusken (285) → Blaziken (286)

Shadow Torchic — 156 72.5 128 118.83 113.12

#0324 Torkoal ✧ — 151 203 172 175.33 174.05

Ember	2	4.8	9	2.40	4.50
Fire Spin	3	13.2	10	4.40	3.33
Flame Wheel		96	-45	2.13	
Earthquake		*110*	*-65*	*1.69*	
Solar Beam		*150*	*-80*	*1.88*	
Overheat		156	-55	2.84	A↓2

100 CG 2 Gen III Hoenn

15/15/15·50 (2366)
0/15/15·27.5 (1496)
No evolution

#0351 Castform (Sunny) ✧ — 139 139 172 150.00 149.23

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Ember	2	4.8	9	2.40	4.50
Fire Blast		168	-80	2.10	
Solar Beam		*150*	*-80*	*1.88*	
Weather Ball (Fire)		72	-35	2.06	

15/15/15·50 (1845)
0/14/15·41.5 (1496)
No evolution

100 CG 3 Gen III Hoenn

#0390 Chimchar ✧ — 113 86 127 108.67 107.27

Ember	2	4.8	9	2.40	4.50
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Flame Wheel		96	-45	2.13	
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑

15/15/15·50 (1082)

100 CG 1 Gen IV Sinnoh

Chimchar → Monferno (286) → Infernape (286)

Shadow Chimchar — 135.6 71.6667 127 111.42 107.27

#0467 Magmortar ✧ — 247 172 181 200.00 197.38

Karate Chop	*2*	*5*	*9*	*2.50*	*4.50*
Fire Spin	3	13.2	10	4.40	3.33
Thunderbolt		***90***	***-55***	***1.64***	
Fire Blast		168	-80	2.10	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Fire Punch		72	-40	1.80	
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Scorching Sands		*80*	*-50*	*1.60*	*10%OA↓*

1/15/15·29.5 (2499)
0/10/15·18 (1498)

300 CG 3 Gen IV Sinnoh

Magmar (277) → **Magmortar**

Shadow Magmortar — 296.4 143.333 181 206.91 197.38

#0498 Tepig ✧ — 115 85 163 121.00 116.80

Ember	2	4.8	9	2.40	4.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (1224)

100 CG 1 Gen V Unova

Tepig → Pignite (287) → Emboar (287)

Shadow Tepig — 138 70.8333 163 123.94 116.80

#0513 Pansear ✧ — 104 94 137 111.67 110.23

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Fire Spin	3	13.2	10	4.40	3.33
Flame Charge		78	-50	1.56	A↑
Flame Burst		84	-55	1.53	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1081)

100 CG 2 Gen V Unova

Pansear → Simisear (281)

#0514 Simisear ✧ — 206 133 181 173.33 170.53

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		108	-55	1.96	
Fire Blast		168	-80	2.10	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

3/15/15·49.5 (2498)
0/14/15·24 (1497)

300 CG 2 Gen V Unova

Pansear (281) → **Simisear**

#0554 Darumaka ✧ — 153 86 172 137.00 131.29

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Fire Fang	2	9.6	6	4.80	3.00
Flame Charge		78	-50	1.56	A↑
Fire Punch		72	-40	1.80	

15/15/15·50 (1630)
2/15/14·50 (1500)

100 CG 2 Gen V Unova

Darumaka → Darmanitan (281)

Shadow Darumaka — 183.6 71.6667 172 142.42 131.29

#0555 Darmanitan ✧ — 263 114 233 203.33 191.16

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Fire Fang	2	9.6	6	4.80	3.00
Incinerate	5	24	20	4.80	4.00
Rock Slide		*75*	*-45*	*1.67*	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Focus Blast		*150*	*-75*	*2.00*	
Overheat		156	-55	2.84	A↓2

0/13/15·30 (2498)
0/15/11·18 (1498)

300 CG 2 Gen V Unova

Darumaka (281) → **Darmanitan**

Shadow Darmanitan — 315.6 95 233 214.53 191.16

#0631 Heatmor ✧ — 204 129 198 177.00 173.37

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		108	-55	1.96	
Thunder Punch		*60*	*-40*	*1.50*	
Power-Up Punch		*20*	*-35*	*0.57*	A↑

1/15/14·49 (2499)
0/15/15·23.5 (1498) 0/15/14·23.5 (1494)
No evolution

100 CG 2 Gen V Unova

#0653 Fennekin ✧ — 116 102 120 112.67 112.39

Ember	2	4.8	9	2.40	4.50
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Flamethrower		108	-55	1.96	
Psyshock		*70*	*-40*	*1.75*	
Flame Charge		78	-50	1.56	A↑

15/15/15·50 (1162)
Fennekin → Braixen (282) → Delphox (292)

100 CG 1 Gen VI Kalos

#0654 Braixen ✧ — 171 130 153 151.33 150.39

Ember	2	4.8	9	2.40	4.50
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Flamethrower		108	-55	1.96	
Psyshock		*70*	*-40*	*1.75*	
Flame Charge		78	-50	1.56	A↑

15/15/15·50 (2049)
0/15/15·33 (1500) 0/15/14·33 (1495)
Fennekin (282) → **Braixen** → Delphox (292)

300 CG 1 Gen VI Kalos

#0725 Litten ✧ — 128 79 128 111.67 108.98

Ember	2	4.8	9	2.40	4.50
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1170)
No evolution

100 CG 1 Gen VII Alola

#0726 Torracat ✧ — 174 103 163 146.67 142.95

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Ember	2	4.8	9	2.40	4.50
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1934)
0/15/13·37 (1499)
No evolution

100 CG 1 Gen VII Alola

#0813 Scorbunny — 132 79 137 116.00 112.63

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑

15/15/15·50 (1240)

100 CG 1 Gen VIII Galar

Scorbunny → Raboot (283) → Cinderace (283)

#0814 Raboot — 170 125 163 152.67 151.30

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑

15/15/15·50 (2062)
0/12/14·33.5 (1499)

300 CG 1 Gen VIII Galar

Scorbunny (283) → **Raboot** → Cinderace (283)

#0815 Cinderace ✧ — 238 163 190 197.00 194.61

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑
Focus Blast		*150*	*-75*	*2.00*	

1/15/14·31.5 (2499)
0/15/15·18.5 (1500) 0/15/14·18.5 (1497)

500 CG 1 Gen VIII Galar

Scorbunny (283) → Raboot (283) → **Cinderace**

#0909 Fuecoco ✧ — 112 96 167 125.00 121.54

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Incinerate	5	24	20	4.80	4.00
Flamethrower		108	-55	1.96	
Disarming Voice		*70*	*-45*	*1.56*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1274) 15/15/14·50 (1271)

100 CG 1 Gen IX Paldea

Fuecoco → Crocalor (284) → Skeledirge (290)

#0910 Crocalor ✧ — 162 134 191 162.33 160.65

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Incinerate	5	24	20	4.80	4.00
Flamethrower		108	-55	1.96	
Disarming Voice		*70*	*-45*	*1.56*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (2189)
0/15/10·30 (1500)

300 CG 1 Gen IX Paldea

Fuecoco (284) → **Crocalor** → Skeledirge (290)

#0935 Charcadet ✧ — 92 74 120 95.33 93.48

Ember	2	4.8	9	2.40	4.50
Incinerate	5	24	20	4.80	4.00
Flamethrower		108	-55	1.96	
Heat Wave		114	-75	1.52	
Flame Charge		78	-50	1.56	A↑

15/15/15·50 (828)

100 CG 2 Gen IX Paldea

Charcadet → Armarouge (292)

#0850 Sizzlipede — 118 90 137 115.00 113.31

Bug Bite	1	4.8	3	4.80	3.00
Ember	2	4.8	9	2.40	4.50
Heat Wave		114	-75	1.52	
Bug Buzz		120	-60	2.00	30%OD↓
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1186)

100 CG 3 Gen VIII Galar

Sizzlipede → Centiskorch (285)

#0851 Centiskorch — 220 158 225 201.00 198.50

Bug Bite	1	4.8	3	4.80	3.00
Ember	2	4.8	9	2.40	4.50
Heat Wave		114	-75	1.52	
Bug Buzz		120	-60	2.00	30%OD↓
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Lunge		72	-45	1.60	OA↓

0/15/15·32.5 (2499)
0/15/9·19 (1500)

300 CG 3 Gen VIII Galar

Sizzlipede (284) → **Centiskorch**

#0727 Incineroar ✧ — 214 175 216 201.67 200.74

Fire Fang	2	9.6	6	4.80	3.00
Snarl	3	6	13	2.00	4.33
Double Kick	*3*	*8*	*12*	*2.67*	*4.00*
Dark Pulse		96	-50	1.92	
Drain Punch		*20*	*-40*	*0.50*	*D↑*
Brutal Swing		66	-35	1.89	
Flame Charge		78	-50	1.56	A↑
Fire Blast		168	-80	2.10	
Blast Burn		**132**	**-50**	**2.64**	
Blaze Kick		72	-40	1.80	
Darkest Lariat		144	-60	2.40	

0/15/15·32.5 (2500)
0/15/9·19 (1500)

100 CG 1 Gen VII Alola

No evolution

#0776 Turtonator ✧ — 165 215 155 178.33 176.50

Ember	2	4.8	9	2.40	4.50
Fire Spin	3	13.2	10	4.40	3.33
Incinerate	5	24	20	4.80	4.00
Dragon Claw		96	-50	1.92	
Brutal Swing		*55*	*-35*	*1.57*	
Flamethrower		108	-55	1.96	
Flash Cannon		*110*	*-70*	*1.57*	
Dragon Pulse		108	-55	1.96	
Overheat		156	-55	2.84	A↓2

15/14/14·50 (2500)
0/12/14·26 (1499)

100 CG 3 Gen VII Alola

No evolution

#0256 Combusken ✧ — 163 115 155 144.33 142.69

Ember	2	4.8	9	2.40	4.50
Peck	*2*	*6*	*8*	*3.00*	*4.00*
Flamethrower		108	-55	1.96	
Rock Slide		*75*	*-45*	*1.67*	
Flame Charge		78	-50	1.56	A↑

15/15/15·50 (1868) 15/15/14·50 (1862)
0/15/14·39.5 (1498)

300 CG 1 Gen III Hoenn

Torchic (279) → **Combusken** → Blaziken (286)

Shadow Combusken — 195.6 95.8333 155 148.81 142.69

#0257 Blaziken ✧ — 240 141 190 190.33 185.95

Counter	2	9.6	6	4.80	3.00
Fire Spin	3	13.2	10	4.40	3.33
Stone Edge		***100***	***-55***	***1.82***	
Focus Blast		180	-75	2.40	
Brave Bird		*130*	*-55*	*2.36*	D↓3
Overheat		156	-55	2.84	A↓2
Blast Burn		**132**	**-50**	**2.64**	
Blaze Kick		72	-40	1.80	

1/15/15·35 (2499)
1/15/15·19.5 (1499) 1/15/14·19.5 (1496)

500 CG 1 Gen III Hoenn

Torchic (279) → Combusken (285) → **Blaziken**

Shadow Blaziken — 288 117.5 190 198.50 185.95

#0391 Monferno ✧ — 158 105 162 141.67 139.03

Ember	2	4.8	9	2.40	4.50
Rock Smash	3	10.8	7	3.60	2.33
Flame Wheel		96	-45	2.13	
Flamethrower		108	-55	1.96	
Low Sweep		48	-40	1.20	

15/15/15·50 (1780)
0/15/14·43.5 (1498)

300 CG 1 Gen IV Sinnoh

Chimchar (280) → **Monferno** → Infernape (286)

Shadow Monferno — 189.6 87.5 162 146.37 139.03

#0392 Infernape ✧ — 222 151 183 185.33 183.06

Rock Smash	3	10.8	7	3.60	2.33
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		108	-55	1.96	
Solar Beam		*150*	*-80*	*1.88*	
Close Combat		120	-45	2.67	D↓2
Blast Burn		**132**	**-50**	**2.64**	

1/15/14·39.5 (2500)
0/13/15·21 (1499)

500 CG 1 Gen IV Sinnoh

Chimchar (280) → Monferno (286) → **Infernape**

Shadow Infernape — 266.4 125.833 183 191.74 183.06

#0499 Pignite ✧ — 173 106 207 162.00 155.99

Ember	2	4.8	9	2.40	4.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Flamethrower		108	-55	1.96	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Flame Charge		78	-50	1.56	A↑

15/15/15·50 (2175)
0/15/15·29.5 (1492)

300 CG 1 Gen V Unova

Tepig (280) → **Pignite** → Emboar (287)

Shadow Pignite — 207.6 88.3333 207 167.64 155.99

#0500 Emboar ✧ — 235 127 242 201.33 193.30

Low Kick	2	4.8	5	2.40	2.50
Ember	2	4.8	9	2.40	4.50
Heat Wave		114	-75	1.52	
Rock Slide		*75*	*-45*	*1.67*	
Flame Charge		78	-50	1.56	A↑
Focus Blast		180	-75	2.40	
Blast Burn		**132**	**-50**	**2.64**	

0/15/14·32.5 (2498)
0/14/9·19 (1498)

500 CG 1 Gen V Unova

Tepig (280) → Pignite (287) → **Emboar**

Shadow Emboar — 282 105.833 242 209.94 193.30

#0006 Charizard ✧ — 223 173 186 194.00 192.88

Air Slash	3	10.8	9	3.60	3.00
Fire Spin	3	13.2	10	4.40	3.33
Wing Attack	**2**	**6**	**7**	**3.00**	**3.50**
Ember	**2**	**4.8**	**9**	**2.40**	**4.50**
Dragon Breath	**1**	**3**	**4**	**3.00**	**4.00**
Air Cutter		54	-35	1.54	30%A↑
Fire Blast		168	-80	2.10	
Overheat		156	-55	2.84	A↓2
Dragon Claw		*80*	*-50*	*1.60*	
Blast Burn		**132**	**-50**	**2.64**	
Flamethrower		**108**	**-55**	**1.96**	

0/13/15·35 (2500)
0/15/13·19.5 (1500)

500 CG 1 Gen I Kanto

Charmander (275) → Charmeleon (275) → **Charizard**

Shadow Charizard — 267.6 144.167 186 199.26 192.88

#0146 Moltres ✧ — 251 181 207 213.00 211.08

Wing Attack	2	6	7	3.00	3.50
Fire Spin	3	13.2	10	4.40	3.33
Heat Wave		114	-75	1.52	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Fire Blast		168	-80	2.10	
Sky Attack		**90**	**-50**	**1.80**	
Overheat		156	-55	2.84	A↓2

0/14/12·27 (2499)
1/15/15·16 (1500) 1/15/14·16 (1497)

100 CG 4 Gen I Kanto Legendary

No evolution

Shadow Moltres — 301.2 150.833 207 219.68 211.08

#0250 Ho-Oh ✧ — 239 244 214 232.33 231.95

Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Extrasensory	*3*	*8*	*10*	*2.67*	*3.33*
Hidden Power	*3*	*9*	*8*	*3.00*	*2.67*
Incinerate	5	24	20	4.80	4.00
Earthquake		***110***	***-65***	***1.69***	
Fire Blast		168	-80	2.10	
Solar Beam		*150*	*-80*	*1.88*	
Brave Bird		156	-55	2.84	D↓3
Sacred Fire		**156**	**-65**	**2.40**	**50%OA↓**

1/15/14·24 (2497)
0/13/15·14.5 (1500)

100 CG 4 Gen II Johto Legendary

No evolution

Shadow Ho-Oh — 286.8 203.333 214 234.71 231.95

#0662 Fletchinder ✧ — 145 110 158 137.67 136.08

Ember	2	4.8	9	2.40	4.50
Peck	2	7.2	8	3.60	4.00
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Heat Wave		114	-75	1.52	
Aerial Ace		72	-45	1.60	
Flame Charge		78	-50	1.56	A↑
Fly		96	-45	2.13	

15/15/15·50 (1661)
0/14/15·50 (1499)

300 CG 1 Gen VI Kalos

Fletchling (376) → **Fletchinder** → Talonflame (289)

Shadow Fletchinder — 174 91.6667 158 141.22 136.08

#0663 Talonflame ✧ — 176 155 186 172.33 171.84

Peck	2	7.2	8	3.60	4.00
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Fire Spin	3	13.2	10	4.40	3.33
Incinerate	**5**	**24**	**20**	**4.80**	**4.00**
Flame Charge		78	-50	1.56	A↑
Fire Blast		168	-80	2.10	
Hurricane		132	-65	2.03	
Brave Bird		156	-55	2.84	D↓3
Fly		96	-45	2.13	

15/15/15·50 (2493) 15/15/14·50 (2486)
0/13/15·26 (1500) 0/13/14·26 (1496)
Fletchling (376) → Fletchinder (288) → **Talonflame**

500 CG 1 Gen VI Kalos

Shadow Talonflame 211.2 129.167 186 175.46 171.84

#0741 Oricorio (Baile) ✧ — 196 145 181 174.00 172.62

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Air Cutter		54	-35	1.54	30%A↑
Hurricane		132	-65	2.03	

4/15/15·50 (2500)
0/13/13·24.5 (1500)
No evolution

100 CG 3 Gen VII Alola

#0105 Alolan Marowak ✧ — 144 186 155 161.67 160.72

Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Hex	3	8.4	13	2.80	4.33
Fire Spin	3	13.2	10	4.40	3.33
Flame Wheel		96	-45	2.13	
Shadow Ball		120	-55	2.18	
Bone Club		*55*	*-35*	*1.57*	
Fire Blast		168	-80	2.10	
Shadow Bone		**96**	**-45**	**2.13**	**20%OD↓**

15/15/15·50 (2075) 15/15/14·50 (2069)
0/14/14·33.5 (1500)
Cubone (332) → **Alolan Marowak**

300 CG 2 Gen I Kanto

Shadow Alolan Marowak 172.8 155 155 160.93 160.72

#0157 Hisuian Typhlosion ✧ — 238 172 177 195.67 193.51

Ember	2	4.8	9	2.40	4.50
Hex	3	8.4	13	2.80	4.33
Shadow Ball		120	-55	2.18	
Fire Punch		72	-40	1.80	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*
Night Shade		96	-45	2.13	12.5%A↑2
Overheat		156	-55	2.84	A↓2

1/15/14·32 (2498)
0/11/12·19 (1500)
No evolution

100 CG 1 Gen II Johto

Shadow Hisuian Typhlosion 285.6 143.333 177 201.98 193.51

#0806 Blacephalon ✧ — 315 148 142 201.67 187.77

Astonish	3	14.4	10	4.80	3.33
Incinerate	5	24	20	4.80	4.00
Shadow Ball		120	-55	2.18	
Overheat		156	-55	2.84	A↓2
Mystical Fire		72	-45	1.60	OA↓

0/13/14·28 (2494)
3/15/15·16.5 (1497)
No evolution

100 CG 4 Gen VII Alola Ultra Beast

#0911 Skeledirge ✧ — 207 178 232 205.67 204.47

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Hex	3	8.4	13	2.80	4.33
Incinerate	5	24	20	4.80	4.00
Flamethrower		108	-55	1.96	
Shadow Ball		120	-55	2.18	
Disarming Voice		*70*	*-45*	*1.56*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Blast Burn		**132**	**-50**	**2.64**	
Torch Song		84	-45	1.87	A↑

0/15/15·32 (2500)
1/15/15·18.5 (1499) 1/15/14·18.5 (1496)
Fuecoco (284) → Crocalor (284) → **Skeledirge**

500 CG 1 Gen IX Paldea

#0937 Ceruledge ✧ — 239 189 181 203.00 201.46

Ember	2	4.8	9	2.40	4.50
Incinerate	5	24	20	4.80	4.00
Flamethrower		108	-55	1.96	
Heat Wave		114	-75	1.52	
Shadow Ball		120	-55	2.18	
Flame Charge		78	-50	1.56	A↑

0/15/12·29.5 (2496)
1/15/15·17.5 (1498)
Charcadet (284) → **Ceruledge**

300 CG 2 Gen IX Paldea

#0322 Numel ✧ — 119 79 155 117.67 113.37

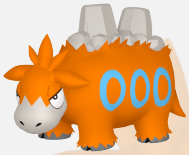
Ember	2	4.8	9	2.40	4.50
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Heat Wave		114	-75	1.52	
Bulldoze		54	-45	1.20	50%OD↓
Stomp		*55*	*-40*	*1.38*	

15/15/15·50 (1196) 15/15/14·50 (1192)
Numel → Camerupt (291)

100 CG 2 Gen III Hoenn

Shadow Numel — 142.8 65.8333 155 121.21 113.37

#0323 Camerupt ✧ — 194 136 172 167.33 165.56



Ember	2	4.8	9	2.40	4.50
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Incinerate	5	24	20	4.80	4.00
Earthquake		132	-65	2.03	
Solar Beam		*150*	*-80*	*1.88*	
Overheat		156	-55	2.84	A↓2
Earth Power		108	-55	1.96	10%OD↓

15/15/15·50 (2479)
0/14/13·26 (1499)

300 CG 2 Gen III Hoenn

Numel (290) → **Camerupt**

Shadow Camerupt — 232.8 113.333 172 172.71 165.56

#0667 Litleo ✧ — 139 112 158 136.33 134.99

Ember	2	4.8	9	2.40	4.50
Tackle	1	3.6	3	3.60	3.00
Fire Fang	2	9.6	6	4.80	3.00
Incinerate	5	24	20	4.80	4.00
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1611)
4/15/15·50 (1496)

100 CG 1 Gen VI Kalos

Litleo → Pyroar (291)

#0668 Pyroar ✧ — 221 149 200 190.00 187.44

Ember	2	4.8	9	2.40	4.50
Fire Fang	2	9.6	6	4.80	3.00
Take Down	3	6	8	2.00	2.67
Incinerate	5	24	20	4.80	4.00
Dark Pulse		*80*	*-50*	*1.60*	
Flame Charge		78	-50	1.56	A↑
Solar Beam		*150*	*-80*	*1.88*	
Overheat		156	-55	2.84	A↓2

0/15/12·38 (2500)
0/15/10·20.5 (1500)

300 CG 1 Gen VI Kalos

Litleo (291) → **Pyroar**

#0655 Delphox ✧ — 230 189 181 200.00 198.89

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Zen Headbutt	3	9.6	6	3.20	2.00
Fire Spin	3	13.2	10	4.40	3.33
Psyshock		84	-40	2.10	
Flamethrower		108	-55	1.96	
Flame Charge		78	-50	1.56	A↑
Fire Blast		168	-80	2.10	
Psychic		90	-55	1.64	10%OD↓
Blast Burn		**132**	**-50**	**2.64**	
Mystical Fire		72	-45	1.60	OA↓

1/15/15·30.5 (2493)
0/11/14·18.5 (1499)

500 CG 1 Gen VI Kalos

Fennekin (282) → Braixen (282) → **Delphox**

#0936 Armarouge ✧ — 234 185 198 205.67 204.65

Ember	2	4.8	9	2.40	4.50
Incinerate	5	24	20	4.80	4.00
Flamethrower		108	-55	1.96	
Heat Wave		114	-75	1.52	
Psyshock		84	-40	2.10	
Flame Charge		78	-50	1.56	A↑

0/15/15·29 (2499)
0/13/15·17.5 (1500)

300 CG 2 Gen IX Paldea

Charcadet (284) → **Armarouge**

#0058 Hisuian Growlithe ✧ — 142 92 155 129.67 126.51

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Ember	2	4.8	9	2.40	4.50
Flamethrower		108	-55	1.96	
Rock Slide		90	-45	2.00	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1495) 15/15/14·50 (1490)

100 CG 2 Gen I Kanto

Hisuian Growlithe → Hisuian Arcanine (293)

Shadow Hisuian Growlithe — 170.4 76.6667 155 134.02 126.51

#0059 Hisuian Arcanine ✧ — 232 165 216 204.33 202.21

Fire Fang	2	9.6	6	4.80	3.00
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Flamethrower		108	-55	1.96	
Rock Slide		90	-45	2.00	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

0/10/15·30 (2497)
0/14/10·18 (1498)

300 CG 2 Gen I Kanto

Hisuian Growlithe (292) → **Hisuian Arcanine**

Shadow Hisuian Arcanine — 278.4 137.5 216 210.63 202.21

#0219 Magcargo ✧ — 139 191 137 155.67 153.79

Ember	2	4.8	9	2.40	4.50
Rock Throw	2	9.6	5	4.80	2.50
Incinerate	5	24	20	4.80	4.00
Stone Edge		120	-55	2.18	
Heat Wave		114	-75	1.52	
Rock Tomb		96	-50	1.92	OA↓
Overheat		156	-55	2.84	A↓2

15/15/15·50 (1924)
0/15/14·38.5 (1498)

300 CG 1 Gen II Johto

Slugma (278) → **Magcargo**

#0485 Heatran ✧ — 251 213 209 224.33 223.56

Bug Bite	*1*	*4*	*3*	*4.00*	*3.00*
Fire Spin	3	13.2	10	4.40	3.33
Flamethrower		108	-55	1.96	
Stone Edge		*100*	*-55*	*1.82*	
Iron Head		84	-50	1.68	
Fire Blast		168	-80	2.10	
Earth Power		*90*	*-55*	*1.64*	*10%OD↓*
Magma Storm		**78**	**-40**	**1.95**	

2/15/15·24.5 (2499)
0/14/10·15 (1498)

100 CG 4 Gen IV Sinnoh Legendary

No evolution

Shadow Heatran — 301.2 177.5 209 229.23 223.56

#0721 Volcanion — 252 216 190 219.33 217.87

Water Gun	1	3.6	3	3.60	3.00
Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Incinerate	5	24	20	4.80	4.00
Sludge Bomb		*80*	*-50*	*1.60*	
Hydro Pump		156	-75	2.08	
Overheat		156	-55	2.84	A↓2
Earth Power		*90*	*-55*	*1.64*	*10%OD↓*

0/15/15·25.5 (2495)
0/11/14·15.5 (1500)

100 CG 4 Gen VI Kalos Mythical

No evolution

#0641 Incarnate Form Tornadus ✧ 266 164 188 206.00 201.66

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Air Slash	3	10.8	9	3.60	3.00
Hyper Beam		*150*	*-80*	*1.88*	
Dark Pulse		*80*	*-50*	*1.60*	
Hurricane		132	-65	2.03	
Grass Knot		*90*	*-50*	*1.80*	

1/15/15·27.5 (2497)
1/15/15·16.5 (1498)
No evolution

100 CG 4 Gen V Unova Legendary

#0641 Therian Form Tornadus ✧ 238 189 188 205.00 203.73

Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Gust	4	19.2	12	4.80	3.00
Heat Wave		*95*	*-75*	*1.27*	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Hurricane		132	-65	2.03	
Focus Blast		*150*	*-75*	*2.00*	
Bleakwind Storm		**72**	**-45**	**1.60**	**OA↓**

0/14/15·29 (2500)
0/15/11·17.5 (1497)
No evolution

100 CG 4 Gen V Unova Legendary

#0821 Rookidee ✧ 88 67 116 90.33 88.11

Peck	2	7.2	8	3.60	4.00
Air Slash	3	10.8	9	3.60	3.00
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Sky Attack		90	-50	1.80	
Payback		*110*	*-60*	*1.83*	

15/15/15·50 (753)

100 CG 1 Gen VIII Galar

Rookidee → Corvisquire (294) → Corviknight (295)

#0822 Corvisquire ✧ 129 110 169 136.00 133.85

Peck	2	7.2	8	3.60	4.00
Air Slash	3	10.8	9	3.60	3.00
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Sky Attack		90	-50	1.80	
Payback		*110*	*-60*	*1.83*	

15/15/15·50 (1542)
12/15/15·49.5 (1500)

300 CG 1 Gen VIII Galar

Rookidee (294) → **Corvisquire** → Corviknight (295)

#0962 Bombirdier — 198 172 172 180.67 180.26

Sucker Punch	2	9.6	7	4.80	3.50
Wing Attack	2	6	7	3.00	3.50
Rock Throw	*2*	*8*	*5*	*4.00*	*2.50*
Aerial Ace		72	-45	1.60	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Payback		132	-60	2.20	
Fly		96	-45	2.13	

0/15/14·46.5 (2499)
0/11/14·23 (1499)
No evolution

100 CG 3 Gen IX Paldea

#0714 Noibat — 83 73 120 92.00 89.92

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Wing Attack	2	6	7	3.00	3.50
Heat Wave		*95*	*-75*	*1.27*	
Dragon Pulse		108	-55	1.96	
Air Cutter		54	-35	1.54	30%A↑

15/15/15·50 (754)
Noibat → Noivern (295)

100 CG 3 Gen VI Kalos

#0715 Noivern — 205 175 198 192.67 192.23

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Air Slash	3	10.8	9	3.60	3.00
Heat Wave		*95*	*-75*	*1.27*	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Hurricane		132	-65	2.03	
Draco Meteor		180	-65	2.77	A↓2
Boomburst		***150***	***-70***	***2.14***	

0/15/14·38 (2496)
0/15/12·20.5 (1497)
Noibat (295) → **Noivern**

300 CG 3 Gen VI Kalos

#0823 Corviknight — 163 192 221 192.00 190.53

Steel Wing	2	8.4	5	4.20	2.50
Air Slash	3	10.8	9	3.60	3.00
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Iron Head		**84**	**-50**	**1.68**	
Sky Attack		90	-50	1.80	
Payback		*110*	*-60*	*1.83*	

0/15/15·48.5 (2498)
0/13/14·23.5 (1500)
Rookidee (294) → Corvisquire (294) → **Corviknight**

500 CG 1 Gen VIII Galar

#0200 Misdreavus — 167 154 155 158.67 158.56

Astonish	3	14.4	10	4.80	3.33
Hex	3	8.4	13	2.80	4.33
Psywave	*1*	*3*	*4*	*3.00*	*4.00*
Dark Pulse		*80*	*-50*	*1.60*	
Shadow Sneak		60	-45	1.33	
Ominous Wind		54	-45	1.20	10%A+D↑

100 CG 2 Gen II Johto

15/15/15·50 (2178) 15/15/14·50 (2171)
1/15/15·29.5 (1499)
Misdreavus → Mismagius (297)

Shadow Misdreavus — 200.4 128.333 155 161.24 158.56

#0222 Galarian Corsola — 116 182 155 151.00 148.46

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Astonish	3	14.4	10	4.80	3.33
Power Gem		*85*	*-50*	*1.70*	
Rock Blast		*50*	*-40*	*1.25*	
Night Shade		96	-45	2.13	12.5%A↑2

100 CG 2 Gen II Johto

15/15/15·50 (1692) 15/15/14·50 (1687)
0/15/15·50 (1498) 0/15/14·50 (1494)
Galarian Corsola → Cursola (299)

#0353 Shuppet — 138 65 127 110.00 104.44

Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Astonish	3	14.4	10	4.80	3.33
Shadow Sneak		60	-45	1.33	
Ominous Wind		54	-45	1.20	10%A+D↑
Night Shade		96	-45	2.13	12.5%A↑2

100 CG 2 Gen III Hoenn

15/15/15·50 (1151)
Shuppet → Banette (296)

Shadow Shuppet — 165.6 54.1667 127 115.59 104.44

#0354 Banette — 218 126 162 168.67 164.48

Shadow Claw	2	7.2	8	3.60	4.00
Hex	3	8.4	13	2.80	4.33
Shadow Ball		120	-55	2.18	
Thunder		*100*	*-60*	*1.67*	
Dazzling Gleam		*90*	*-55*	*1.64*	

300 CG 2 Gen III Hoenn

6/15/15·50 (2498)
0/14/15·24.5 (1500)
Shuppet (296) → **Banette**

Shadow Banette — 261.6 105 162 176.20 164.48

#0355 Duskull — 70 162 85 105.67 98.78

Astonish	3	14.4	10	4.80	3.33
Hex	3	8.4	13	2.80	4.33
Shadow Sneak		60	-45	1.33	
Ominous Wind		54	-45	1.20	10%A+D↑
Night Shade		96	-45	2.13	12.5%A↑2

15/15/15·50 (798)

100 CG 2 Gen III Hoenn

Duskull → Dusclops (297) → Dusknoir (297)

Shadow Duskull — 84 135 85 101.33 98.78

#0356 Dusclops — 124 234 120 159.33 151.57

Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Hex	3	8.4	13	2.80	4.33
Ice Punch		*60*	*-40*	*1.50*	
Shadow Punch		66	-35	1.89	
Fire Punch		*60*	*-40*	*1.50*	
Poltergeist		180	-75	2.40	

15/15/15·50 (1799)
0/11/15·45 (1499)

300 CG 2 Gen III Hoenn

Duskull (297) → **Dusclops** → Dusknoir (297)

Shadow Dusclops — 148.8 195 120 154.60 151.57

#0429 Mismagius — 211 187 155 184.33 182.87

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Hex	3	8.4	13	2.80	4.33
Magical Leaf	*3*	*10*	*10*	*3.33*	*3.33*
Psywave	*1*	*3*	*4*	*3.00*	*4.00*
Dark Pulse		*80*	*-50*	*1.60*	
Shadow Ball		120	-55	2.18	
Dazzling Gleam		*90*	*-55*	*1.64*	

0/14/15·42 (2498)
0/15/15·21.5 (1500)

300 CG 2 Gen IV Sinnoh

Misdreavus (296) → **Mismagius**

Shadow Mismagius — 253.2 155.833 155 188.01 182.87

#0477 Dusknoir — 180 254 128 187.33 180.21

Astonish	3	14.4	10	4.80	3.33
Hex	3	8.4	13	2.80	4.33
Dark Pulse		*80*	*-50*	*1.60*	
Shadow Punch		66	-35	1.89	
Ominous Wind		54	-45	1.20	10%A+D↑
Shadow Ball		**120**	**-55**	**2.18**	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Dynamic Punch		*90*	*-45*	*2.00*	
Poltergeist		180	-75	2.40	

0/15/15·50 (2492)
0/14/13·24 (1498)

500 CG 2 Gen IV Sinnoh

Duskull (297) → Dusclops (297) → **Dusknoir**

Shadow Dusknoir — 216 211.667 128 185.22 180.21

#0562 Yamask ✧ — 95 141 116 117.33 115.82

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Astonish	3	14.4	10	4.80	3.33
Dark Pulse		*80*	*-50*	*1.60*	
Ominous Wind		54	-45	1.20	10%A+D↑
Shadow Ball		120	-55	2.18	

100 CG 2 Gen V Unova

15/15/15·50 (1110)
Yamask → Cofagrigus (298)

Shadow Yamask — 114 117.5 116 115.83 115.82

#0563 Cofagrigus ✧ — 163 237 151 183.67 180.01

Shadow Claw	2	7.2	8	3.60	4.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Astonish	3	14.4	10	4.80	3.33
Dark Pulse		*80*	*-50*	*1.60*	
Shadow Ball		120	-55	2.18	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

300 CG 2 Gen V Unova

10/15/15·50 (2498)
0/11/14·25.5 (1500)
Yamask (298) → **Cofagrigus**

Shadow Cofagrigus — 195.6 197.5 151 181.37 180.01

#0854 Sinistea — 134 96 120 116.67 115.57

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Astonish	3	14.4	10	4.80	3.33
Dark Pulse		*80*	*-50*	*1.60*	
Shadow Ball		120	-55	2.18	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

100 CG 2 Gen VIII Galar

15/15/15·50 (1287)
Sinistea → Polteageist (298)

#0855 Polteageist — 248 189 155 197.33 193.68

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Astonish	3	14.4	10	4.80	3.33
Hex	3	8.4	13	2.80	4.33
Dark Pulse		*80*	*-50*	*1.60*	
Shadow Ball		120	-55	2.18	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

300 CG 2 Gen VIII Galar

1/15/14·30.5 (2495)
2/15/15·18 (1495)
Sinistea (298) → **Polteageist**

#0864 Cursola ✧ — 253 182 155 196.67 192.53

Astonish	3	14.4	10	4.80	3.33
Hex	3	8.4	13	2.80	4.33
Shadow Ball		120	-55	2.18	
Brine		*60*	*-50*	*1.20*	
Rock Blast		*50*	*-40*	*1.25*	
Night Shade		96	-45	2.13	12.5%A↑2

0/12/15·31 (2500)
2/15/15·18 (1498)

300 CG 2 Gen VIII Galar

Galarian Corsola (296) → **Cursola**

Shadow Cursola — 303.6 151.667 155 203.42 192.53

#0971 Greavard — 105 106 137 116.00 115.10

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Lick	1	3.6	3	3.60	3.00
Dig		*70*	*-50*	*1.40*	
Shadow Ball		120	-55	2.18	
Psychic Fangs		*40*	*-35*	*1.14*	*OD↓*

15/15/15·50 (1149)

100 CG 2 Gen IX Paldea

Greavard → Houndstone (299)

#0972 Houndstone — 186 195 176 185.67 185.50

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Lick	1	3.6	3	3.60	3.00
Dig		*70*	*-50*	*1.40*	
Shadow Ball		120	-55	2.18	
Psychic Fangs		*40*	*-35*	*1.14*	*OD↓*

0/14/15·46 (2500)
1/14/15·22.5 (1500)

300 CG 2 Gen IX Paldea

Greavard (299) → **Houndstone**

#0999 Gimmighoul ✧ — 140 76 128 114.67 110.85

Astonish	3	14.4	10	4.80	3.33
Shadow Ball		120	-55	2.18	

15/15/15·50 (1248)

100 CG 1 Gen IX Paldea

Gimmighoul → Gholdengo (428)

#0442 Spiritomb — 169 199 137 168.33 166.40

Sucker Punch	2	9.6	7	4.80	3.50
Feint Attack	2	7.2	6	3.60	3.00
Rock Tomb		*80*	*-50*	*1.60*	*0A↓*
Shadow Sneak		60	-45	1.33	
Ominous Wind		54	-45	1.20	10%A+D↑
Shadow Ball		120	-55	2.18	

15/15/15·50 (2343)
0/15/15·27.5 (1495)
No evolution

100 CG 3 Gen IV Sinnoh

#0487 Altered Forme Giratina — 187 225 284 232.00 228.62

Dragon Breath	1	3.6	4	3.60	4.00
Shadow Claw	2	7.2	8	3.60	4.00
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Shadow Sneak		60	-45	1.33	
Dragon Claw		96	-50	1.92	
Shadow Force		**144**	**-90**	**1.60**	

0/14/15·28 (2497)
0/11/12·17 (1499)
No evolution

100 CG 4 Gen IV Sinnoh Legendary

Shadow Altered Forme Giratina — 224.4 187.5 284 231.97 228.62

#0487 Origin Forme Giratina — 225 187 284 232.00 228.62

Shadow Claw	2	7.2	8	3.60	4.00
Dragon Tail	3	10.8	12	3.60	4.00
Ominous Wind		54	-45	1.20	10%A+D↑
Shadow Ball		120	-55	2.18	
Dragon Pulse		108	-55	1.96	
Shadow Force		**144**	**-90**	**1.60**	

0/13/14·25.5 (2499)
0/10/11·15.5 (1500)
No evolution

100 CG 4 Gen IV Sinnoh Legendary

Shadow Origin Forme Giratina — 270 155.833 284 236.61 228.62

#0607 Litwick — 108 98 137 114.33 113.19

Ember	2	4.8	9	2.40	4.50
Astonish	3	14.4	10	4.80	3.33
Heat Wave		114	-75	1.52	
Flame Charge		78	-50	1.56	A↑
Flame Burst		84	-55	1.53	
Mystical Fire		72	-45	1.60	0A↓

15/15/15·50 (1138)
Litwick → Lampent (301) → Chandelure (301)

100 CG 3 Gen V Unova

Shadow Litwick — 129.6 81.6667 137 116.09 113.19

#0608 Lampent — 169 115 155 146.33 144.42

Ember	2	4.8	9	2.40	4.50
Astonish	3	14.4	10	4.80	3.33
Heat Wave		114	-75	1.52	
Flame Burst		84	-55	1.53	
Energy Ball		*90*	*-55*	*1.64*	*10%OD↓*

300 CG 3 Gen V Unova

15/15/15·50 (1931) 15/15/14·50 (1925)
0/15/14·37 (1497)
Litwick (300) → **Lampent** → Chandelure (301)

Shadow Lampent 202.8 95.8333 155 151.21 144.42

#0609 Chandelure — 271 182 155 202.67 197.00

Hex	3	8.4	13	2.80	4.33
Fire Spin	3	13.2	10	4.40	3.33
Incinerate	5	24	20	4.80	4.00
Shadow Ball		120	-55	2.18	
Flame Charge		78	-50	1.56	A↑
Overheat		156	-55	2.84	A↓2
Energy Ball		*90*	*-55*	*1.64*	*10%OD↓*
Poltergeist		**180**	**-75**	**2.40**	

500 CG 3 Gen V Unova

0/15/12·28.5 (2500)
0/15/14·17 (1500)
Litwick (300) → Lampent (301) → **Chandelure**

Shadow Chandelure 325.2 151.667 155 210.62 197.00

#0425 Drifloon — 117 80 207 134.67 124.67

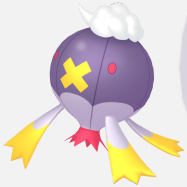
Astonish	3	14.4	10	4.80	3.33
Hex	3	8.4	13	2.80	4.33
Ominous Wind		54	-45	1.20	10%A+D↑
Shadow Ball		120	-55	2.18	
Icy Wind		*60*	*-45*	*1.33*	*OA↓*

100 CG 3 Gen IV Sinnoh

15/15/15·50 (1353)
Drifloon → Drifblim (301)

Shadow Drifloon 140.4 66.6667 207 138.02 124.67

#0426 Drifblim — 180 102 312 198.00 178.93



Astonish	3	14.4	10	4.80	3.33
Hex	3	8.4	13	2.80	4.33
Ominous Wind		54	-45	1.20	10%A+D↑
Shadow Ball		120	-55	2.18	
Icy Wind		*60*	*-45*	*1.33*	*OA↓*
Mystical Fire		*60*	*-45*	*1.33*	*OA↓*

300 CG 3 Gen IV Sinnoh

1/15/15·50 (2499)
0/15/12·24 (1500)
Drifloon (301) → **Drifblim**

Shadow Drifblim 216 85 312 204.33 178.93

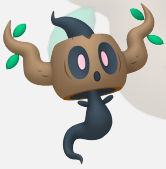
#0741 Oricorio (Sensu) — 196 145 181 174.00 172.62

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Air Cutter		54	-35	1.54	30%A↑
Hurricane		132	-65	2.03	

100 CG 3 Gen VII Alola

4/15/15·50 (2500)
0/13/13·24.5 (1500)
No evolution

#0708 Phantump — 125 103 125 117.67 117.19



Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Astonish	3	14.4	10	4.80	3.33
Seed Bomb		66	-40	1.65	
Shadow Ball		120	-55	2.18	
Foul Play		*60*	*-40*	*1.50*	

100 CG 3 Gen VI Kalos

15/15/15·50 (1270)
Phantump → Trevenant (302)

#0709 Trevenant — 201 154 198 184.33 183.00

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Shadow Claw	2	7.2	8	3.60	4.00
Seed Bomb		66	-40	1.65	
Shadow Ball		120	-55	2.18	
Foul Play		*60*	*-40*	*1.50*	

300 CG 3 Gen VI Kalos

1/15/15·43.5 (2500)
0/15/15·22 (1497)
Phantump (302) → **Trevenant**

#0710 Pumpkaboo — 121 123 135 126.33 126.19

Razor Leaf	2	10.8	4	5.40	2.00
Astonish	3	14.4	10	4.80	3.33
Shadow Sneak		60	-45	1.33	
Grass Knot		108	-50	2.16	
Foul Play		*60*	*-40*	*1.50*	

100 CG 3 Gen VI Kalos

15/15/15·50 (1381)
Pumpkaboo → Gourgeist (303)

#0710 Pumpkaboo Small ✧ 122 124 127 124.33 124.32

Razor Leaf	2	10.8	4	5.40	2.00
Astonish	3	14.4	10	4.80	3.33
Shadow Sneak		60	-45	1.33	
Grass Knot		108	-50	2.16	
Foul Play		*60*	*-40*	*1.50*	

15/15/15·50 (1359)

100 CG 3 Gen VI Kalos

Pumpkaboo Small → Gourgeist Small (304)

#0710 Pumpkaboo Large ✧ 120 122 144 128.67 128.22

Razor Leaf	2	10.8	4	5.40	2.00
Astonish	3	14.4	10	4.80	3.33
Shadow Sneak		60	-45	1.33	
Grass Knot		108	-50	2.16	
Foul Play		*60*	*-40*	*1.50*	

15/15/15·50 (1406)

100 CG 3 Gen VI Kalos

Pumpkaboo Large → Gourgeist Large (304)

#0710 Pumpkaboo Super ✧ 118 120 153 130.33 129.40

Razor Leaf	2	10.8	4	5.40	2.00
Astonish	3	14.4	10	4.80	3.33
Shadow Sneak		60	-45	1.33	
Grass Knot		108	-50	2.16	
Foul Play		*60*	*-40*	*1.50*	

15/15/15·50 (1414)

100 CG 3 Gen VI Kalos

Pumpkaboo Super → Gourgeist Super (304)

#0711 Gourgeist ✧ 175 213 163 183.67 182.47

Razor Leaf	2	10.8	4	5.40	2.00
Hex	3	8.4	13	2.80	4.33
Seed Bomb		66	-40	1.65	
Shadow Punch		66	-35	1.89	
Fire Blast		*140*	*-80*	*1.75*	
Foul Play		*60*	*-40*	*1.50*	
Poltergeist		180	-75	2.40	

1/14/15·50 (2498)
0/14/13·24 (1498)

300 CG 3 Gen VI Kalos

Pumpkaboo (302) → **Gourgeist**

#0711 Gourgeist Small ✧ — 171 219 146 178.67 176.17

Razor Leaf	2	10.8	4	5.40	2.00
Hex	3	8.4	13	2.80	4.33
Seed Bomb		66	-40	1.65	
Shadow Punch		66	-35	1.89	
Fire Blast		*140*	*-80*	*1.75*	
Foul Play		*60*	*-40*	*1.50*	
Poltergeist		180	-75	2.40	

11/15/15·50 (2494)
0/15/13·25.5 (1500)

300 CG 3 Gen VI Kalos

Pumpkaboo Small (303) → **Gourgeist Small**

#0711 Gourgeist Large ✧ — 179 206 181 188.67 188.28

Razor Leaf	2	10.8	4	5.40	2.00
Hex	3	8.4	13	2.80	4.33
Seed Bomb		66	-40	1.65	
Shadow Punch		66	-35	1.89	
Fire Blast		*140*	*-80*	*1.75*	
Foul Play		*60*	*-40*	*1.50*	
Poltergeist		180	-75	2.40	

1/14/15·45.5 (2499)
1/14/15·22.5 (1500)

300 CG 3 Gen VI Kalos

Pumpkaboo Large (303) → **Gourgeist Large**

#0711 Gourgeist Super ✧ — 182 200 198 193.33 193.16

Razor Leaf	2	10.8	4	5.40	2.00
Hex	3	8.4	13	2.80	4.33
Seed Bomb		66	-40	1.65	
Shadow Punch		66	-35	1.89	
Fire Blast		*140*	*-80*	*1.75*	
Foul Play		*60*	*-40*	*1.50*	
Poltergeist		180	-75	2.40	

0/14/14·42.5 (2498)
1/15/14·21.5 (1498)

300 CG 3 Gen VI Kalos

Pumpkaboo Super (303) → **Gourgeist Super**

#0781 Dhelmise — 233 179 172 194.67 192.86

Shadow Claw	2	7.2	8	3.60	4.00
Astonish	3	14.4	10	4.80	3.33
Metal Sound	*2*	*5*	*8*	*2.50*	*4.00*
Wrap		*60*	*-45*	*1.33*	*D↑*
Shadow Ball		120	-55	2.18	
Power Whip		108	-50	2.16	
Heavy Slam		*70*	*-50*	*1.40*	

0/15/15·33 (2494)
0/15/14·19 (1500)

100 CG 2 Gen VII Alola

No evolution

#0769 Sandygast — 120 118 146 128.00 127.39

Mud Shot	2	4.8	8	2.40	4.00
Astonish	3	14.4	10	4.80	3.33
Sand Attack	1	2.4	4	2.40	4.00
Shadow Ball		120	-55	2.18	
Sand Tomb		30	-40	0.75	OD↓
Earth Power		108	-55	1.96	10%OD↓
Scorching Sands		96	-50	1.92	10%OA↓

15/15/15·50 (1394)

100 CG 2 Gen VII Alola

Sandygast → Palossand (305)

#0770 Palossand — 178 178 198 184.67 184.43

Mud Shot	2	4.8	8	2.40	4.00
Astonish	3	14.4	10	4.80	3.33
Sand Attack	1	2.4	4	2.40	4.00
Shadow Ball		120	-55	2.18	
Sand Tomb		30	-40	0.75	OD↓
Earth Power		108	-55	1.96	10%OD↓
Scorching Sands		96	-50	1.92	10%OA↓

0/13/14·49 (2499)
0/15/11·23.5 (1499)

300 CG 2 Gen VII Alola

Sandygast (305) → **Palossand**

#0092 Gastly — 186 67 102 118.33 108.33

Sucker Punch	**2**	**8**	**7**	**4.00**	**3.50**
Lick	1	3.6	3	3.60	3.00
Astonish	3	14.4	10	4.80	3.33
Dark Pulse		*80*	*-50*	*1.60*	
Ominous Wind		**54**	**-45**	**1.20**	**10%A+D↑**
Sludge Bomb		96	-50	1.92	
Night Shade		96	-45	2.13	12.5%A↑2

15/15/15·50 (1390)

100 CG 2 Gen I Kanto

Gastly → Haunter (305) → Gengar (306)

Shadow Gastly — 223.2 55.8333 102 127.01 108.33

#0093 Haunter — 223 107 128 152.67 145.09

Lick	**1**	**3.6**	**3**	**3.60**	**3.00**
Shadow Claw	2	7.2	8	3.60	4.00
Astonish	3	14.4	10	4.80	3.33
Dark Pulse		*80*	*-50*	*1.60*	
Ice Punch		*60*	*-40*	*1.50*	
Shadow Punch		66	-35	1.89	
Shadow Ball		120	-55	2.18	
Sludge Bomb		96	-50	1.92	

15/15/15·50 (2219)
1/15/14·28.5 (1499)

300 CG 2 Gen I Kanto

Gastly (305) → **Haunter** → Gengar (306)

Shadow Haunter — 267.6 89.1667 128 161.59 145.09

#0094 Gengar — 261 149 155 188.33 181.99

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Lick	**1**	**3.6**	**3**	**3.60**	**3.00**
Shadow Claw	2	7.2	8	3.60	4.00
Hex	3	8.4	13	2.80	4.33
Drain Punch		*20*	*-40*	*0.50*	*D↑*
Dark Pulse		***80***	***-50***	***1.60***	
Shadow Punch		**66**	**-35**	**1.89**	
Shadow Ball		120	-55	2.18	
Sludge Bomb		96	-50	1.92	
Sludge Wave		**132**	**-65**	**2.03**	
Psychic		***75***	***-55***	***1.36***	***10%OD↓***
Focus Blast		*150*	*-75*	*2.00*	

0/15/14·34.5 (2500)
0/13/13·19.5 (1498)

500 CG 2 Gen I Kanto

Gastly (305) → Haunter (305) → **Gengar**

Shadow Gengar 313.2 124.167 155 197.46 181.99

#0114 Tangela — 183 169 163 171.67 171.46

Vine Whip	2	6	8	3.00	4.00
Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Sludge Bomb		*80*	*-50*	*1.60*	
Solar Beam		180	-80	2.25	
Power Whip		**108**	**-50**	**2.16**	
Grass Knot		108	-50	2.16	

12/15/15·50 (2491)
0/13/15·25.5 (1498)

100 CG 2 Gen I Kanto

Tangela → Tangrowth (311)

Shadow Tangela 219.6 140.833 163 174.48 171.46

#0152 Chikorita — 92 122 128 114.00 112.84

Vine Whip	2	6	8	3.00	4.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Magical Leaf	3	12	10	4.00	3.33
Body Slam		*55*	*-35*	*1.57*	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (1057)

100 CG 1 Gen II Johto

Chikorita → Bayleef (307) → Meganium (307)

Shadow Chikorita 110.4 101.667 128 113.36 112.84

#0153 Bayleef ✧ 122 155 155 144.00 143.11

Razor Leaf	2	10.8	4	5.40	2.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Magical Leaf	3	12	10	4.00	3.33
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (1644) 15/15/14·50 (1639)
3/15/15·50 (1500) 3/15/14·50 (1496)

300 CG 1 Gen II Johto

Chikorita (306) → **Bayleef** → Meganium (307)

Shadow Bayleef 146.4 129.167 155 143.52 143.11

#0154 Meganium ✧ 168 202 190 186.67 186.13

Vine Whip	2	6	8	3.00	4.00
Razor Leaf	2	10.8	4	5.40	2.00
Magical Leaf	3	12	10	4.00	3.33
Earthquake		*110*	*-65*	*1.69*	
Petal Blizzard		132	-65	2.03	
Solar Beam		180	-80	2.25	
Frenzy Plant		**120**	**-45**	**2.67**	

0/14/15·50 (2496)
0/10/15·24 (1499)

500 CG 1 Gen II Johto

Chikorita (306) → Bayleef (307) → **Meganium**

Shadow Meganium 201.6 168.333 190 186.64 186.13

#0182 Bellossom ✧ 169 186 181 178.67 178.52

Razor Leaf	2	10.8	4	5.40	2.00
Acid	*2*	*6*	*8*	*3.00*	*4.00*
Bullet Seed	3	6	13	2.00	4.33
Magical Leaf	3	12	10	4.00	3.33
Petal Blizzard		132	-65	2.03	
Dazzling Gleam		*90*	*-55*	*1.64*	
Leaf Blade		84	-35	2.40	

9/15/15·50 (2494)
1/14/14·25 (1497)

500 CG 2 Gen II Johto

Oddish (327) → Gloom (328) → **Bellossom**

Shadow Bellossom 202.8 155 181 179.60 178.52

#0191 Sunkern ✧ 55 55 102 70.67 67.57

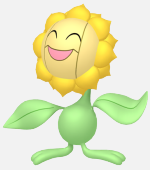
Razor Leaf	2	10.8	4	5.40	2.00
Cut	*1*	*3*	*2*	*3.00*	*2.00*
Seed Bomb		66	-40	1.65	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (447)

100 CG 2 Gen II Johto

Sunkern → Sunflora (308)

#0192 Sunflora ✧ — 185 135 181 167.00 165.35



Razor Leaf	2	10.8	4	5.40	2.00
Bullet Seed	3	6	13	2.00	4.33
Petal Blizzard		132	-65	2.03	
Sludge Bomb		*80*	*-50*	*1.60*	
Solar Beam		180	-80	2.25	
Leaf Storm		156	-55	2.84	A↓2

300 CG 2 Gen II Johto

15/15/15·50 (2421)
0/15/15·26.5 (1500) 0/15/14·26.5 (1496)
Sunkern (307) → **Sunflora**

#0252 Treecko ✧ — 124 94 120 112.67 111.83

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Bullet Seed	3	6	13	2.00	4.33
Aerial Ace		*60*	*-45*	*1.33*	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

100 CG 1 Gen III Hoenn

15/15/15·50 (1190)
Treecko → Grovyle (308) → Sceptile (308)

Shadow Treecko — 148.8 78.3333 120 115.71 111.83

#0253 Grovyle ✧ — 172 120 137 143.00 141.41

Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Bullet Seed	3	6	13	2.00	4.33
Aerial Ace		*60*	*-45*	*1.33*	
Leaf Blade		84	-35	2.40	
Grass Knot		108	-50	2.16	

300 CG 1 Gen III Hoenn

15/15/15·50 (1891)
0/15/14·38.5 (1500)
Treecko (308) → **Grovyle** → Sceptile (308)

Shadow Grovyle — 206.4 100 137 147.80 141.41

#0254 Sceptile ✧ — 223 169 172 188.00 186.45

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Bullet Seed	3	6	13	2.00	4.33
Earthquake		*110*	*-65*	*1.69*	
Aerial Ace		*60*	*-45*	*1.33*	
Dragon Claw		*80*	*-50*	*1.60*	
Leaf Blade		84	-35	2.40	
Frenzy Plant		**120**	**-45**	**2.67**	
Breaking Swipe		*50*	*-50*	*1.00*	OA↓

500 CG 1 Gen III Hoenn

0/15/13·38 (2496)
0/12/15·20.5 (1500)
Treecko (308) → Grovyle (308) → **Sceptile**

Shadow Sceptile — 267.6 140.833 172 193.48 186.45

#0273 Seedot ✧ — 71 77 120 89.33 86.89

Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Bullet Seed	3	6	13	2.00	4.33
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓
Foul Play		*60*	*-40*	*1.50*	

100 CG 2 Gen III Hoenn

15/15/15·50 (676)

Seedot → Nuzleaf (318) → Shiftry (318)

Shadow Seedot — 85.2 64.1667 120 89.79 86.89

#0285 Shroomish ✧ — 74 110 155 113.00 108.06

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Bullet Seed	3	6	13	2.00	4.33
Seed Bomb		66	-40	1.65	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

500 CG 2 Gen III Hoenn

15/15/15·50 (916) 15/15/14·50 (913)

Shroomish → Breloom (321)

#0331 Cacnea ✧ — 156 74 137 122.33 116.51

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Poison Sting	*2*	*4*	*9*	*2.00*	*4.50*
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Seed Bomb		66	-40	1.65	
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Grass Knot		108	-50	2.16	
Payback		*110*	*-60*	*1.83*	
Trailblaze		78	-45	1.73	A↑

100 CG 2 Gen III Hoenn

15/15/15·50 (1404)

Cacnea → Cacturne (318)

Shadow Cacnea — 187.2 61.6667 137 128.62 116.51

#0387 Turtwig ✧ — 119 110 146 125.00 124.10

Razor Leaf	2	10.8	4	5.40	2.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Seed Bomb		66	-40	1.65	
Body Slam		*55*	*-35*	*1.57*	
Energy Ball		108	-55	1.96	10%OD↓

100 CG 1 Gen IV Sinnoh

15/15/15·50 (1342)

Turtwig → Grotle (310) → Torterra (324)

Shadow Turtwig — 142.8 91.6667 146 126.82 124.10

#0388 Grotle ✧ 157 143 181 160.33 159.58

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Razor Leaf	2	10.8	4	5.40	2.00
Solar Beam		180	-80	2.25	
Body Slam		*55*	*-35*	*1.57*	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (2137)
0/15/11·31.5 (1500)

300 CG 1 Gen IV Sinnoh

Turtwig (309) → **Grotle** → Torterra (324)

Shadow Grotle 188.4 119.167 181 162.86 159.58

#0420 Cherubi ✧ 108 92 128 109.33 108.34

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Bullet Seed	3	6	13	2.00	4.33
Petal Blizzard		132	-65	2.03	
Seed Bomb		66	-40	1.65	
Dazzling Gleam		*90*	*-55*	*1.64*	

15/15/15·50 (1074)

100 CG 1 Gen IV Sinnoh

Cherubi → Cherrim (Sunny Form) (310)

#0421 Cherrim (Sunny Form) ✧ 170 153 172 165.00 164.77

Razor Leaf	2	10.8	4	5.40	2.00
Bullet Seed	3	6	13	2.00	4.33
Hyper Beam		*150*	*-80*	*1.88*	
Dazzling Gleam		*90*	*-55*	*1.64*	
Solar Beam		180	-80	2.25	
Weather Ball (Fire)		*60*	*-35*	*1.71*	

15/15/15·50 (2315)
0/13/15·28 (1496)

300 CG 1 Gen IV Sinnoh

Cherubi (310) → **Cherrim (Sunny Form)**

#0421 Cherrim (Overcast Form) ✧ 170 153 172 165.00 164.77

Razor Leaf	2	10.8	4	5.40	2.00
Bullet Seed	3	6	13	2.00	4.33
Hyper Beam		*150*	*-80*	*1.88*	
Dazzling Gleam		*90*	*-55*	*1.64*	
Solar Beam		180	-80	2.25	

15/15/15·50 (2315)
0/13/15·28 (1496)

300 CG 1 Gen IV Sinnoh

Cherubi (310) → **Cherrim (Overcast Form)**

#0455 Carnivine ✧ 187 136 179 167.33 165.73

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Vine Whip	2	6	8	3.00	4.00
Power Whip		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

100 CG 3 Gen IV Sinnoh

15/15/15·50 (2441)
0/14/13·26.5 (1500)
No evolution

#0465 Tangrowth ✧ 207 184 225 205.33 204.64

Vine Whip	2	6	8	3.00	4.00
Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Rock Slide		*75*	*-45*	*1.67*	
Sludge Bomb		*80*	*-50*	*1.60*	
Solar Beam		180	-80	2.25	
Power Whip		108	-50	2.16	

300 CG 2 Gen IV Sinnoh

0/14/15·32 (2496)
1/15/15·18.5 (1500) 1/15/14·18.5 (1497)
Tangela (306) → **Tangrowth**

Shadow Tangrowth 248.4 153.333 225 208.91 204.64

#0470 Leafeon ✧ 216 219 163 199.33 197.56

Razor Leaf	2	10.8	4	5.40	2.00
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Bullet Seed	**3**	**6**	**13**	**2.00**	**4.33**
Solar Beam		180	-80	2.25	
Leaf Blade		84	-35	2.40	
Energy Ball		108	-55	1.96	10%OD↓
Last Resort		***90***	***-55***	***1.64***	

300 CG 3 Gen IV Sinnoh

0/14/13·34 (2497)
1/15/14·19 (1497)
Eevee (353) → **Leafeon**

#0492 Shaymin ✧ 210 210 225 215.00 214.89

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Hidden Power	3	10.8	8	3.60	2.67
Solar Beam		180	-80	2.25	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓
Seed Flare		156	-75	2.08	40%OD↓2

100 CG 4 Gen IV Sinnoh Mythical

0/15/10·29 (2499)
0/10/13·17.5 (1500)
No evolution

#0495 Snivy ✧ — 88 107 128 107.67 106.42

Vine Whip	2	6	8	3.00	4.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Wrap		*60*	*-45*	*1.33*	*D↑*
Seed Bomb		66	-40	1.65	
Energy Ball		108	-55	1.96	10%OD↓

100 CG 1 Gen V Unova

15/15/15·50 (960)

Snivy → Servine (312) → Serperior (312)

#0496 Servine ✧ — 122 152 155 143.00 142.18

Vine Whip	2	6	8	3.00	4.00
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Wrap		*60*	*-45*	*1.33*	*D↑*
Grass Knot		108	-50	2.16	
Leaf Tornado		54	-40	1.35	50%OA↓2

300 CG 1 Gen V Unova

15/15/15·50 (1629) 15/15/14·50 (1625)
4/15/15·50 (1499) 4/15/14·50 (1494)

Snivy (312) → **Servine** → Serperior (312)

#0497 Serperior ✧ — 161 204 181 182.00 181.15

Vine Whip	2	6	8	3.00	4.00
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Aerial Ace		*60*	*-45*	*1.33*	
Grass Knot		108	-50	2.16	
Frenzy Plant		**120**	**-45**	**2.67**	
Leaf Tornado		54	-40	1.35	50%OA↓2

500 CG 1 Gen V Unova

10/14/15·50 (2495)
0/10/15·25.5 (1500)

Snivy (312) → Servine (312) → **Serperior**

#0511 Pansage ✧ — 104 94 137 111.67 110.23

Vine Whip	2	6	8	3.00	4.00
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Seed Bomb		66	-40	1.65	
Energy Ball		108	-55	1.96	10%OD↓
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

100 CG 2 Gen V Unova

15/15/15·50 (1081)

Pansage → Simisage (313)

#0512 Simisage ✧ 206 133 181 173.33 170.53

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Vine Whip	2	6	8	3.00	4.00
Solar Beam		180	-80	2.25	
Grass Knot		108	-50	2.16	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

300 CG 2 Gen V Unova

3/15/15·49.5 (2498)
0/14/15·24 (1497)
Pansage (312) → **Simisage**

#0548 Petilil ✧ 119 91 128 112.67 111.50

Hidden Power	3	10.8	8	3.60	2.67
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Seed Bomb		66	-40	1.65	
Energy Ball		108	-55	1.96	10%OD↓

100 CG 1 Gen V Unova

15/15/15·50 (1164)
Petilil → Lilligant (313)

#0549 Lilligant ✧ 214 155 172 180.33 178.69

Hidden Power	3	10.8	8	3.60	2.67
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Magical Leaf	3	12	10	4.00	3.33
Hyper Beam		*150*	*-80*	*1.88*	
Petal Blizzard		132	-65	2.03	
Solar Beam		180	-80	2.25	

300 CG 1 Gen V Unova

0/13/14·44.5 (2499)
0/15/15·22 (1497)
Petilil (313) → **Lilligant**

#0549 Hisuian Lilligant ✧ 214 155 172 180.33 178.69

Hidden Power	3	10.8	8	3.60	2.67
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Magical Leaf	3	12	10	4.00	3.33
Hyper Beam		*150*	*-80*	*1.88*	
Petal Blizzard		132	-65	2.03	
Solar Beam		180	-80	2.25	

100 CG 1 Gen V Unova

0/13/14·44.5 (2499)
0/15/15·22 (1497)
No evolution

#0556 Maractus ✧ 201 130 181 170.67 167.86

Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Bullet Seed	3	6	13	2.00	4.33
Aerial Ace		*60*	*-45*	*1.33*	
Petal Blizzard		132	-65	2.03	
Solar Beam		180	-80	2.25	

100 CG 1 Gen V Unova

9/15/15·50 (2499)
0/13/14·25 (1497)
No evolution

#0650 Chespin ✧ 110 106 148 121.33 119.95

Vine Whip	2	6	8	3.00	4.00
Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Seed Bomb		66	-40	1.65	
Body Slam		*55*	*-35*	*1.57*	
Gyro Ball		*80*	*-50*	*1.60*	

100 CG 1 Gen VI Kalos

15/15/15·50 (1239) 15/15/14·50 (1235)
Chespin → Quilladin (314) → Chesnaught (322)

#0651 Quilladin ✧ 146 156 156 152.67 152.59

Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Vine Whip	2	6	8	3.00	4.00
Body Slam		*55*	*-35*	*1.57*	
Gyro Ball		*80*	*-50*	*1.60*	
Energy Ball		108	-55	1.96	10%OD↓

300 CG 1 Gen VI Kalos

15/15/15·50 (1943)
0/14/15·37.5 (1499)
Chespin (314) → **Quilladin** → Chesnaught (322)

#0672 Skiddo ✧ 123 102 165 130.00 127.45

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Seed Bomb		66	-40	1.65	
Brick Break		*40*	*-40*	*1.00*	*OD↓*

100 CG 2 Gen VI Kalos

15/15/15·50 (1414)
Skiddo → Gogoat (315)

#0673 Gogoat ✧ — 196 146 265 202.33 196.46

Vine Whip	2	6	8	3.00	4.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Seed Bomb		66	-40	1.65	
Leaf Blade		84	-35	2.40	
Brick Break		*40*	*-40*	*1.00*	*OD↓*

0/14/15·37.5 (2498)
2/15/15·20 (1500)
Skiddo (314) → **Gogoat**

300 CG 2 Gen VI Kalos

#0753 Fomantis ✧ — 100 64 120 94.67 91.58

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Razor Leaf	2	10.8	4	5.40	2.00
Leafage	2	7.2	8	3.60	4.00
Leaf Blade		84	-35	2.40	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓
Trailblaze		78	-45	1.73	A↑

15/15/15·50 (838)
Fomantis → Lurantis (315)

100 CG 2 Gen VII Alola

#0754 Lurantis ✧ — 192 169 172 177.67 177.38

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Razor Leaf	2	10.8	4	5.40	2.00
Leafage	2	7.2	8	3.60	4.00
X-Scissor		*65*	*-40*	*1.62*	
Leaf Blade		84	-35	2.40	
Superpower		*85*	*-40*	*2.12*	*A+D↓*
Leaf Storm		156	-55	2.84	A↓2
Trailblaze		78	-45	1.73	A↑

0/15/15·49.5 (2499)
0/15/15·23.5 (1493)
Fomantis (315) → **Lurantis**

300 CG 2 Gen VII Alola

#0761 Bounsweet ✧ — 55 69 123 82.33 77.57

Razor Leaf	2	10.8	4	5.40	2.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Draining Kiss		*60*	*-55*	*1.09*	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (532) 15/15/14·50 (530)
Bounsweet → Steenee (316) → Tsareena (316)

100 CG 1 Gen VII Alola

#0762 Steenee ✧ — 78 94 141 104.33 101.11

Razor Leaf	2	10.8	4	5.40	2.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Draining Kiss		*60*	*-55*	*1.09*	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓
Triple Axel		*60*	*-45*	*1.33*	*A↑*

15/15/15·50 (856)

300 CG 1 Gen VII Alola

Bounsweet (315) → **Steenee** → Tsareena (316)

#0763 Tsareena ✧ — 222 195 176 197.67 196.77

Razor Leaf	2	10.8	4	5.40	2.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Magical Leaf	3	12	10	4.00	3.33
Draining Kiss		*60*	*-55*	*1.09*	
Stomp		*55*	*-40*	*1.38*	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓
Triple Axel		*60*	*-45*	*1.33*	*A↑*
High Jump Kick		***110***	***-55***	***2.00***	***10%D↓4***

0/15/15·33 (2499)
0/15/13·19 (1499)

500 CG 1 Gen VII Alola

Bounsweet (315) → Steenee (316) → **Tsareena**

#0810 Grookey ✧ — 122 91 137 116.67 115.00

Razor Leaf	2	10.8	4	5.40	2.00
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (1227)

100 CG 1 Gen VIII Galar

Grookey → Thwackey (316) → Rillaboom (317)

Shadow Grookey — 146.4 75.8333 137 119.74 115.00

#0811 Thwackey ✧ — 165 134 172 157.00 156.09

Razor Leaf	2	10.8	4	5.40	2.00
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (2121)
0/14/13·31.5 (1498)

300 CG 1 Gen VIII Galar

Grookey (316) → **Thwackey** → Rillaboom (317)

Shadow Thwackey — 198 111.667 172 160.56 156.09

#0812 Rillaboom ✧ — 239 168 225 210.67 208.27

Razor Leaf	2	10.8	4	5.40	2.00
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓
Earth Power		*90*	*-55*	*1.64*	*10%OD↓*

0/14/15·28 (2495)
0/12/13·17 (1500)

500 CG 1 Gen VIII Galar

Grookey (316) → Thwackey (316) → **Rillaboom**

Shadow Rillaboom — 286.8 140 225 217.27 208.27

#0829 Gossifleur — 70 104 120 98.00 95.60

Razor Leaf	2	10.8	4	5.40	2.00
Bullet Seed	3	6	13	2.00	4.33
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (760)

100 CG 2 Gen VIII Galar

Gossifleur → Eldegoss (317)

#0830 Eldegoss — 148 211 155 171.33 169.16

Razor Leaf	2	10.8	4	5.40	2.00
Bullet Seed	3	6	13	2.00	4.33
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (2255) 15/15/14·50 (2249)
0/14/15·29 (1498)

300 CG 2 Gen VIII Galar

Gossifleur (317) → **Eldegoss**

#0906 Sprigatito ✧ — 116 99 120 111.67 111.28

Charm	*3*	*13*	*8*	*4.33*	*2.67*
Leafage	2	7.2	8	3.60	4.00
Play Rough		*90*	*-60*	*1.50*	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (1147)

100 CG 1 Gen IX Paldea

Sprigatito → Floragato (318) → Meowscarada (319)

#0907 Floragato ✧ — 157 128 156 147.00 146.36

Charm	*3*	*13*	*8*	*4.33*	*2.67*
Leafage	2	7.2	8	3.60	4.00
Play Rough		*90*	*-60*	*1.50*	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (1899)
0/13/15·39 (1500)

300 CG 1 Gen IX Paldea

Sprigatito (317) → **Floragato** → Meowscarada (319)

#0274 Nuzleaf ✧ — 134 78 172 128.00 121.59

Razor Leaf	2	10.8	4	5.40	2.00
Feint Attack	2	7.2	6	3.60	3.00
Leaf Blade		84	-35	2.40	
Grass Knot		108	-50	2.16	
Foul Play		72	-40	1.80	

15/15/15·50 (1387)

300 CG 2 Gen III Hoenn

Seedot (309) → **Nuzleaf** → Shiftry (318)

Shadow Nuzleaf — 160.8 65 172 132.60 121.59

#0275 Shiftry ✧ — 200 121 207 176.00 171.10

Razor Leaf	2	10.8	4	5.40	2.00
Feint Attack	2	7.2	6	3.60	3.00
Bullet Seed	**3**	**6**	**13**	**2.00**	**4.33**
Snarl	3	6	13	2.00	4.33
Leaf Blade		84	-35	2.40	
Hurricane		*110*	*-65*	*1.69*	
Foul Play		72	-40	1.80	
Leaf Tornado		54	-40	1.35	50%OA↓2

3/15/15·50 (2490)
0/14/11·24.5 (1500)

500 CG 2 Gen III Hoenn

Seedot (309) → Nuzleaf (318) → **Shiftry**

Shadow Shiftry — 240 100.833 207 182.61 171.10

#0332 Cacturne ✧ — 221 115 172 169.33 163.51

Sucker Punch	2	9.6	7	4.80	3.50
Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Dark Pulse		96	-50	1.92	
Dynamic Punch		*90*	*-45*	*2.00*	
Grass Knot		108	-50	2.16	
Payback		132	-60	2.20	
Trailblaze		78	-45	1.73	A↑

6/15/15·50 (2499)
0/14/15·24.5 (1500)

300 CG 2 Gen III Hoenn

Cacnea (309) → **Cacturne**

Shadow Cacturne — 265.2 95.8333 172 177.68 163.51

#0908 Meowscarada ✧ — 233 153 183 189.67 186.85

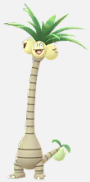
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Leafage	2	7.2	8	3.60	4.00
Night Slash		60	-35	1.71	
Play Rough		*90*	*-60*	*1.50*	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓
Frenzy Plant		**120**	**-45**	**2.67**	
Flower Trick		36	-35	1.03	A↑

0/15/14·36 (2496)
0/13/13·20 (1499)

500 CG 1 Gen IX Paldea

Sprigatito (317) → Floragato (318) → **Meowscarada**

#0103 Alolan Exeggutor ✧ — 230 153 216 199.67 196.62



Dragon Tail	3	10.8	12	3.60	4.00
Bullet Seed	3	6	13	2.00	4.33
Seed Bomb		66	-40	1.65	
Dragon Pulse		108	-55	1.96	
Solar Beam		180	-80	2.25	
Draco Meteor		**180**	**-65**	**2.77**	**A↓2**

1/15/15·31.5 (2497)
1/15/14·18.5 (1499)

300 CG 2 Gen I Kanto

Exeggcute (330) → **Alolan Exeggutor**

Shadow Alolan Exeggutor — 276 127.5 216 206.50 196.62

#0840 Applin — 71 116 120 102.33 99.61

Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (807)

100 CG 3 Gen VIII Galar

Applin → Flapple (319)

#0841 Flapple — 214 144 172 176.67 174.36

Dragon Breath	1	3.6	4	3.60	4.00
Bullet Seed	3	6	13	2.00	4.33
Seed Bomb		66	-40	1.65	
Dragon Pulse		108	-55	1.96	
Outrage		132	-60	2.20	
Fly		*80*	*-45*	*1.78*	

0/15/15·46.5 (2498) 0/15/14·46.5 (2491)
0/13/14·23 (1500)

300 CG 3 Gen VIII Galar

Applin (319) → **Flapple**

#0842 Appletun — 178 146 242 188.67 184.58

Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Bullet Seed	3	6	13	2.00	4.33
Seed Bomb		66	-40	1.65	
Dragon Pulse		108	-55	1.96	
Energy Ball		108	-55	1.96	10%OD↓
Outrage		132	-60	2.20	

0/15/15·48 (2496)
2/15/14·23 (1499)
Applin (319) → **Appletun**

300 CG 3 Gen VIII Galar

#0546 Cottonee ✨ — 71 111 120 100.67 98.16

Razor Leaf	2	10.8	4	5.40	2.00
Charm	3	15.6	8	5.20	2.67
Seed Bomb		66	-40	1.65	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (791)
Cottonee → Whimsicott (320)

100 CG 1 Gen V Unova

#0547 Whimsicott ✨ — 164 176 155 165.00 164.78

Razor Leaf	2	10.8	4	5.40	2.00
Charm	3	15.6	8	5.20	2.67
Fairy Wind	2	4.8	9	2.40	4.50
Seed Bomb		66	-40	1.65	
Moonblast		132	-60	2.20	10%OA↓
Hurricane		*110*	*-65*	*1.69*	
Grass Knot		108	-50	2.16	

15/15/15·50 (2277) 15/15/14·50 (2270)
0/14/15·28.5 (1499)
Cottonee (320) → **Whimsicott**

300 CG 1 Gen V Unova

#0755 Morelull ✨ — 108 119 120 115.67 115.54

Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Seed Bomb		66	-40	1.65	
Dazzling Gleam		108	-55	1.96	

15/15/15·50 (1168)
Morelull → Shiinotic (321)

500 CG 2 Gen VII Alola

#0756 Shiinotic — 154 168 155 159.00 158.87

Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Seed Bomb		66	-40	1.65	
Moonblast		132	-60	2.20	10%OA↓
Sludge Bomb		*80*	*-50*	*1.60*	

15/15/15·50 (2104) 15/15/14·50 (2098)
0/14/15·32 (1498)
Morelull (320) → **Shiinotic**

700 CG 2 Gen VII Alola

#0787 Tapu Bulu — 249 215 172 212.00 209.60

Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Bullet Seed	3	6	13	2.00	4.33
Megahorn		*110*	*-55*	*2.00*	
Dazzling Gleam		108	-55	1.96	
Solar Beam		180	-80	2.25	
Grass Knot		108	-50	2.16	
Nature's Madness		**96**	**-50**	**1.92**	OD↓

0/9/15·27.5 (2500)
0/14/11·16.5 (1500)
No evolution

100 CG 4 Gen VII Alola Legendary

#0286 Breloom — 241 144 155 180.00 175.21

Counter	2	9.6	6	4.80	3.00
Bullet Seed	3	6	13	2.00	4.33
Force Palm	3	15.6	10	5.20	3.33
Seed Bomb		66	-40	1.65	
Sludge Bomb		*80*	*-50*	*1.60*	
Dynamic Punch		108	-45	2.40	
Grass Knot		**108**	**-50**	**2.16**	

0/14/15·41 (2498)
2/15/15·21 (1497)
Shroomish (309) → **Breloom**

700 CG 2 Gen III Hoenn

#0640 Virizion — 192 229 209 210.00 209.46

Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Double Kick	3	9.6	12	3.20	4.00
Stone Edge		*100*	*-55*	*1.82*	
Leaf Blade		84	-35	2.40	
Close Combat		120	-45	2.67	D↓2
Sacred Sword		**72**	**-35**	**2.06**	

0/14/15·32.5 (2498)
0/12/11·19 (1498)
No evolution

100 CG 4 Gen V Unova Legendary

#0652 Chesnaught — 201 204 204 203.00 203.00

Low Kick	2	4.8	5	2.40	2.50
Vine Whip	2	6	8	3.00	4.00
Smack Down	*3*	*12*	*8*	*4.00*	*2.67*
Thunder Punch		*60*	*-40*	*1.50*	
Solar Beam		180	-80	2.25	
Gyro Ball		*80*	*-50*	*1.60*	
Energy Ball		108	-55	1.96	10%OD↓
Frenzy Plant		**120**	**-45**	**2.67**	
Superpower		102	-40	2.55	A+D↓

1/15/14·33.5 (2500)
1/15/15·19 (1499)

500 CG 1 Gen VI Kalos

Chespin (314) → Quilladin (314) → **Chesnaught**

#0724 Hisuian Decidueye — 213 174 204 197.00 196.27

Psycho Cut	*2*	*3*	*9*	*1.50*	*4.50*
Magical Leaf	3	12	10	4.00	3.33
Aerial Ace		*60*	*-45*	*1.33*	
Night Shade		*80*	*-45*	*1.78*	*12.5%A↑2*
Energy Ball		108	-55	1.96	10%OD↓
Aura Sphere		96	-40	2.40	
Trailblaze		78	-45	1.73	A↑

0/14/14·35 (2500)
0/15/13·19.5 (1500)

100 CG 1 Gen VII Alola

No evolution

#0187 Hoppip — 67 94 111 90.67 88.75

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Bullet Seed	3	6	13	2.00	4.33
Seed Bomb		66	-40	1.65	
Dazzling Gleam		*90*	*-55*	*1.64*	
Grass Knot		108	-50	2.16	

15/15/15·50 (678) 15/15/14·50 (675)

100 CG 2 Gen II Johto

Hoppip → Skiploom (322) → Jumpluff (323)

Shadow Hoppip — 80.4 78.3333 111 89.91 88.75

#0188 Skiploom — 91 120 146 119.00 116.82

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Bullet Seed	3	6	13	2.00	4.33
Dazzling Gleam		*90*	*-55*	*1.64*	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (1103)

300 CG 2 Gen II Johto

Hoppip (322) → **Skiploom** → Jumpluff (323)

Shadow Skiploom — 109.2 100 146 118.40 116.82

#0189 Jumpluff — 118 183 181 160.67 157.52

Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Bullet Seed	3	6	13	2.00	4.33
Fairy Wind	*2*	*4*	*9*	*2.00*	*4.50*
Aerial Ace		72	-45	1.60	
Dazzling Gleam		*90*	*-55*	*1.64*	
Solar Beam		180	-80	2.25	
Energy Ball		108	-55	1.96	10%OD↓
Acrobatics		**132**	**-55**	**2.40**	**12.5%A↑2**

15/15/15·50 (1850)
0/14/14·43 (1499)

500 CG 2 Gen II Johto

Hoppip (322) → Skiploom (322) → **Jumpluff**

Shadow Jumpluff 141.6 152.5 181 158.37 157.52

#0357 Tropius — 136 163 223 174.00 170.35

Razor Leaf	2	10.8	4	5.40	2.00
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Leaf Blade		84	-35	2.40	
Stomp		*55*	*-40*	*1.38*	
Brutal Swing		*55*	*-35*	*1.57*	

15/15/15·50 (2194) 15/15/14·50 (2189)
0/15/15·30 (1498)

100 CG 3 Gen III Hoenn

No evolution

#0492 Sky Shaymin — 261 166 225 217.33 213.62

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Hidden Power	*3*	*9*	*8*	*3.00*	*2.67*
Magical Leaf	3	12	10	4.00	3.33
Solar Beam		180	-80	2.25	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓
Seed Flare		156	-75	2.08	40%OD↓2

0/13/13·26 (2499)
0/14/15·15.5 (1500)

100 CG 4 Gen IV Sinnoh Mythical

No evolution

#0722 Rowlet — 102 99 169 123.33 119.50

Razor Leaf	2	10.8	4	5.40	2.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Magical Leaf	3	12	10	4.00	3.33
Leafage	2	7.2	8	3.60	4.00
Seed Bomb		66	-40	1.65	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (1196)

100 CG 1 Gen VII Alola

Rowlet → Dartrix (324) → Decidueye (324)

#0723 Dartrix — 142 139 186 155.67 154.27

Peck	2	7.2	8	3.60	4.00
Razor Leaf	2	10.8	4	5.40	2.00
Magical Leaf	3	12	10	4.00	3.33
Leafage	2	7.2	8	3.60	4.00
Seed Bomb		66	-40	1.65	
Brave Bird		156	-55	2.84	D↓3
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (1950) 15/15/14·50 (1945)
0/15/14·37.5 (1500)

300 CG 1 Gen VII Alola

Rowlet (323) → **Dartrix** → Decidueye (324)

#0724 Decidueye — 210 179 186 191.67 191.22

Razor Leaf	2	10.8	4	5.40	2.00
Astonish	3	14.4	10	4.80	3.33
Magical Leaf	3	12	10	4.00	3.33
Leafage	2	7.2	8	3.60	4.00
Shadow Sneak		60	-45	1.33	
Brave Bird		*130*	*-55*	*2.36*	*D↓3*
Energy Ball		108	-55	1.96	10%OD↓
Frenzy Plant		**120**	**-45**	**2.67**	
Spirit Shackle		60	-40	1.50	33%OD↓

0/14/13·38 (2497)
0/14/11·20.5 (1497)

500 CG 1 Gen VII Alola

Rowlet (323) → Dartrix (324) → **Decidueye**

#0389 Torterra — 202 188 216 202.00 201.68

Mud Slap	3	14.4	10	4.80	3.33
Razor Leaf	2	10.8	4	5.40	2.00
Bite	*1*	*4*	*2*	*4.00*	*2.00*
Earthquake		132	-65	2.03	
Sand Tomb		30	-40	0.75	OD↓
Stone Edge		*100*	*-55*	*1.82*	
Solar Beam		180	-80	2.25	
Frenzy Plant		**120**	**-45**	**2.67**	

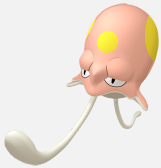
0/15/15·34 (2497)
0/11/13·19.5 (1500)

500 CG 1 Gen IV Sinnoh

Turtwig (309) → Grotle (310) → **Torterra**

Shadow Torterra — 242.4 156.667 216 205.02 201.68

#0948 Toedscool — 97 149 120 122.00 120.15



Mud Slap	3	14.4	10	4.80	3.33
Mud Shot	2	4.8	8	2.40	4.00
Earth Power		108	-55	1.96	10%OD↓
Seed Bomb		66	-40	1.65	
Wrap		*60*	*-45*	*1.33*	*D↑*

15/15/15·50 (1176)

100 CG 2 Gen IX Paldea

Toedscool → Toedscruel (325)

#0949 Toedscruel — 166 209 190 188.33 187.50

Mud Slap	3	14.4	10	4.80	3.33
Mud Shot	2	4.8	8	2.40	4.00
Earth Power		108	-55	1.96	10%OD↓
Seed Bomb		66	-40	1.65	
Acid Spray		*20*	*-45*	*0.44*	*OD↓2*

0/13/15·50 (2500)
1/15/15·23.5 (1500) 1/15/14·23.5 (1497)
Toedscool (324) → **Toedscruel**

300 CG 2 Gen IX Paldea

#0459 Snover ✧ — 115 105 155 125.00 123.24

Ice Shard	3	10.8	10	3.60	3.33
Powder Snow	2	6	8	3.00	4.00
Leafage	2	7.2	8	3.60	4.00
Ice Beam		108	-55	1.96	
Stomp		*55*	*-40*	*1.38*	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (1311) 15/15/14·50 (1307)
Snover → Abomasnow (325)

100 CG 2 Gen IV Sinnoh

Shadow Snover — 138 87.5 155 126.83 123.24

#0460 Abomasnow ✧ — 178 158 207 181.00 179.89

Razor Leaf	2	10.8	4	5.40	2.00
Powder Snow	2	6	8	3.00	4.00
Leafage	2	7.2	8	3.60	4.00
Blizzard		168	-75	2.24	
Icy Wind		72	-45	1.60	OA↓
Energy Ball		108	-55	1.96	10%OD↓
Outrage		*110*	*-60*	*1.83*	
Weather Ball (Ice)		72	-35	2.06	

3/15/14·50 (2499)
0/15/15·24 (1494)
Snover (325) → **Abomasnow**

300 CG 2 Gen IV Sinnoh

Shadow Abomasnow — 213.6 131.667 207 184.09 179.89

#0928 Smoliv ✧ — 100 89 121 103.33 102.50

Razor Leaf	2	10.8	4	5.40	2.00
Tackle	1	3.6	3	3.60	3.00
Seed Bomb		66	-40	1.65	
Energy Ball		108	-55	1.96	10%OD↓
Earth Power		*90*	*-55*	*1.64*	*10%OD↓*
Trailblaze		78	-45	1.73	A↑

15/15/15·50 (965)
Smoliv → Dolliv (326) → Arboliva (326)

100 CG 2 Gen IX Paldea

#0929 Dolliv ✧ — 137 131 141 136.33 136.27

Razor Leaf	2	10.8	4	5.40	2.00
Tackle	1	3.6	3	3.60	3.00
Magical Leaf	3	12	10	4.00	3.33
Seed Bomb		66	-40	1.65	
Energy Ball		108	-55	1.96	10%OD↓
Earth Power		*90*	*-55*	*1.64*	*10%OD↓*
Trailblaze		78	-45	1.73	A↑

15/15/15·50 (1619)
4/14/15·50 (1497)

300 CG 2 Gen IX Paldea

Smoliv (325) → **Dolliv** → Arboliva (326)

#0930 Arboliva ✧ — 219 189 186 198.00 197.46

Razor Leaf	2	10.8	4	5.40	2.00
Tackle	1	3.6	3	3.60	3.00
Magical Leaf	3	12	10	4.00	3.33
Seed Bomb		66	-40	1.65	
Energy Ball		108	-55	1.96	10%OD↓
Earth Power		*90*	*-55*	*1.64*	*10%OD↓*
Trailblaze		78	-45	1.73	A↑

0/13/15·33.5 (2500)
0/14/15·19 (1499)

500 CG 2 Gen IX Paldea

Smoliv (325) → Dolliv (326) → **Arboliva**

#0001 Bulbasaur ✧ — 118 111 128 119.00 118.80

Vine Whip	2	6	8	3.00	4.00
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Seed Bomb		66	-40	1.65	
Sludge Bomb		96	-50	1.92	
Power Whip		108	-50	2.16	

15/15/15·50 (1260)

100 CG 1 Gen I Kanto

Bulbasaur → Ivysaur (327) → Venusaur (327)

Shadow Bulbasaur — 141.6 92.5 128 120.70 118.80

#0002 Ivysaur — 151 143 155 149.67 149.58

Vine Whip	2	6	8	3.00	4.00
Razor Leaf	2	10.8	4	5.40	2.00
Sludge Bomb		96	-50	1.92	
Solar Beam		180	-80	2.25	
Power Whip		108	-50	2.16	

15/15/15·50 (1921) 15/15/14·50 (1915)
0/13/14·38.5 (1498)

300 CG 1 Gen I Kanto

Bulbasaur (326) → **Ivysaur** → Venusaur (327)

Shadow Ivysaur — 181.2 119.167 155 151.79 149.58

#0003 Venusaur — 198 189 190 192.33 192.29

Vine Whip	2	6	8	3.00	4.00
Razor Leaf	2	10.8	4	5.40	2.00
Petal Blizzard		132	-65	2.03	
Sludge		84	-40	2.10	
Sludge Bomb		96	-50	1.92	
Solar Beam		180	-80	2.25	
Frenzy Plant		**120**	**-45**	**2.67**	

1/15/14·39 (2499)
0/14/11·21 (1498)

500 CG 1 Gen I Kanto

Bulbasaur (326) → Ivysaur (327) → **Venusaur**

Shadow Venusaur — 237.6 157.5 190 195.03 192.29

#0043 Oddish — 131 112 128 123.67 123.38

Razor Leaf	2	10.8	4	5.40	2.00
Acid	2	7.2	8	3.60	4.00
Seed Bomb		66	-40	1.65	
Moonblast		*110*	*-60*	*1.83*	*10%OA↓*
Sludge Bomb		96	-50	1.92	

15/15/15·50 (1389)

100 CG 2 Gen I Kanto

Oddish → Gloom (328) → Vileplume (328)

Shadow Oddish — 157.2 93.3333 128 126.18 123.38

#0044 Gloom ✧ — 153 136 155 148.00 147.75

Razor Leaf	2	10.8	4	5.40	2.00
Acid	2	7.2	8	3.60	4.00
Petal Blizzard		132	-65	2.03	
Moonblast		*110*	*-60*	*1.83*	*10%OA↓*
Sludge Bomb		96	-50	1.92	

300 CG 2 Gen I Kanto

15/15/15·50 (1900) 15/15/14·50 (1895)
0/12/14·39.5 (1500)
Oddish (327) → **Gloom** → Vileplume (328)

Shadow Gloom — 183.6 113.333 155 150.64 147.75

#0045 Vileplume ✧ — 202 167 181 183.33 182.77

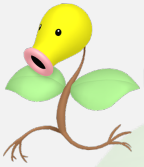
Razor Leaf	2	10.8	4	5.40	2.00
Acid	2	7.2	8	3.60	4.00
Petal Blizzard		132	-65	2.03	
Moonblast		*110*	*-60*	*1.83*	*10%OA↓*
Sludge Bomb		96	-50	1.92	
Solar Beam		180	-80	2.25	

500 CG 2 Gen I Kanto

0/15/14·44 (2498)
0/15/15·22 (1497) 0/15/14·22 (1493)
Oddish (327) → Gloom (328) → **Vileplume**

Shadow Vileplume — 242.4 139.167 181 187.52 182.77

#0069 Bellsprout ✧ — 139 61 137 112.33 105.12



Vine Whip	2	6	8	3.00	4.00
Acid	2	7.2	8	3.60	4.00
Wrap		*60*	*-45*	*1.33*	*D↑*
Sludge Bomb		96	-50	1.92	
Power Whip		108	-50	2.16	

100 CG 2 Gen I Kanto

15/15/15·50 (1168)
Bellsprout → Weepinbell (328) → Victreebel (329)

Shadow Bellsprout — 166.8 50.8333 137 118.21 105.12

#0070 Weepinbell ✧ — 172 92 163 142.33 137.14

Razor Leaf	**2**	**10.8**	**4**	**5.40**	**2.00**
Acid	2	7.2	8	3.60	4.00
Bullet Seed	3	6	13	2.00	4.33
Seed Bomb		66	-40	1.65	
Sludge Bomb		96	-50	1.92	
Power Whip		108	-50	2.16	

300 CG 2 Gen I Kanto

15/15/15·50 (1822)
1/15/15·40.5 (1500)
Bellsprout (328) → **Weepinbell** → Victreebel (329)

Shadow Weepinbell — 206.4 76.6667 163 148.69 137.14

#0071 Victreebel — 207 135 190 177.33 174.46

Razor Leaf	2	10.8	4	5.40	2.00
Acid	2	7.2	8	3.60	4.00
Magical Leaf	**3**	**12**	**10**	**4.00**	**3.33**
Sludge Bomb		96	-50	1.92	
Solar Beam		180	-80	2.25	
Leaf Blade		84	-35	2.40	
Acid Spray		24	-45	0.53	OD↓2
Leaf Tornado		54	-40	1.35	50%OA↓2

0/15/12·48.5 (2499)
1/15/15·23 (1497)

500 CG 2 Gen I Kanto

Bellsprout (328) → Weepinbell (328) → **Victreebel**

Shadow Victreebel 248.4 112.5 190 183.63 174.46

#0315 Roselia — 186 131 137 151.33 149.45

Razor Leaf	2	10.8	4	5.40	2.00
Poison Jab	2	8.4	7	4.20	3.50
Magical Leaf	3	12	10	4.00	3.33
Petal Blizzard		132	-65	2.03	
Dazzling Gleam		*90*	*-55*	*1.64*	
Sludge Bomb		96	-50	1.92	

15/15/15·50 (2114)
0/13/15·31 (1497)

300 CG 2 Gen III Hoenn

Budew (329) → **Roselia** → Roserade (329)

#0406 Budew — 91 109 120 106.67 105.98

Razor Leaf	2	10.8	4	5.40	2.00
Hidden Power	*3*	*9*	*8*	*3.00*	*2.67*
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

15/15/15·50 (968)

100 CG 1 Gen IV Sinnoh Baby

Budew → Roselia (329) → Roserade (329)

#0407 Roserade — 243 185 155 194.33 191.00

Razor Leaf	2	10.8	4	5.40	2.00
Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Bullet Seed	**3**	**6**	**13**	**2.00**	**4.33**
Magical Leaf	3	12	10	4.00	3.33
Dazzling Gleam		*90*	*-55*	*1.64*	
Sludge Bomb		96	-50	1.92	
Solar Beam		180	-80	2.25	
Grass Knot		108	-50	2.16	
Weather Ball (Fire)		***60***	***-35***	***1.71***	
Leaf Storm		156	-55	2.84	A↓2

0/12/15·33 (2499)
0/11/14·19 (1499)

500 CG 2 Gen IV Sinnoh

Budew (329) → Roselia (329) → **Roserade**

#0590 Foongus — 97 91 170 119.33 114.49

Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Body Slam		*55*	*-35*	*1.57*	
Grass Knot		108	-50	2.16	
Energy Ball		108	-55	1.96	10%OD↓

500 CG 2 Gen V Unova

15/15/15·50 (1107)
Foongus → Amoonguss (330)

Shadow Foongus — 116.4 75.8333 170 120.74 114.49

#0591 Amoonguss — 155 139 249 181.00 175.06

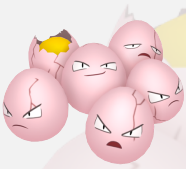
Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Sludge Bomb		96	-50	1.92	
Grass Knot		108	-50	2.16	
Foul Play		*60*	*-40*	*1.50*	

700 CG 2 Gen V Unova

15/15/15·50 (2420)
0/14/15·27 (1500)
Foongus (330) → **Amoonguss**

Shadow Amoonguss — 186 115.833 249 183.61 175.06

#0102 Exeggcute — 107 125 155 129.00 127.51



Confusion	4	19.2	14	4.80	3.50
Bullet Seed	3	6	13	2.00	4.33
Seed Bomb		66	-40	1.65	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Psychic		90	-55	1.64	10%OD↓

100 CG 2 Gen I Kanto

15/15/15·50 (1328) 15/15/14·50 (1325)
Exeggcute → Exeggutor (330)

Shadow Exeggcute — 128.4 104.167 155 129.19 127.51

#0103 Exeggutor — 233 149 216 199.33 195.73

Zen Headbutt	**3**	**9.6**	**6**	**3.20**	**2.00**
Confusion	4	19.2	14	4.80	3.50
Bullet Seed	3	6	13	2.00	4.33
Extrasensory	3	9.6	10	3.20	3.33
Seed Bomb		66	-40	1.65	
Psychic		90	-55	1.64	10%OD↓
Solar Beam		180	-80	2.25	

300 CG 2 Gen I Kanto

1/15/15·31.5 (2499)
1/15/14·18.5 (1500)
Exeggcute (330) → **Exeggutor**

Shadow Exeggutor — 279.6 124.167 216 206.59 195.73

#0597 Ferroseed — 82 155 127 121.33 117.30

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Metal Claw	2	6	7	3.00	3.50
Flash Cannon		132	-70	1.89	
Iron Head		84	-50	1.68	
Gyro Ball		96	-50	1.92	

15/15/15·50 (1064)

100 CG 3 Gen V Unova

Ferroseed → Ferrothorn (331)

Shadow Ferroseed — 98.4 129.167 127 118.19 117.30

#0598 Ferrothorn — 158 223 179 186.67 184.76

Metal Claw	2	6	7	3.00	3.50
Bullet Seed	3	6	13	2.00	4.33
Flash Cannon		132	-70	1.89	
Thunder		*100*	*-60*	*1.67*	
Power Whip		108	-50	2.16	
Acid Spray		*20*	*-45*	*0.44*	*OD↓2*
Mirror Shot		42	-35	1.20	30%OA↓

7/14/15·50 (2498)
0/13/13·25 (1500)

300 CG 3 Gen V Unova

Ferroseed (331) → **Ferrothorn**

Shadow Ferrothorn — 189.6 185.833 179 184.81 184.76

#0798 Kartana — 323 182 139 214.67 201.42

Razor Leaf	2	10.8	4	5.40	2.00
Air Slash	*3*	*9*	*9*	*3.00*	*3.00*
Aerial Ace		*60*	*-45*	*1.33*	
Night Slash		*50*	*-35*	*1.43*	
X-Scissor		*65*	*-40*	*1.62*	
Leaf Blade		84	-35	2.40	

0/14/14·25 (2495)
0/14/14·15 (1497)

100 CG 4 Gen VII Alola Ultra Beast

No evolution

#0027 Sandshrew — 126 120 137 127.67 127.47

Mud Shot	2	4.8	8	2.40	4.00
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Sand Attack	1	2.4	4	2.40	4.00
Dig		84	-50	1.68	
Rock Tomb		***80***	***-50***	***1.60***	***OA↓***
Rock Slide		*75*	*-45*	*1.67*	
Sand Tomb		30	-40	0.75	OD↓

15/15/15·50 (1426)

100 CG 2 Gen I Kanto

Sandshrew → Sandslash (332)

Shadow Sandshrew — 151.2 100 137 129.40 127.47

#0028 Sandslash ✧ — 182 175 181 179.33 179.31

Mud Shot	2	4.8	8	2.40	4.00
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Sand Attack	1	2.4	4	2.40	4.00
Earthquake		132	-65	2.03	
Night Slash		***50***	***-35***	***1.43***	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Bulldoze		54	-45	1.20	50%OD↓
Scorching Sands		96	-50	1.92	10%OA↓

2/14/15·50 (2500)
0/14/15·24 (1500)

300 CG 2 Gen I Kanto

Sandshrew (331) → **Sandslash**

Shadow Sandslash — 218.4 145.833 181 181.74 179.31

#0050 Diglett ✧ — 109 78 67 84.67 82.90

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Mud Shot	2	4.8	8	2.40	4.00
Mud Slap	3	14.4	10	4.80	3.33
Dig		84	-50	1.68	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Mud Bomb		72	-40	1.80	

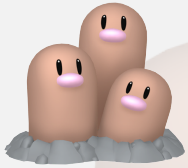
15/15/15·50 (764) 15/15/14·50 (759)

100 CG 2 Gen I Kanto

Diglett → Dugtrio (332)

Shadow Diglett — 130.8 65 67 87.60 82.90

#0051 Dugtrio ✧ — 167 134 111 137.33 135.43



Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Mud Shot	2	4.8	8	2.40	4.00
Mud Slap	3	14.4	10	4.80	3.33
Earthquake		132	-65	2.03	
Stone Edge		*100*	*-55*	*1.82*	
Mud Bomb		72	-40	1.80	

15/15/15·50 (1760) 15/15/14·50 (1753)
0/14/15·44 (1497)

300 CG 2 Gen I Kanto

Diglett (332) → **Dugtrio**

Shadow Dugtrio — 200.4 111.667 111 141.02 135.43

#0104 Cubone ✧ — 90 144 137 123.67 121.09

Mud Slap	3	14.4	10	4.80	3.33
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Dig		84	-50	1.68	
Bone Club		66	-35	1.89	
Bulldoze		54	-45	1.20	50%OD↓

15/15/15·50 (1152)

100 CG 2 Gen I Kanto

Cubone → Marowak (333)

Shadow Cubone — 108 120 137 121.67 121.09

#0105 Marowak ✧ — 144 186 155 161.67 160.72

Mud Slap	3	14.4	10	4.80	3.33
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Dig		84	-50	1.68	
Earthquake		132	-65	2.03	
Rock Slide		*75*	*-45*	*1.67*	
Bone Club		66	-35	1.89	

15/15/15·50 (2075) 15/15/14·50 (2069)
0/14/14·33.5 (1500)
Cubone (332) → **Marowak**

300 CG 2 Gen I Kanto

Shadow Marowak — 172.8 155 155 160.93 160.72

#0231 Phanpy ✧ — 107 98 207 137.33 129.48

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Rock Slide		*75*	*-45*	*1.67*	
Bulldoze		54	-45	1.20	50%OD↓
Body Slam		*55*	*-35*	*1.57*	
Trailblaze		*65*	*-45*	*1.44*	A↑

15/15/15·50 (1364)
Phanpy → Donphan (333)

100 CG 2 Gen II Johto

Shadow Phanpy — 128.4 81.6667 207 139.02 129.48

#0232 Donphan ✧ — 214 185 207 202.00 201.61

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Mud Slap	3	14.4	10	4.80	3.33
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Earthquake		132	-65	2.03	
Play Rough		*90*	*-60*	*1.50*	
Body Slam		*55*	*-35*	*1.57*	
Heavy Slam		*70*	*-50*	*1.40*	
Trailblaze		*65*	*-45*	*1.44*	A↑

0/15/15·32 (2494)
0/14/8·19 (1500)
Phanpy (333) → **Donphan**

300 CG 2 Gen II Johto

Shadow Donphan — 256.8 154.167 207 205.99 201.61

#0328 Trapinch ✧ — 162 78 128 122.67 117.38

Mud Shot	2	4.8	8	2.40	4.00
Struggle Bug	*3*	*9*	*8*	*3.00*	*2.67*
Sand Attack	1	2.4	4	2.40	4.00
Dig		84	-50	1.68	
Sand Tomb		30	-40	0.75	OD↓
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Scorching Sands		96	-50	1.92	10%OA↓

15/15/15·50 (1441)
Trapinch → Vibrava (336) → Flygon (336)

100 CG 3 Gen III Hoenn

Shadow Trapinch — 194.4 65 128 129.13 117.38

#0383 Groudon ✧ — 270 228 205 234.33 232.82

Mud Shot	2	4.8	8	2.40	4.00
Dragon Tail	*3*	*9*	*12*	*3.00*	*4.00*
Earthquake		132	-65	2.03	
Fire Blast		*140*	*-80*	*1.75*	
Fire Punch		***60***	***-40***	***1.50***	
Solar Beam		*150*	*-80*	*1.88*	
Precipice Blades		**156**	**-60**	**2.60**	

0/15/14·22.5 (2500) 0/15/13·22.5 (2495)
0/15/14·13.5 (1500) 0/15/13·13.5 (1497)

100 CG 4 Gen III Hoenn Legendary

No evolution

Shadow Groudon — 324 190 205 239.67 232.82

#0449 Hippopotas ✧ — 124 118 169 137.00 135.23

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Sand Attack	1	2.4	4	2.40	4.00
Dig		84	-50	1.68	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (1535)
13/15/14·49.5 (1500)

100 CG 2 Gen IV Sinnoh

Hippopotas → Hippowdon (334)

Shadow Hippopotas — 148.8 98.3333 169 138.71 135.23

#0450 Hippowdon ✧ — 201 191 239 210.33 209.35

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Fire Fang	*2*	*8*	*6*	*4.00*	*3.00*
Thunder Fang	*2*	*8*	*6*	*4.00*	*3.00*
Ice Fang	*2*	*8*	*6*	*4.00*	*3.00*
Sand Attack	1	2.4	4	2.40	4.00
Earthquake		132	-65	2.03	
Stone Edge		*100*	*-55*	*1.82*	
Body Slam		*55*	*-35*	*1.57*	
Weather Ball (Rock)		*60*	*-35*	*1.71*	
Earth Power		108	-55	1.96	10%OD↓
Scorching Sands		96	-50	1.92	10%OA↓

0/14/15·31 (2496)
0/14/10·18.5 (1499)

300 CG 2 Gen IV Sinnoh

Hippopotas (334) → **Hippowdon**

Shadow Hippowdon — 241.2 159.167 239 213.12 209.35

#0529 Drilbur ✧ — 154 85 155 131.33 126.60

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Mud Slap	3	14.4	10	4.80	3.33
Dig		84	-50	1.68	
Drill Run		96	-45	2.13	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*

100 CG 2 Gen V Unova

15/15/15·50 (1555) 15/15/14·50 (1551)
10/15/15·49.5 (1500)
Drilbur → Excadrill (342)

#0749 Mudbray ✧ — 175 121 172 156.00 153.86

Mud Slap	3	14.4	10	4.80	3.33
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Earthquake		132	-65	2.03	
Bulldoze		54	-45	1.20	50%OD↓
Body Slam		*55*	*-35*	*1.57*	

100 CG 2 Gen VII Alola

15/15/15·50 (2139)
1/15/14·30 (1498)
Mudbray → Mudsdale (335)

#0750 Mudsdale ✧ — 214 174 225 204.33 203.10

Mud Slap	3	14.4	10	4.80	3.33
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Earthquake		132	-65	2.03	
Bulldoze		54	-45	1.20	50%OD↓
Body Slam		*55*	*-35*	*1.57*	
Heavy Slam		*70*	*-50*	*1.40*	

300 CG 2 Gen VII Alola

0/15/14·31.5 (2495)
0/14/15·18.5 (1500) 0/14/14·18.5 (1497)
Mudbray (335) → **Mudsdale**

#0551 Sandile ✧ — 132 69 137 112.67 107.66

Bite	1	4.8	2	4.80	2.00
Mud Slap	3	14.4	10	4.80	3.33
Dig		84	-50	1.68	
Bulldoze		54	-45	1.20	50%OD↓
Crunch		84	-45	1.87	20%OD↓

100 CG 3 Gen V Unova

15/15/15·50 (1172)
Sandile → Krokorok (336) → Krookodile (336)

#0552 Krokorok — 155 90 155 133.33 129.31

Bite	1	4.8	2	4.80	2.00
Mud Slap	3	14.4	10	4.80	3.33
Earthquake		132	-65	2.03	
Bulldoze		54	-45	1.20	50%OD↓
Crunch		84	-45	1.87	20%OD↓

15/15/15·50 (1603) 15/15/14·50 (1599)
6/15/15·49 (1500)

300 CG 3 Gen V Unova

Sandile (335) → **Krokorok** → Krookodile (336)

#0553 Krookodile — 229 158 216 201.00 198.45

Mud Slap	3	14.4	10	4.80	3.33
Snarl	3	6	13	2.00	4.33
Sand Tomb		30	-40	0.75	OD↓
Earthquake		132	-65	2.03	
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Outrage		*110*	*-60*	*1.83*	
Crunch		84	-45	1.87	20%OD↓

0/13/15·31.5 (2497)
0/13/14·18.5 (1499)

500 CG 3 Gen V Unova

Sandile (335) → Krokorok (336) → **Krookodile**

#0329 Vibrava — 134 99 137 123.33 122.04

Dragon Breath	1	3.6	4	3.60	4.00
Mud Shot	2	4.8	8	2.40	4.00
Sand Attack	1	2.4	4	2.40	4.00
Bug Buzz		*100*	*-60*	*1.67*	*30%OD↓*
Bulldoze		54	-45	1.20	50%OD↓
Sand Tomb		30	-40	0.75	OD↓
Scorching Sands		96	-50	1.92	10%OA↓

15/15/15·50 (1384)

300 CG 3 Gen III Hoenn

Trapinch (333) → **Vibrava** → Flygon (336)

Shadow Vibrava — 160.8 82.5 137 126.77 122.04

#0330 Flygon — 205 168 190 187.67 187.04

Mud Shot	2	4.8	8	2.40	4.00
Sand Attack	1	2.4	4	2.40	4.00
Dragon Tail	3	10.8	12	3.60	4.00
Boomburst		*150*	*-70*	*2.14*	
Earthquake		132	-65	2.03	
Scorching Sands		96	-50	1.92	10%OA↓
Sand Tomb		30	-40	0.75	OD↓
Stone Edge		*100*	*-55*	*1.82*	
Dragon Claw		96	-50	1.92	
Earth Power		**108**	**-55**	**1.96**	**10%OD↓**

0/13/15·41 (2497)
0/15/9·21.5 (1500)

500 CG 3 Gen III Hoenn

Trapinch (333) → Vibrava (336) → **Flygon**

Shadow Flygon — 246 140 190 192.00 187.04

#0618 Stunfisk ✧ 144 171 240 185.00 180.80

Thunder Shock	2	4.8	9	2.40	4.50
Mud Shot	2	4.8	8	2.40	4.00
Discharge		66	-40	1.65	
Mud Bomb		72	-40	1.80	
Muddy Water		*35*	*-35*	*1.00*	*30%OA↓*

100 CG 3 Gen V Unova

15/15/15·50 (2445)
0/12/15·27 (1498)
No evolution

Shadow Stunfisk 172.8 142.5 240 185.10 180.80

#0207 Gligar ✧ 143 184 163 163.33 162.47

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Wing Attack	2	6	7	3.00	3.50
Dig		84	-50	1.68	
Aerial Ace		72	-45	1.60	
Night Slash		*50*	*-35*	*1.43*	

100 CG 3 Gen II Johto

15/15/15·50 (2099)
0/15/12·33 (1500)
Gligar → Gliscor (337)

Shadow Gligar 171.6 153.333 163 162.64 162.47

#0472 Gliscor ✧ 185 222 181 196.00 195.16

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Wing Attack	2	6	7	3.00	3.50
Sand Attack	1	2.4	4	2.40	4.00
Earthquake		132	-65	2.03	
Aerial Ace		72	-45	1.60	
Night Slash		*50*	*-35*	*1.43*	
Sand Tomb		30	-40	0.75	OD↓

300 CG 3 Gen IV Sinnoh

0/14/15·40.5 (2500)
1/15/14·21 (1498)
Gligar (337) → **Gliscor**

Shadow Gliscor 222 185 181 196.00 195.16

#0645 Incarnate Form Landorus ✧ 261 182 205 216.00 213.54

Mud Shot	2	4.8	8	2.40	4.00
Rock Throw	*2*	*8*	*5*	*4.00*	*2.50*
Rock Slide		*75*	*-45*	*1.67*	
Focus Blast		*150*	*-75*	*2.00*	
Outrage		*110*	*-60*	*1.83*	
Earth Power		108	-55	1.96	10%OD↓

100 CG 4 Gen V Unova Legendary

0/15/11·26 (2498)
0/15/14·15.5 (1499)
No evolution

#0645 Therian Form Landorus ✧ 289 179 205 224.33 219.70

Mud Shot	2	4.8	8	2.40	4.00
Extrasensory	*3*	*8*	*10*	*2.67*	*3.33*
Earthquake		132	-65	2.03	
Stone Edge		*100*	*-55*	*1.82*	
Bulldoze		54	-45	1.20	50%OD↓
Superpower		*85*	*-40*	*2.12*	*A+D↓*
Sandsear Storm		**72**	**-45**	**1.60**	**OA↓**

100 CG 4 Gen V Unova Legendary

0/14/15·23.5 (2497)
2/15/14·14 (1498)
No evolution

#0562 Galarian Yamask ✧ 95 141 116 117.33 115.82

Astonish	3	14.4	10	4.80	3.33
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Night Shade		96	-45	2.13	12.5%A↑2

100 CG 2 Gen V Unova

15/15/15·50 (1110)
Galarian Yamask → Runerigus (339)

Shadow Galarian Yamask 114 117.5 116 115.83 115.82

#0622 Golett ✧ 127 92 153 124.00 121.37

Mud Slap	3	14.4	10	4.80	3.33
Astonish	3	14.4	10	4.80	3.33
Shadow Punch		66	-35	1.89	
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Night Shade		96	-45	2.13	12.5%A↑2

100 CG 3 Gen V Unova

15/15/15·50 (1344)
Golett → Golurk (338)

Shadow Golett 152.4 76.6667 153 127.36 121.37

#0623 Golurk ✧ 222 154 205 193.67 191.37

Mud Slap	3	14.4	10	4.80	3.33
Astonish	3	14.4	10	4.80	3.33
Shadow Punch		66	-35	1.89	
Dynamic Punch		*90*	*-45*	*2.00*	
Earth Power		108	-55	1.96	10%OD↓
Poltergeist		180	-75	2.40	

300 CG 3 Gen V Unova

0/13/14·36 (2500)
2/15/14·19.5 (1499)
Golett (338) → **Golurk**

Shadow Golurk 266.4 128.333 205 199.91 191.37

#0867 Runerigus ✧ — 163 237 151 183.67 180.01

Shadow Claw	2	7.2	8	3.60	4.00
Astonish	3	14.4	10	4.80	3.33
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Shadow Ball		120	-55	2.18	
Sand Tomb		30	-40	0.75	OD↓
Brutal Swing		*55*	*-35*	*1.57*	

10/15/15·50 (2498)
0/11/14·25.5 (1500)

300 CG 2 Gen VIII Galar

Galarian Yamask (338) → **Runerigus**

Shadow Runerigus — 195.6 197.5 151 181.37 180.01

#0901 Ursaluna ✧ — 243 181 277 233.67 230.10

Tackle	1	3.6	3	3.60	3.00
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Ice Punch		*60*	*-40*	*1.50*	
Aerial Ace		*60*	*-45*	*1.33*	
Thunder Punch		*60*	*-40*	*1.50*	
Fire Punch		*60*	*-40*	*1.50*	
Swift		66	-35	1.89	
High Horsepower		**120**	**-60**	**2.00**	
Trailblaze		*65*	*-45*	*1.44*	A↑

1/15/15·24 (2500)
0/14/15·14.5 (1500) 0/14/14·14.5 (1497)

500 CG 2 Gen VIII Hisui

Teddiursa (355) → Ursaring (355) → **Ursaluna**

Shadow Ursaluna — 291.6 150.833 277 239.81 230.10

#0343 Baltoy ✧ — 77 124 120 107.00 104.64

Confusion	4	19.2	14	4.80	3.50
Extrasensory	3	9.6	10	3.20	3.33
Dig		84	-50	1.68	
Psybeam		84	-60	1.40	
Gyro Ball		*80*	*-50*	*1.60*	

15/15/15·50 (889)

100 CG 2 Gen III Hoenn

Baltoy → Claydol (340)

#0344 Claydol ✧ — 140 229 155 174.67 170.65

Mud Slap	3	14.4	10	4.80	3.33
Confusion	4	19.2	14	4.80	3.50
Extrasensory	3	9.6	10	3.20	3.33
Earthquake		132	-65	2.03	
Ice Beam		*90*	*-55*	*1.64*	
Rock Tomb		*80*	*-50*	*1.60*	OA↓
Shadow Ball		*100*	*-55*	*1.82*	
Psychic		90	-55	1.64	10%OD↓
Gyro Ball		*80*	*-50*	*1.60*	
Earth Power		108	-55	1.96	10%OD↓
Scorching Sands		96	-50	1.92	10%OA↓

15/15/15·50 (2229) 15/15/14·50 (2222)
0/14/15·29.5 (1498)

300 CG 2 Gen III Hoenn

Baltoy (339) → **Claydol**

#0111 Rhyhorn ✧ — 140 127 190 152.33 150.05

Mud Slap	3	14.4	10	4.80	3.33
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Bulldoze		54	-45	1.20	50%OD↓
Horn Attack		*40*	*-35*	*1.14*	
Stomp		*55*	*-40*	*1.38*	

15/15/15·50 (1867)
0/13/15·41 (1500)

100 CG 2 Gen I Kanto

Rhyhorn → Rhydon (340) → Rhyperior (341)

Shadow Rhyhorn — 168 105.833 190 154.61 150.05

#0112 Rhydon ✧ — 222 171 233 208.67 206.81

Mud Slap	3	14.4	10	4.80	3.33
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Megahorn		***110***	***-55***	***2.00***	
Earthquake		132	-65	2.03	
Stone Edge		120	-55	2.18	
Surf		*75*	*-45*	*1.67*	
Breaking Swipe		*50*	*-50*	*1.00*	OA↓

0/14/14·29.5 (2498)
2/15/14·17.5 (1499)

300 CG 2 Gen I Kanto

Rhyhorn (340) → **Rhydon** → Rhyperior (341)

Shadow Rhydon — 266.4 142.5 233 213.97 206.81

#0464 Rhyperior — 241 190 251 227.33 225.67

Mud Slap	3	14.4	10	4.80	3.33
Smack Down	3	14.4	8	4.80	2.67
Earthquake		132	-65	2.03	
Stone Edge		120	-55	2.18	
Surf		*75*	*-45*	*1.67*	
Skull Bash		*130*	*-75*	*1.73*	*D↑*
Superpower		*85*	*-40*	*2.12*	*A+D↓*
Rock Wrecker		**132**	**-50**	**2.64**	
Breaking Swipe		*50*	*-50*	*1.00*	*OA↓*

0/14/14·25 (2499)
0/14/14·15 (1500)

500 CG 2 Gen IV Sinnoh

Rhyhorn (340) → Rhydon (340) → **Rhyperior**

Shadow Rhyperior 289.2 158.333 251 232.84 225.67

#0050 Alolan Diglett — 109 82 67 86.00 84.29

Metal Claw	2	6	7	3.00	3.50
Mud Slap	3	14.4	10	4.80	3.33
Sand Attack	1	2.4	4	2.40	4.00
Dig		84	-50	1.68	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Mud Bomb		72	-40	1.80	

15/15/15·50 (780) 15/15/14·50 (776)

100 CG 2 Gen I Kanto

Alolan Diglett → Alolan Dugtrio (341)

Shadow Alolan Diglett 130.8 68.3333 67 88.71 84.29

#0051 Alolan Dugtrio — 201 145 111 152.33 147.90

Metal Claw	2	6	7	3.00	3.50
Mud Slap	3	14.4	10	4.80	3.33
Sand Attack	1	2.4	4	2.40	4.00
Earthquake		132	-65	2.03	
Iron Head		84	-50	1.68	
Mud Bomb		72	-40	1.80	

15/15/15·50 (2165) 15/15/14·50 (2156)
0/14/15·29.5 (1497)

300 CG 2 Gen I Kanto

Alolan Diglett (341) → **Alolan Dugtrio**

Shadow Alolan Dugtrio 241.2 120.833 111 157.68 147.90

#0530 Excadrill ✧ — 255 129 242 208.67 199.67

Mud Shot	2	4.8	8	2.40	4.00
Metal Claw	2	6	7	3.00	3.50
Mud Slap	3	14.4	10	4.80	3.33
Earthquake		132	-65	2.03	
Drill Run		96	-45	2.13	
Rock Slide		*75*	*-45*	*1.67*	
Iron Head		84	-50	1.68	
Scorching Sands		96	-50	1.92	10%OA↓

0/15/15·28.5 (2495)
2/15/15·17 (1499) 2/15/14·17 (1496)

300 CG 2 Gen V Unova

Drilbur (335) → **Excadrill**

#0618 Galarian Stunfisk ✧ — 144 171 240 185.00 180.80

Mud Shot	2	4.8	8	2.40	4.00
Metal Claw	2	6	7	3.00	3.50
Earthquake		132	-65	2.03	
Flash Cannon		132	-70	1.89	
Rock Slide		*75*	*-45*	*1.67*	
Muddy Water		*35*	*-35*	*1.00*	*30%OA↓*

15/15/15·50 (2445)
0/12/15·27 (1498)

100 CG 3 Gen V Unova

No evolution

Shadow Galarian Stunfisk — 172.8 142.5 240 185.10 180.80

#0037 Alolan Vulpix ✧ — 96 109 116 107.00 106.67

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Powder Snow	2	6	8	3.00	4.00
Dark Pulse		*80*	*-50*	*1.60*	
Ice Beam		108	-55	1.96	
Blizzard		168	-75	2.24	
Weather Ball (Ice)		72	-35	2.06	

15/15/15·50 (998)

100 CG 2 Gen I Kanto

Alolan Vulpix → Alolan Ninetales (347)

Shadow Alolan Vulpix — 115.2 90.8333 116 107.34 106.67

#0351 Castform (Snowy) ✧ — 139 139 172 150.00 149.23

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Powder Snow	2	6	8	3.00	4.00
Ice Beam		108	-55	1.96	
Blizzard		168	-75	2.24	
Weather Ball (Ice)		72	-35	2.06	

15/15/15·50 (1845)
0/14/15·41.5 (1496)

100 CG 3 Gen III Hoenn

No evolution

#0361 Snorunt ✧ — 95 95 137 109.00 107.33

Powder Snow	2	6	8	3.00	4.00
Hex	*3*	*7*	*13*	*2.33*	*4.33*
Shadow Ball		*100*	*-55*	*1.82*	
Icy Wind		72	-45	1.60	OA↓
Avalanche		108	-45	2.40	

100 CG 2 Gen III Hoenn

15/15/15·50 (1004)
Snorunt → Glalie (343)

Shadow Snorunt — 114 79.1667 137 110.06 107.33

#0362 Glalie ✧ — 162 162 190 171.33 170.84

Ice Shard	3	10.8	10	3.60	3.33
Frost Breath	2	8.4	5	4.20	2.50
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Shadow Ball		*100*	*-55*	*1.82*	
Avalanche		108	-45	2.40	
Gyro Ball		*80*	*-50*	*1.60*	

300 CG 2 Gen III Hoenn

15/15/15·50 (2380)
0/13/13·27.5 (1498)
Snorunt (343) → **Glalie**

Shadow Glalie — 194.4 135 190 173.13 170.84

#0378 Regice ✧ — 179 309 190 226.00 219.04

Frost Breath	2	8.4	5	4.20	2.50
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Lock On	*1*	*1*	*5*	*1.00*	*5.00*
Earthquake		*110*	*-65*	*1.69*	
Blizzard		168	-75	2.24	
Thunder		***100***	***-60***	***1.67***	
Focus Blast		*150*	*-75*	*2.00*	

100 CG 4 Gen III Hoenn Legendary

0/12/15·31 (2499)
0/10/12·18.5 (1500)
No evolution

Shadow Regice — 214.8 257.5 190 220.77 219.04

#0471 Glaceon ✧ — 238 205 163 202.00 199.61

Ice Shard	3	10.8	10	3.60	3.33
Frost Breath	2	8.4	5	4.20	2.50
Ice Beam		108	-55	1.96	
Water Pulse		***80***	***-50***	***1.60***	
Icy Wind		72	-45	1.60	OA↓
Avalanche		108	-45	2.40	
Last Resort		***90***	***-55***	***1.64***	

300 CG 3 Gen IV Sinnoh

0/15/12·30 (2500)
0/15/12·18 (1500)
Eevee (353) → **Glaceon**

#0554 Galarian Darumaka ✧ 153 86 172 137.00 131.29

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Ice Fang	2	9.6	6	4.80	3.00
Ice Punch		72	-40	1.80	
Ice Beam		108	-55	1.96	

15/15/15·50 (1630)
2/15/14·50 (1500)

100 CG 2 Gen V Unova

Galarian Darumaka → Galarian Darmanitan (344)

Shadow Galarian Darumaka 183.6 71.6667 172 142.42 131.29

#0555 Galarian Darmanitan ✧ 263 114 233 203.33 191.16

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Ice Fang	2	9.6	6	4.80	3.00
Ice Punch		72	-40	1.80	
Avalanche		108	-45	2.40	
Overheat		*130*	*-55*	*2.36*	*A↓2*
Superpower		*85*	*-40*	*2.12*	*A+D↓*

0/13/15·30 (2498)
0/15/11·18 (1498)

300 CG 2 Gen V Unova

Galarian Darumaka (344) → **Galarian Darmanitan**

Shadow Galarian Darmanitan 315.6 95 233 214.53 191.16

#0582 Vanillite ✧ 118 106 113 112.33 112.22

Powder Snow	2	6	8	3.00	4.00
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Ice Beam		108	-55	1.96	
Signal Beam		*75*	*-55*	*1.36*	*20%OA+D↓*
Icy Wind		72	-45	1.60	OA↓

15/15/15·50 (1168)

100 CG 2 Gen V Unova

Vanillite → Vanillish (344) → Vanilluxe (345)

#0583 Vanillish ✧ 151 138 139 142.67 142.55

Frost Breath	2	8.4	5	4.20	2.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Ice Beam		108	-55	1.96	
Signal Beam		*75*	*-55*	*1.36*	*20%OA+D↓*
Icy Wind		72	-45	1.60	OA↓

15/15/15·50 (1799)
0/14/15·43 (1498)

300 CG 2 Gen V Unova

Vanillite (344) → **Vanillish** → Vanilluxe (345)

#0584 Vanilluxe ✧ — 218 184 174 192.00 191.11

Frost Breath	2	8.4	5	4.20	2.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Flash Cannon		*110*	*-70*	*1.57*	
Blizzard		168	-75	2.24	
Signal Beam		*75*	*-55*	*1.36*	*20%OA+D↓*
Avalanche		**108**	**-45**	**2.40**	

0/15/11·37 (2500)
0/15/13·20 (1500) 0/15/12·20 (1496)
500 CG 2 Gen V Unova — Vanillite (344) → Vanillish (344) → **Vanilluxe**

#0613 Cubchoo ✧ — 128 74 146 116.00 111.41

Powder Snow	2	6	8	3.00	4.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Ice Punch		72	-40	1.80	
Play Rough		*90*	*-60*	*1.50*	
Icy Wind		72	-45	1.60	OA↓

15/15/15·50 (1208)
100 CG 2 Gen V Unova — **Cubchoo** → Beartic (345)

#0614 Beartic ✧ — 233 152 216 200.33 197.04

Powder Snow	2	6	8	3.00	4.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Ice Punch		72	-40	1.80	
Play Rough		*90*	*-60*	*1.50*	
Surf		*75*	*-45*	*1.67*	
Liquidation		*70*	*-45*	*1.56*	*30%OD↓*

0/15/13·31.5 (2500)
0/15/12·18.5 (1500)
300 CG 2 Gen V Unova — Cubchoo (345) → **Beartic**

#0615 Cryogonal ✧ — 190 218 190 199.33 198.91

Ice Shard	3	10.8	10	3.60	3.33
Frost Breath	2	8.4	5	4.20	2.50
Night Slash		*50*	*-35*	*1.43*	
Water Pulse		*80*	*-50*	*1.60*	
Solar Beam		*150*	*-80*	*1.88*	
Aurora Beam		96	-60	1.60	
Triple Axel		72	-45	1.60	A↑

0/15/15·37.5 (2500)
0/14/11·20.5 (1500)
100 CG 3 Gen V Unova — No evolution

#0712 Bergmite ✧ — 117 120 146 127.67 127.03

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Icy Wind		72	-45	1.60	OA↓
Mirror Coat		*60*	*-55*	*1.09*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1374)

100 CG 2 Gen VI Kalos

Bergmite → Avalugg (346)

#0713 Avalugg ✧ — 196 240 216 217.33 216.59

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Ice Fang	2	9.6	6	4.80	3.00
Earthquake		*110*	*-65*	*1.69*	
Icy Wind		72	-45	1.60	OA↓
Body Slam		*55*	*-35*	*1.57*	
Avalanche		108	-45	2.40	
Mirror Coat		*60*	*-55*	*1.09*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

0/14/15·29.5 (2499)
2/15/15·17.5 (1500)

300 CG 2 Gen VI Kalos

Bergmite (346) → **Avalugg**

#0974 Cetoddle ✧ — 119 80 239 146.00 131.53

Ice Shard	3	10.8	10	3.60	3.33
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Powder Snow	2	6	8	3.00	4.00
Body Slam		*55*	*-35*	*1.57*	
Avalanche		108	-45	2.40	
Heavy Slam		*70*	*-50*	*1.40*	

15/15/15·50 (1469)

100 CG 2 Gen IX Paldea

Cetoddle → Cetitan (346)

#0975 Cetitan ✧ — 208 123 347 226.00 207.06

Ice Shard	3	10.8	10	3.60	3.33
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Powder Snow	2	6	8	3.00	4.00
Body Slam		*55*	*-35*	*1.57*	
Avalanche		108	-45	2.40	
Heavy Slam		*70*	*-50*	*1.40*	

0/14/15·30.5 (2500) 0/14/14·30.5 (2497)
1/15/15·18 (1500)

300 CG 2 Gen IX Paldea

Cetoddle (346) → **Cetitan**

#0038 Alolan Ninetales ✧ — 170 193 177 180.00 179.75

Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Powder Snow	2	6	8	3.00	4.00
Charm	3	15.6	8	5.20	2.67
Ice Beam		108	-55	1.96	
Blizzard		168	-75	2.24	
Psyshock		*70*	*-40*	*1.75*	
Dazzling Gleam		108	-55	1.96	
Weather Ball (Ice)		72	-35	2.06	

7/15/15·50 (2497)
0/14/12·25 (1500)

300 CG 2 Gen I Kanto

Alolan Vulpix (342) → **Alolan Ninetales**

Shadow Alolan Ninetales — 204 160.833 177 180.61 179.75

#0144 Articuno ✧ — 192 236 207 211.67 210.89

Ice Shard	3	10.8	10	3.60	3.33
Frost Breath	2	8.4	5	4.20	2.50
Ice Beam		108	-55	1.96	
Blizzard		168	-75	2.24	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Icy Wind		72	-45	1.60	OA↓
Hurricane		**132**	**-65**	**2.03**	
Triple Axel		72	-45	1.60	A↑

0/13/15·32 (2497)
0/15/15·18.5 (1496)

100 CG 4 Gen I Kanto Legendary

No evolution

Shadow Articuno — 230.4 196.667 207 211.36 210.89

#0225 Delibird ✧ — 128 90 128 115.33 113.82

Present	*3*	*3*	*12*	*1.00*	*4.00*
Ice Punch		72	-40	1.80	
Aerial Ace		72	-45	1.60	
Icy Wind		72	-45	1.60	OA↓
Fly		96	-45	2.13	
Triple Axel		72	-45	1.60	A↑

15/15/15·50 (1237)

500 CG 3 Gen II Johto

No evolution

Shadow Delibird — 153.6 75 128 118.87 113.82

#0478 Froslass ✧ — 171 150 172 164.33 164.01

Powder Snow	2	6	8	3.00	4.00
Hex	3	8.4	13	2.80	4.33
Shadow Ball		120	-55	2.18	
Avalanche		108	-45	2.40	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Triple Axel		72	-45	1.60	A↑

15/15/15·50 (2306)
0/15/15·28 (1500)

300 CG 2 Gen IV Sinnoh

Snorunt (343) → **Froslass**

Shadow Froslass — 205.2 125 172 167.40 164.01

#0220 Swinub — 90 69 137 98.67 94.76

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Powder Snow	2	6	8	3.00	4.00
Rock Slide		*75*	*-45*	*1.67*	
Icy Wind		72	-45	1.60	OA↓
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (837)

100 CG 2 Gen II Johto

Swinub → Piloswine (348) → Mamoswine (348)

Shadow Swinub 108 57.5 137 100.83 94.76

#0221 Piloswine — 181 138 225 181.33 177.79

Ice Shard	3	10.8	10	3.60	3.33
Powder Snow	2	6	8	3.00	4.00
Stone Edge		*100*	*-55*	*1.82*	
Bulldoze		54	-45	1.20	50%OD↓
Avalanche		108	-45	2.40	
Icicle Spear		78	-40	1.95	
High Horsepower		120	-60	2.00	

5/15/12·50 (2500)
0/15/10·24.5 (1500)

300 CG 2 Gen II Johto

Swinub (348) → **Piloswine** → Mamoswine (348)

Shadow Piloswine 217.2 115 225 185.73 177.79

#0473 Mamoswine — 247 146 242 211.67 205.88

Mud Slap	3	14.4	10	4.80	3.33
Powder Snow	2	6	8	3.00	4.00
Stone Edge		*100*	*-55*	*1.82*	
Ancient Power		***60***	***-45***	***1.33***	***10%A↑***
Bulldoze		54	-45	1.20	50%OD↓
Avalanche		108	-45	2.40	
Icicle Spear		78	-40	1.95	
High Horsepower		120	-60	2.00	

0/15/13·28 (2500)
0/15/7·17 (1500)

500 CG 2 Gen IV Sinnoh

Swinub (348) → Piloswine (348) → **Mamoswine**

Shadow Mamoswine 296.4 121.667 242 220.02 205.88

#0122 Galarian Mr. Mime — 183 169 137 163.00 161.82

Zen Headbutt	3	9.6	6	3.20	2.00
Confusion	4	19.2	14	4.80	3.50
Psybeam		84	-60	1.40	
Ice Punch		72	-40	1.80	
Psychic		90	-55	1.64	10%OD↓
Triple Axel		72	-45	1.60	A↑

15/15/15·50 (2338)
1/15/13·27.5 (1500)

100 CG 3 Gen I Kanto

Galarian Mr. Mime → Mr. Rime (349)

Shadow Galarian Mr. Mime 219.6 140.833 137 165.81 161.82

#0124 Jynx ✧ — 223 151 163 179.00 176.40

Frost Breath	2	8.4	5	4.20	2.50
Pound	**2**	**4**	**4**	**2.00**	**2.00**
Confusion	4	19.2	14	4.80	3.50
Ice Punch		**72**	**-40**	**1.80**	
Psyshock		84	-40	2.10	
Draining Kiss		*60*	*-55*	*1.09*	
Focus Blast		*150*	*-75*	*2.00*	
Avalanche		108	-45	2.40	

1/15/15·43 (2497)
0/14/15·22 (1500)

300 CG 3 Gen I Kanto

Smoochum (349) → **Jynx**

#0238 Smoochum ✧ — 153 91 128 124.00 121.24

Frost Breath	**2**	**8.4**	**5**	**4.20**	**2.50**
Pound	*2*	*4*	*4*	*2.00*	*2.00*
Powder Snow	2	6	8	3.00	4.00
Ice Punch		72	-40	1.80	
Ice Beam		108	-55	1.96	
Psyshock		84	-40	2.10	

15/15/15·50 (1460)

100 CG 1 Gen II Johto Baby

Smoochum → Jynx (349)

#0866 Mr. Rime ✧ — 212 179 190 193.67 193.19

Ice Shard	3	10.8	10	3.60	3.33
Zen Headbutt	3	9.6	6	3.20	2.00
Confusion	4	19.2	14	4.80	3.50
Psybeam		84	-60	1.40	
Ice Punch		72	-40	1.80	
Psychic		90	-55	1.64	10%OD↓
Icy Wind		72	-45	1.60	OA↓
Triple Axel		72	-45	1.60	A↑

0/14/14·36.5 (2496)
0/14/13·20 (1497)

300 CG 3 Gen VIII Galar

Galarian Mr. Mime (348) → **Mr. Rime**

Shadow Mr. Rime — 254.4 149.167 190 197.86 193.19

#0713 Hisuian Avalugg ✧ — 214 238 216 222.67 222.41

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Powder Snow	2	6	8	3.00	4.00
Blizzard		168	-75	2.24	
Rock Slide		90	-45	2.00	
Icy Wind		72	-45	1.60	OA↓
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

1/14/15·27 (2499)
0/14/9·16.5 (1500)

100 CG 2 Gen VI Kalos

No evolution

#0027 Alolan Sandshrew ✧ — 125 129 137 130.33 130.24

Metal Claw	2	6	7	3.00	3.50
Powder Snow	2	6	8	3.00	4.00
Blizzard		168	-75	2.24	
Night Slash		*50*	*-35*	*1.43*	
Gyro Ball		96	-50	1.92	

15/15/15·50 (1462)

100 CG 2 Gen I Kanto

Alolan Sandshrew → Alolan Sandslash (350)

Shadow Alolan Sandshrew — 150 107.5 137 131.50 130.24

#0028 Alolan Sandslash ✧ — 177 195 181 184.33 184.17

Shadow Claw	**2**	**6**	**8**	**3.00**	**4.00**
Metal Claw	2	6	7	3.00	3.50
Powder Snow	2	6	8	3.00	4.00
Ice Punch		72	-40	1.80	
Blizzard		168	-75	2.24	
Aerial Ace		*60*	*-45*	*1.33*	
Drill Run		*80*	*-45*	*1.78*	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*
Gyro Ball		96	-50	1.92	

0/14/15·49 (2499)
0/14/14·23.5 (1498)

300 CG 2 Gen I Kanto

Alolan Sandshrew (350) → **Alolan Sandslash**

Shadow Alolan Sandslash — 212.4 162.5 181 185.30 184.17

#0363 Spheal ✧ — 95 90 172 119.00 113.72

Water Gun	1	3.6	3	3.60	3.00
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Water Pulse		96	-50	1.92	
Body Slam		*55*	*-35*	*1.57*	
Aurora Beam		96	-60	1.60	

15/15/15·50 (1088)

100 CG 2 Gen III Hoenn

Spheal → Sealeo (350) → Walrein (351)

Shadow Spheal — 114 75 172 120.33 113.72

#0364 Sealeo ✧ — 137 132 207 158.67 155.27

Water Gun	1	3.6	3	3.60	3.00
Powder Snow	2	6	8	3.00	4.00
Water Pulse		96	-50	1.92	
Body Slam		*55*	*-35*	*1.57*	
Aurora Beam		96	-60	1.60	
Surf		90	-45	2.00	

15/15/15·50 (1938)
0/15/14·38 (1498)

300 CG 2 Gen III Hoenn

Spheal (350) → **Sealeo** → Walrein (351)

Shadow Sealeo — 164.4 110 207 160.47 155.27

#0365 Walrein — 182 176 242 200.00 197.91

Frost Breath	2	8.4	5	4.20	2.50
Powder Snow	**2**	**6**	**8**	**3.00**	**4.00**
Waterfall	3	14.4	8	4.80	2.67
Earthquake		*110*	*-65*	*1.69*	
Blizzard		168	-75	2.24	
Water Pulse		96	-50	1.92	
Icicle Spear		**78**	**-40**	**1.95**	

0/15/15·39.5 (2500)
0/12/15·21 (1499)
Spheal (350) → Sealeo (350) → **Walrein**

500 CG 2 Gen III Hoenn

Shadow Walrein 218.4 146.667 242 202.36 197.91

#0019 Rattata — 103 70 102 91.67 90.26

Quick Attack	2	6	8	3.00	4.00
Tackle	1	3.6	3	3.60	3.00
Dig		*70*	*-50*	*1.40*	
Hyper Fang		96	-50	1.92	
Body Slam		66	-35	1.89	

15/15/15·50 (830)
Rattata → Raticate (351)

100 CG 1 Gen I Kanto

Shadow Rattata 123.6 58.3333 102 94.64 90.26

#0020 Raticate — 161 139 146 148.67 148.39

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Quick Attack	2	6	8	3.00	4.00
Hyper Beam		180	-80	2.25	
Dig		*70*	*-50*	*1.40*	
Hyper Fang		96	-50	1.92	

15/15/15·50 (1956)
0/14/15·36.5 (1499)
Rattata (351) → **Raticate**

300 CG 1 Gen I Kanto

Shadow Raticate 193.2 115.833 146 151.68 148.39

#0052 Meowth — 92 78 120 96.67 95.14

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Scratch	1	4.8	2	4.80	2.00
Dark Pulse		*80*	*-50*	*1.60*	
Night Slash		*50*	*-35*	*1.43*	
Body Slam		**66**	**-35**	**1.89**	
Foul Play		*60*	*-40*	*1.50*	

15/15/15·50 (846)
Meowth → Persian (352)

500 CG 2 Gen I Kanto

Shadow Meowth 110.4 65 120 98.47 95.14

#0053 Persian ✧ — 150 136 163 149.67 149.26

Scratch	1	4.8	2	4.80	2.00
Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Night Slash		***50***	***-35***	***1.43***	
Power Gem		*85*	*-50*	*1.70*	
Play Rough		*90*	*-60*	*1.50*	
Foul Play		*60*	*-40*	*1.50*	
Payback		*110*	*-60*	*1.83*	

15/15/15·50 (1910)
0/14/13·39 (1500)

700 CG 2 Gen I Kanto

Meowth (351) → **Persian**

Shadow Persian — 180 113.333 163 152.11 149.26

#0108 Lickitung ✧ — 108 137 207 150.67 145.22

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Wrap		72	-45	1.60	D↑
Hyper Beam		180	-80	2.25	
Power Whip		*90*	*-50*	*1.80*	
Stomp		66	-40	1.65	
Body Slam		**66**	**-35**	**1.89**	

15/15/15·50 (1595)
8/14/15·50 (1499)

100 CG 2 Gen I Kanto

Lickitung → Lickilicky (362)

#0113 Chansey ✧ — 60 128 487 225.00 155.23

Pound	2	4.8	4	2.40	2.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Hyper Beam		180	-80	2.25	
Dazzling Gleam		*90*	*-55*	*1.64*	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

15/15/15·50 (1418)

300 CG 3 Gen I Kanto

Happiny (362) → **Chansey** → Blissey (356)

#0115 Kangaskhan ✧ — 181 165 233 193.00 190.91

Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Earthquake		*110*	*-65*	*1.69*	
Brick Break		***40***	***-40***	***1.00***	***OD↓***
Stomp		**66**	**-40**	**1.65**	
Outrage		*110*	*-60*	*1.83*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Power-Up Punch		*20*	*-35*	*0.57*	*A↑*

0/15/13·44 (2500)
0/14/15·22 (1497)

100 CG 2 Gen I Kanto

No evolution

Shadow Kangaskhan — 217.2 137.5 233 195.90 190.91

#0128 Tauros ✧ — 198 183 181 187.33 187.18

Tackle	1	3.6	3	3.60	3.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Earthquake		*110*	*-65*	*1.69*	
Iron Head		*70*	*-50*	*1.40*	
Horn Attack		48	-35	1.37	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

0/15/15·42 (2498) 0/15/14·42 (2491)
0/15/15·21.5 (1496)

100 CG 2 Gen I Kanto — No evolution

#0132 Ditto ✧ — 91 91 134 105.33 103.53

Transform	1	0	0	0.00	0.00
Struggle		42	-100	0.42	

15/15/15·50 (940)

100 CG 2 Gen I Kanto — No evolution

#0133 Eevee ✧ — 104 114 146 121.33 120.07

Quick Attack	2	6	8	3.00	4.00
Tackle	1	3.6	3	3.60	3.00
Dig		*70*	*-50*	*1.40*	
Swift		66	-35	1.89	
Body Slam		**66**	**-35**	**1.89**	
Last Resort		**108**	**-55**	**1.96**	

15/15/15·50 (1210)

100 CG 3 Gen I Kanto — **Eevee** → Vaporeon (436)

#0137 Porygon ✧ — 153 136 163 150.67 150.25

Tackle	1	3.6	3	3.60	3.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Hidden Power	3	10.8	8	3.60	2.67
Hyper Beam		180	-80	2.25	
Psybeam		***70***	***-60***	***1.17***	
Discharge		***55***	***-40***	***1.38***	
Signal Beam		***75***	***-55***	***1.36***	***20%OA+D↓***
Solar Beam		*150*	*-80*	*1.88*	
Zap Cannon		*150*	*-80*	*1.88*	*33%OA↓*

15/15/15·50 (1944)
0/13/15·37.5 (1500)

100 CG 2 Gen I Kanto — **Porygon** → Porygon2 (355) → Porygon-Z (362)

Shadow Porygon — 183.6 113.333 163 153.31 150.25

#0143 Snorlax — 190 169 330 229.67 219.64

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Yawn	**4**	**0**	**12**	**0.00**	**3.00**
Hyper Beam		180	-80	2.25	
Earthquake		*110*	*-65*	*1.69*	
Body Slam		66	-35	1.89	
Heavy Slam		*70*	*-50*	*1.40*	
Outrage		*110*	*-60*	*1.83*	
Skull Bash		156	-75	2.08	D↑
Superpower		*85*	*-40*	*2.12*	*A+D↓*

0/12/15·29.5 (2499)
1/15/14·17.5 (1500)

300 CG 3 Gen I Kanto

Munchlax (362) → **Snorlax**

Shadow Snorlax — 228 140.833 330 232.94 219.64

#0161 Sentret — 79 73 111 87.67 86.18

Quick Attack	2	6	8	3.00	4.00
Scratch	1	4.8	2	4.80	2.00
Dig		*70*	*-50*	*1.40*	
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Grass Knot		*90*	*-50*	*1.80*	

15/15/15·50 (698) 15/15/14·50 (696)

100 CG 1 Gen II Johto

Sentret → Furret (354)

#0162 Furret — 148 125 198 157.00 154.15

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Quick Attack	2	6	8	3.00	4.00
Hyper Beam		180	-80	2.25	
Dig		*70*	*-50*	*1.40*	
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Swift		66	-35	1.89	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

15/15/15·50 (1987) 15/15/14·50 (1982)
1/15/14·35.5 (1500)

300 CG 1 Gen II Johto

Sentret (354) → **Furret**

#0190 Aipom — 136 112 146 131.33 130.53

Scratch	1	4.8	2	4.80	2.00
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Aerial Ace		*60*	*-45*	*1.33*	
Low Sweep		*40*	*-40*	*1.00*	
Swift		66	-35	1.89	

15/15/15·50 (1524)
14/15/14·49.5 (1500)

100 CG 2 Gen II Johto

Aipom → Ambipom (360)

Shadow Aipom — 163.2 93.3333 146 134.18 130.53

#0206 Dunsparce ✧ — 131 128 225 161.33 155.68

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Dig		*70*	*-50*	*1.40*	
Drill Run		*80*	*-45*	*1.78*	
Rock Slide		*75*	*-45*	*1.67*	

100 CG 2 Gen II Johto

15/15/15·50 (1909)
0/14/12·40 (1500)
No evolution

#0216 Teddiursa ✧ — 142 93 155 130.00 126.97

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Scratch	1	4.8	2	4.80	2.00
Cross Chop		*55*	*-35*	*1.57*	
Play Rough		*90*	*-60*	*1.50*	
Swift		66	-35	1.89	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Trailblaze		*65*	*-45*	*1.44*	*A↑*

100 CG 2 Gen II Johto

15/15/15·50 (1502) 15/15/14·50 (1497)
Teddiursa → Ursaring (355) → Ursaluna (339)

Shadow Teddiursa — 170.4 77.5 155 134.30 126.97

#0217 Ursaring ✧ — 236 144 207 195.67 191.61

Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Hyper Beam		180	-80	2.25	
Play Rough		*90*	*-60*	*1.50*	
Swift		66	-35	1.89	
Close Combat		*100*	*-45*	*2.22*	*D↓2*
Trailblaze		*65*	*-45*	*1.44*	*A↑*

300 CG 2 Gen II Johto

0/15/13·33.5 (2500)
0/14/15·19 (1498)
Teddiursa (355) → **Ursaring** → Ursaluna (339)

Shadow Ursaring — 283.2 120 207 203.40 191.61

#0233 Porygon2 ✧ — 198 180 198 192.00 191.81

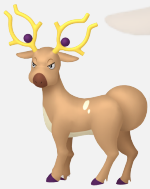
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Hidden Power	3	10.8	8	3.60	2.67
Lock On	1	1.2	5	1.20	5.00
Hyper Beam		180	-80	2.25	
Solar Beam		*150*	*-80*	*1.88*	
Zap Cannon		*150*	*-80*	*1.88*	*33%OA↓*
Tri Attack		78	-50	1.56	50%OA+D↓

300 CG 2 Gen II Johto

1/15/15·39 (2496)
0/12/15·21 (1500)
Porygon (353) → **Porygon2** → Porygon-Z (362)

Shadow Porygon2 — 237.6 150 198 195.20 191.81

#0234 Stantler ✧ — 192 131 177 166.67 164.51



Tackle	1	3.6	3	3.60	3.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Megahorn		*110*	*-55*	*2.00*	
Stomp		66	-40	1.65	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*

100 CG 2 Gen II Johto

15/15/15·50 (2447)
0/11/15·26.5 (1499)
No evolution

Shadow Stantler — 230.4 109.167 177 172.19 164.51

#0235 Smeargle ✧ — 40 83 146 89.67 78.55

Splash	*4*	*0*	*12*	*0.00*	*3.00*
Struggle		42	-100	0.42	

100 CG 2 Gen II Johto

15/15/15·50 (487)
No evolution

#0241 Miltank ✧ — 157 193 216 188.67 187.06

Tackle	1	3.6	3	3.60	3.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Ice Beam		*90*	*-55*	*1.64*	
Thunderbolt		*90*	*-55*	*1.64*	
Stomp		66	-40	1.65	
Body Slam		66	-35	1.89	
Gyro Ball		*80*	*-50*	*1.60*	

100 CG 3 Gen II Johto

4/15/15·50 (2491)
0/14/14·24.5 (1497)
No evolution

#0242 Blissey ✧ — 129 169 496 264.67 221.13

Pound	2	4.8	4	2.40	2.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Hyper Beam		180	-80	2.25	
Dazzling Gleam		*90*	*-55*	*1.64*	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Wild Charge		***100***	***-45***	***2.22***	***D↓2***

500 CG 3 Gen II Johto

0/15/14·41 (2499)
0/15/3·21.5 (1499)
Happiny (362) → Chansey (352) → **Blissey**

#0263 Zigzagoon ✧ — 58 80 116 84.67 81.34

Tackle	1	3.6	3	3.60	3.00
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Dig		*70*	*-50*	*1.40*	
Thunderbolt		*90*	*-55*	*1.64*	
Grass Knot		*90*	*-50*	*1.80*	

15/15/15·50 (575)

100 CG 1 Gen III Hoenn

Zigzagoon → Linoone (357)

Shadow Zigzagoon — 69.6 66.6667 116 84.09 81.34

#0264 Linoone ✧ — 142 128 186 152.00 150.08

Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Tackle	1	3.6	3	3.60	3.00
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Dig		*70*	*-50*	*1.40*	
Thunder		*100*	*-60*	*1.67*	
Swift		66	-35	1.89	
Grass Knot		*90*	*-50*	*1.80*	

15/15/15·50 (1879) 15/15/14·50 (1874)
0/15/14·40 (1499)

300 CG 1 Gen III Hoenn

Zigzagoon (357) → **Linoone**

Shadow Linoone — 170.4 106.667 186 154.36 150.08

#0287 Slakoth ✧ — 104 92 155 117.00 114.04

Yawn	4	0	12	0.00	3.00
Night Slash		*50*	*-35*	*1.43*	
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Body Slam		66	-35	1.89	

15/15/15·50 (1133) 15/15/14·50 (1129)

100 CG 3 Gen III Hoenn

Slakoth → Vigoroth (357) → Slaking (358)

Shadow Slakoth — 124.8 76.6667 155 118.82 114.04

#0288 Vigoroth ✧ — 159 145 190 164.67 163.62

Scratch	1	4.8	2	4.80	2.00
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Rock Slide		*75*	*-45*	*1.67*	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*
Brick Break		*40*	*-40*	*1.00*	*OD↓*
Body Slam		66	-35	1.89	

15/15/15·50 (2225)
1/15/15·29 (1499)

300 CG 3 Gen III Hoenn

Slakoth (357) → **Vigoroth** → Slaking (358)

Shadow Vigoroth — 190.8 120.833 190 167.21 163.62

#0289 Slaking ✧ — 290 166 284 246.67 239.12

Yawn	4	0	12	0.00	3.00
Hyper Beam		180	-80	2.25	
Earthquake		*110*	*-65*	*1.69*	
Play Rough		*90*	*-60*	*1.50*	
Body Slam		**66**	**-35**	**1.89**	

0/11/15·21 (2500)
0/14/15·12.5 (1500)

500 CG 3 Gen III Hoenn

Slakoth (357) → Vigoroth (357) → **Slaking**

Shadow Slaking — 348 138.333 284 256.78 239.12

#0293 Whismur ✧ — 92 42 162 98.67 85.54

Pound	2	4.8	4	2.40	2.00
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Flamethrower		*90*	*-55*	*1.64*	
Disarming Voice		*70*	*-45*	*1.56*	
Stomp		66	-40	1.65	

15/15/15·50 (758)

100 CG 1 Gen III Hoenn

Whismur → Loudred (358) → Exploud (358)

Shadow Whismur — 110.4 35 162 102.47 85.54

#0294 Loudred ✧ — 134 81 197 137.33 128.83

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Flamethrower		*90*	*-55*	*1.64*	
Disarming Voice		*70*	*-45*	*1.56*	
Stomp		66	-40	1.65	

15/15/15·50 (1500)
15/15/15·50 (1500)

300 CG 1 Gen III Hoenn

Whismur (358) → **Loudred** → Exploud (358)

Shadow Loudred — 160.8 67.5 197 141.77 128.83

#0295 Exploud ✧ — 179 137 232 182.67 178.52

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Disarming Voice		*70*	*-45*	*1.56*	
Fire Blast		*140*	*-80*	*1.75*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Boomburst		180	-70	2.57	

4/15/14·50 (2498)
0/15/10·24.5 (1500)

500 CG 1 Gen III Hoenn

Whismur (358) → Loudred (358) → **Exploud**

Shadow Exploud — 214.8 114.167 232 186.99 178.52

#0300 Skitty ✧ — 84 79 137 100.00 96.87

Tackle	1	3.6	3	3.60	3.00
Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Dig		*70*	*-50*	*1.40*	
Disarming Voice		*70*	*-45*	*1.56*	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*

15/15/15·50 (835)

100 CG 2 Gen III Hoenn

Skitty → Delcatty (359)

#0301 Delcatty ✧ — 132 127 172 143.67 142.33

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Disarming Voice		*70*	*-45*	*1.56*	
Play Rough		*90*	*-60*	*1.50*	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*

15/15/15·50 (1691)
0/15/15·49 (1500)

300 CG 2 Gen III Hoenn

Skitty (359) → **Delcatty**

#0327 Spinda ✧ — 116 116 155 129.00 127.77

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Psycho Cut	*2*	*3*	*9*	*1.50*	*4.50*
Dig		*70*	*-50*	*1.40*	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Icy Wind		*60*	*-45*	*1.33*	*OA↓*

15/15/15·50 (1380) 15/15/14·50 (1376)

100 CG 2 Gen III Hoenn

No evolution

#0335 Zangoose ✧ — 222 124 177 174.33 169.53

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Dig		*70*	*-50*	*1.40*	
Night Slash		*50*	*-35*	*1.43*	
Close Combat		*100*	*-45*	*2.22*	*D↓2*

0/15/15·48 (2500)
0/15/10·23.5 (1500)

100 CG 2 Gen III Hoenn

No evolution

#0351 Castform ✧ — 139 139 172 150.00 149.23

Tackle	1	3.6	3	3.60	3.00
Hex	*3*	*7*	*13*	*2.33*	*4.33*
Hurricane		*110*	*-65*	*1.69*	
Energy Ball		*90*	*-55*	*1.64*	*10%OD↓*
Weather Ball (Rock)		*60*	*-35*	*1.71*	
Weather Ball (Normal)		72	-35	2.06	

15/15/15·50 (1845)
0/14/15·41.5 (1496)
No evolution

100 CG 3 Gen III Hoenn

#0352 Kecleon ✧ — 161 189 155 168.33 167.70

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Lick	*1*	*3*	*3*	*3.00*	*3.00*
Flamethrower		*90*	*-55*	*1.64*	
Ice Beam		*90*	*-55*	*1.64*	
Aerial Ace		*60*	*-45*	*1.33*	
Shadow Sneak		*50*	*-45*	*1.11*	
Thunder		*100*	*-60*	*1.67*	
Foul Play		*60*	*-40*	*1.50*	

15/15/15·50 (2314) 15/15/14·50 (2307)
0/15/15·28 (1498)
No evolution

100 CG 3 Gen III Hoenn

#0399 Bidoof ✧ — 80 73 153 102.00 96.32

Tackle	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Ice Beam		***90***	***-55***	***1.64***	
Shadow Ball		***100***	***-55***	***1.82***	
Thunderbolt		***90***	***-55***	***1.64***	
Hyper Fang		96	-50	1.92	
Grass Knot		*90*	*-50*	*1.80*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Superpower		***85***	***-40***	***2.12***	***A+D↓***

15/15/15·50 (815)
Bidoof → Bibarel (380)

100 CG 1 Gen IV Sinnoh

Shadow Bidoof — **96 60.8333 153 103.28 96.32**

#0424 Ambipom ✧ — 205 143 181 176.33 174.42

Scratch	1	4.8	2	4.80	2.00
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Hyper Beam		180	-80	2.25	
Aerial Ace		*60*	*-45*	*1.33*	
Low Sweep		*40*	*-40*	*1.00*	

0/15/14·48.5 (2495)
0/13/14·23.5 (1499)
Aipom (354) → **Ambipom**

300 CG 2 Gen IV Sinnoh

Shadow Ambipom — **246 119.167 181 182.06 174.42**

#0427 Buneary ✧ — 130 105 146 127.00 125.84

Quick Attack	2	6	8	3.00	4.00
Pound	2	4.8	4	2.40	2.00
Fire Punch		*60*	*-40*	*1.50*	
Swift		66	-35	1.89	

100 CG 2 Gen IV Sinnoh

15/15/15·50 (1423)

Buneary → Lopunny (361)

#0428 Lopunny ✧ — 156 194 163 171.00 170.23

Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Pound	2	4.8	4	2.40	2.00
Double Kick	*3*	*8*	*12*	*2.67*	*4.00*
Hyper Beam		180	-80	2.25	
Fire Punch		*60*	*-40*	*1.50*	
Focus Blast		*150*	*-75*	*2.00*	
Triple Axel		*60*	*-45*	*1.33*	*A↑*

300 CG 2 Gen IV Sinnoh

15/15/15·50 (2328)
0/15/14·28 (1499)

Buneary (361) → **Lopunny**

#0431 Glameow ✧ — 109 82 135 108.67 106.46

Quick Attack	2	6	8	3.00	4.00
Scratch	1	4.8	2	4.80	2.00
Aerial Ace		*60*	*-45*	*1.33*	
Thunderbolt		*90*	*-55*	*1.64*	
Play Rough		*90*	*-60*	*1.50*	

100 CG 2 Gen IV Sinnoh

15/15/15·50 (1056)

Glameow → Purugly (361)

Shadow Glameow — 130.8 68.3333 135 111.38 106.46

#0432 Purugly ✧ — 172 133 174 159.67 158.48

Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Scratch	1	4.8	2	4.80	2.00
Aerial Ace		*60*	*-45*	*1.33*	
Thunder		*100*	*-60*	*1.67*	
Play Rough		*90*	*-60*	*1.50*	

300 CG 2 Gen IV Sinnoh

15/15/15·50 (2208)
0/12/15·29.5 (1499)

Glameow (361) → **Purugly**

Shadow Purugly — 206.4 110.833 174 163.74 158.48

#0440 Happiny ✧ — 25 77 225 109.00 75.66

Pound	2	4.8	4	2.40	2.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

15/15/15·50 (419)

100 CG 1 Gen IV Sinnoh Baby

Happiny → Chansey (352) → Blissey (356)

#0446 Munchlax ✧ — 137 117 286 180.00 166.12

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Tackle	1	3.6	3	3.60	3.00
Gunk Shot		*130*	*-75*	*1.73*	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*
Heavy Slam		*70*	*-50*	*1.40*	

15/15/15·50 (2139) 15/15/14·50 (2135)
0/14/13·32 (1500)

100 CG 1 Gen IV Sinnoh Baby

Munchlax → Snorlax (354)

#0463 Lickilicky ✧ — 161 181 242 194.67 191.77

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Hyper Beam		180	-80	2.25	
Earthquake		*110*	*-65*	*1.69*	
Shadow Ball		*100*	*-55*	*1.82*	
Solar Beam		*150*	*-80*	*1.88*	
Body Slam		**66**	**-35**	**1.89**	

0/14/15·48.5 (2499)
0/15/10·23.5 (1500)

300 CG 2 Gen IV Sinnoh

Lickitung (352) → **Lickilicky**

#0474 Porygon-Z ✧ — 264 150 198 204.00 198.66

Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Hidden Power	3	10.8	8	3.60	2.67
Lock On	1	1.2	5	1.20	5.00
Hyper Beam		180	-80	2.25	
Blizzard		*140*	*-75*	*1.87*	
Solar Beam		*150*	*-80*	*1.88*	
Zap Cannon		*150*	*-80*	*1.88*	*33%OA↓*
Tri Attack		**78**	**-50**	**1.56**	**50%OA+D↓**

0/13/14·28.5 (2496)
1/15/13·17 (1500)

500 CG 2 Gen IV Sinnoh

Porygon (353) → Porygon2 (355) → **Porygon-Z**

Shadow Porygon-Z — 316.8 125 198 213.27 198.66

#0486 Regigigas ✧ — 287 210 221 239.33 237.05

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Hidden Power	3	10.8	8	3.60	2.67
Thunder		*100*	*-60*	*1.67*	
Focus Blast		*150*	*-75*	*2.00*	
Giga Impact		180	-80	2.25	

0/13/10·21.5 (2499)
0/8/12·13 (1500)
No evolution

100 CG 4 Gen IV Sinnoh Legendary

Shadow Regigigas — 344.4 175 221 246.80 237.05

#0504 Patrat ✧ — 98 73 128 99.67 97.11

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Tackle	1	3.6	3	3.60	3.00
Dig		*70*	*-50*	*1.40*	
Hyper Fang		96	-50	1.92	
Grass Knot		*90*	*-50*	*1.80*	

15/15/15·50 (895)
Patrat → Watchog (363)

100 CG 1 Gen V Unova

Shadow Patrat — 117.6 60.8333 128 102.14 97.11

#0505 Watchog ✧ — 165 139 155 153.00 152.62

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Hyper Fang		96	-50	1.92	
Grass Knot		*90*	*-50*	*1.80*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (2056) 15/15/14·50 (2050)
0/15/15·33 (1500)
Patrat (363) → **Watchog**

300 CG 1 Gen V Unova

Shadow Watchog — 198 115.833 155 156.28 152.62

#0506 Lillipup ✧ — 107 86 128 107.00 105.61

Tackle	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Dig		*70*	*-50*	*1.40*	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Thunderbolt		*90*	*-55*	*1.64*	

15/15/15·50 (1035)
Lillipup → Herdier (364) → Stoutland (364)

100 CG 1 Gen V Unova

#0507 Herdier — 145 126 163 144.67 143.87

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Take Down	3	6	8	2.00	2.67
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Dig		*70*	*-50*	*1.40*	
Thunderbolt		*90*	*-55*	*1.64*	
Play Rough		*90*	*-60*	*1.50*	

15/15/15·50 (1789)
1/15/15·43 (1499)

300 CG 1 Gen V Unova

Lillipup (363) → **Herdier** → Stoutland (364)

#0508 Stoutland — 206 182 198 195.33 195.07

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Take Down	3	6	8	2.00	2.67
Ice Fang	*2*	*8*	*6*	*4.00*	*3.00*
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Play Rough		*90*	*-60*	*1.50*	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

0/14/15·36.5 (2497)
0/15/13·20 (1498)

500 CG 1 Gen V Unova

Lillipup (363) → Herdier (364) → **Stoutland**

#0531 Audino — 114 163 230 169.00 162.28

Pound	2	4.8	4	2.40	2.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Hyper Beam		180	-80	2.25	
Disarming Voice		*70*	*-45*	*1.56*	
Dazzling Gleam		*90*	*-55*	*1.64*	
Body Slam		66	-35	1.89	

15/15/15·50 (1902) 15/15/14·50 (1898)
0/15/13·41 (1499)

2100 CG 2 Gen V Unova

No evolution

#0572 Minccino — 98 80 146 108.00 104.61

Pound	2	4.8	4	2.40	2.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Aqua Tail		*55*	*-35*	*1.57*	
Thunderbolt		*90*	*-55*	*1.64*	
Swift		66	-35	1.89	

15/15/15·50 (986)

100 CG 2 Gen V Unova

Minccino → Cinccino (365)

#0573 Cinccino ✧ 198 130 181 169.67 167.02

Pound	2	4.8	4	2.40	2.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Hyper Beam		180	-80	2.25	
Aqua Tail		*55*	*-35*	*1.57*	
Thunderbolt		*90*	*-55*	*1.64*	

300 CG 2 Gen V Unova

12/15/15·50 (2499)
2/15/14·25 (1500)
Minccino (364) → **Cinccino**

#0626 Bouffalant ✧ 195 182 216 197.67 197.18

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Megahorn		*110*	*-55*	*2.00*	
Earthquake		*110*	*-65*	*1.69*	
Stomp		66	-40	1.65	
Skull Bash		156	-75	2.08	D↑

100 CG 2 Gen V Unova

0/14/15·37.5 (2498)
0/13/11·20.5 (1500)
No evolution

#0659 Bunnelby ✧ 68 72 116 85.33 82.81

Quick Attack	2	6	8	3.00	4.00
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Dig		*70*	*-50*	*1.40*	
Earthquake		*110*	*-65*	*1.69*	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*

100 CG 1 Gen VI Kalos

15/15/15·50 (625)
Bunnelby → Diggersby (378)

Shadow Bunnelby 81.6 60 116 85.87 82.81

#0676 Furfrou ✧ 164 167 181 170.67 170.51

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Take Down	3	6	8	2.00	2.67
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Dark Pulse		*80*	*-50*	*1.60*	
Grass Knot		*90*	*-50*	*1.80*	
Surf		*75*	*-45*	*1.67*	

100 CG 3 Gen VI Kalos

15/15/15·50 (2387)
1/14/15·27 (1497)
No evolution

#0734 Yungoos ✧ — 122 56 134 104.00 97.10

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Tackle	1	3.6	3	3.60	3.00
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Hyper Fang		96	-50	1.92	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

100 CG 1 Gen VII Alola

15/15/15·50 (994)

Yungoos → Gumshoos (366)

#0735 Gumshoos ✧ — 194 113 204 170.33 164.75

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Take Down	3	6	8	2.00	2.67
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Hyper Fang		96	-50	1.92	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

300 CG 1 Gen VII Alola

15/15/15·50 (2470)
0/15/13·26 (1500) 0/15/12·26 (1496)
Yungoos (366) → **Gumshoos**

#0775 Komala ✧ — 216 165 163 181.33 179.77

Yawn	4	0	12	0.00	3.00
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Play Rough		*90*	*-60*	*1.50*	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*
Payback		*110*	*-60*	*1.83*	

100 CG 2 Gen VII Alola

0/14/15·43 (2500)
0/15/11·22 (1500)
No evolution

#0819 Skwovet ✧ — 95 86 172 117.67 112.01

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Tackle	1	3.6	3	3.60	3.00
Bullet Seed	*3*	*5*	*13*	*1.67*	*4.33*
Body Slam		66	-35	1.89	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Trailblaze		*65*	*-45*	*1.44*	*A↑*

100 CG 1 Gen VIII Galar

15/15/15·50 (1067)

Skwovet → Greedent (367)

#0820 Greedent ✧ — 160 156 260 192.00 186.53

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Tackle	1	3.6	3	3.60	3.00
Bullet Seed	*3*	*5*	*13*	*1.67*	*4.33*
Body Slam		66	-35	1.89	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Trailblaze		*65*	*-45*	*1.44*	*A↑*

300 CG 1 Gen VIII Galar

3/15/15·50 (2495)
0/12/14·24.5 (1500)
Skwovet (366) → **Greedent**

#0831 Wooloo ✧ — 76 97 123 98.67 96.79

Tackle	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Stomp		66	-40	1.65	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*
Payback		*110*	*-60*	*1.83*	

100 CG 1 Gen VIII Galar

15/15/15·50 (798) 15/15/14·50 (795)
Wooloo → Dubwool (367)

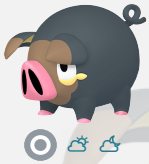
#0832 Dubwool ✧ — 159 198 176 177.67 176.95

Tackle	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Double Kick	*3*	*8*	*12*	*2.67*	*4.00*
Body Slam		66	-35	1.89	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*
Payback		*110*	*-60*	*1.83*	

300 CG 1 Gen VIII Galar

15/15/15·50 (2478)
1/15/15·26 (1497)
Wooloo (367) → **Dubwool**

#0915 Lechonk ✧ — 81 79 144 101.33 97.31



Tackle	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Dig		*70*	*-50*	*1.40*	
Body Slam		66	-35	1.89	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

100 CG 1 Gen IX Paldea

15/15/15·50 (828)
Lechonk → Male Oinkologne (368)

#0916 Male Oinkologne ✧ — 186 153 242 193.67 190.26

Tackle	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Dig		*70*	*-50*	*1.40*	
Body Slam		66	-35	1.89	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

300 CG 1 Gen IX Paldea

0/14/12·43.5 (2499)
0/11/15·22 (1499)
Lechonk (367) → **Male Oinkologne**

#0916 Female Oinkologne ✧ — 169 162 251 194.00 190.12

Tackle	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Dig		*70*	*-50*	*1.40*	
Body Slam		66	-35	1.89	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

300 CG 1 Gen IX Paldea

0/15/15·47 (2497)
0/14/15·23 (1500)
Lechonk (367) → **Female Oinkologne**

#0924 Tandemaus ✧ — 98 90 137 108.33 106.51

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Bullet Seed	*3*	*5*	*13*	*1.67*	*4.33*
Take Down	3	6	8	2.00	2.67
Play Rough		*90*	*-60*	*1.50*	
Swift		66	-35	1.89	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

100 CG 1 Gen IX Paldea

15/15/15·50 (1008)
Tandemaus → Maushold (368)

#0925 Maushold ✧ — 159 157 179 165.00 164.71

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Bullet Seed	*3*	*5*	*13*	*1.67*	*4.33*
Take Down	3	6	8	2.00	2.67
Play Rough		*90*	*-60*	*1.50*	
Swift		66	-35	1.89	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

300 CG 1 Gen IX Paldea

15/15/15·50 (2244)
0/14/15·29 (1498)
Tandemaus (368) → **Maushold**

#0780 Drampa ✧ — 231 164 186 193.67 191.72

Dragon Breath	1	3.6	4	3.60	4.00
Extrasensory	*3*	*8*	*10*	*2.67*	*3.33*
Dragon Pulse		108	-55	1.96	
Swift		66	-35	1.89	
Outrage		132	-60	2.20	
Fly		*80*	*-45*	*1.78*	

0/15/14·34 (2495)
2/15/15·19 (1498)

100 CG 3 Gen VII Alola — No evolution

#0039 Jigglypuff ✧ — 80 41 251 124.00 93.72

Pound	2	4.8	4	2.40	2.00
Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Disarming Voice		84	-45	1.87	
Dazzling Gleam		108	-55	1.96	
Play Rough		**108**	**-60**	**1.80**	
Swift		66	-35	1.89	
Body Slam		**66**	**-35**	**1.89**	
Gyro Ball		*80*	*-50*	*1.60*	

15/15/15·50 (818)

100 CG 1 Gen I Kanto — **Jigglypuff** → Wigglytuff (369)

#0040 Wigglytuff ✧ — 156 90 295 180.33 160.59

Pound	2	4.8	4	2.40	2.00
Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Charm	3	15.6	8	5.20	2.67
Hyper Beam		180	-80	2.25	
Ice Beam		*90*	*-55*	*1.64*	
Disarming Voice		84	-45	1.87	
Dazzling Gleam		108	-55	1.96	
Play Rough		108	-60	1.80	
Icy Wind		*60*	*-45*	*1.33*	*OA↓*
Swift		66	-35	1.89	

15/15/15·50 (2178)
0/15/12·30 (1499)

300 CG 1 Gen I Kanto — Jigglypuff (369) → **Wigglytuff**

#0174 Igglybuff ✧ — 69 32 207 102.67 77.03

Pound	2	4.8	4	2.40	2.00
Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Shadow Ball		*100*	*-55*	*1.82*	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Swift		66	-35	1.89	
Body Slam		**66**	**-35**	**1.89**	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*

15/15/15·50 (605)

100 CG 1 Gen II Johto Baby — No evolution

#0298 Azurill — 36 71 137 81.33 70.48

Splash	*4*	*0*	*12*	*0.00*	*3.00*
Bubble	*3*	*8*	*11*	*2.67*	*3.67*
Ice Beam		*90*	*-55*	*1.64*	
Bubble Beam		*25*	*-40*	*0.62*	*OA↓*
Body Slam		66	-35	1.89	

15/15/15·50 (411)

100 CG 1 Gen III Hoenn Baby

Azurill → Marill (451) → Azumarill (451)

#0759 Stufful — 136 95 172 134.33 130.50

Tackle	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Brick Break		48	-40	1.20	OD↓
Stomp		66	-40	1.65	
Superpower		102	-40	2.55	A+D↓

15/15/15·50 (1529)
12/15/15·50 (1498)

100 CG 1 Gen VII Alola

Stufful → Bewear (370)

#0760 Bewear — 226 141 260 209.00 202.35

Low Kick	2	4.8	5	2.40	2.50
Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Tackle	1	3.6	3	3.60	3.00
Stomp		66	-40	1.65	
Superpower		102	-40	2.55	A+D↓
Drain Punch		**24**	**-40**	**0.60**	**D↑**
Payback		*110*	*-60*	*1.83*	

0/14/15·30 (2498)
0/15/14·18 (1500)

300 CG 1 Gen VII Alola

Stufful (370) → **Bewear**

#0016 Pidgey — 85 73 120 92.67 90.64

Quick Attack	2	6	8	3.00	4.00
Tackle	1	3.6	3	3.60	3.00
Aerial Ace		72	-45	1.60	
Twister		*45*	*-45*	*1.00*	
Air Cutter		54	-35	1.54	30%A↑

15/15/15·50 (769)

100 CG 1 Gen I Kanto

Pidgey → Pidgeotto (371) → Pidgeot (371)

Shadow Pidgey — 102 60.8333 120 94.28 90.64

#0017 Pidgeotto — 117 105 160 127.33 125.27

Wing Attack	2	6	7	3.00	3.50
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Aerial Ace		72	-45	1.60	
Twister		*45*	*-45*	*1.00*	
Air Cutter		54	-35	1.54	30%A↑

15/15/15·50 (1350)

300 CG 1 Gen I Kanto

Pidgey (370) → **Pidgeotto** → Pidgeot (371)

Shadow Pidgeotto — 140.4 87.5 160 129.30 125.27

#0018 Pidgeot — 166 154 195 171.67 170.83

Air Slash	3	10.8	9	3.60	3.00
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Wing Attack	**2**	**6**	**7**	**3.00**	**3.50**
Gust	**4**	**19.2**	**12**	**4.80**	**3.00**
Hurricane		132	-65	2.03	
Aerial Ace		72	-45	1.60	
Brave Bird		156	-55	2.84	D↓3
Feather Dance		42	-50	0.84	OA↓2
Air Cutter		**54**	**-35**	**1.54**	**30%A↑**

15/15/15·50 (2407)
0/14/14·27 (1498)

500 CG 1 Gen I Kanto

Pidgey (370) → Pidgeotto (371) → **Pidgeot**

Shadow Pidgeot — 199.2 128.333 195 174.18 170.83

#0021 Spearow — 112 60 120 97.33 93.08

Peck	2	7.2	8	3.60	4.00
Quick Attack	2	6	8	3.00	4.00
Drill Peck		84	-40	2.10	
Aerial Ace		72	-45	1.60	
Twister		***45***	***-45***	***1.00***	
Sky Attack		90	-50	1.80	

15/15/15·50 (902)

100 CG 1 Gen I Kanto

Spearow → Fearow (371)

#0022 Fearow — 182 133 163 159.33 158.02

Peck	2	7.2	8	3.60	4.00
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Aerial Ace		72	-45	1.60	
Drill Peck		84	-40	2.10	
Drill Run		*80*	*-45*	*1.78*	
Twister		***45***	***-45***	***1.00***	
Sky Attack		90	-50	1.80	
Fly		96	-45	2.13	

15/15/15·50 (2257)
0/15/14·28.5 (1498)

300 CG 1 Gen I Kanto

Spearow (371) → **Fearow**

#0083 Farfetch'd ✧ — 124 115 141 126.67 126.22

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Cut	**1**	**3.6**	**2**	**3.60**	**2.00**
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Leaf Blade		*70*	*-35*	*2.00*	
Air Cutter		54	-35	1.54	30%A↑

15/15/15·50 (1397)

100 CG 2 Gen I Kanto

No evolution

Shadow Farfetch'd — 148.8 95.8333 141 128.54 126.22

#0084 Doduo ✧ — 158 83 111 117.33 113.33

Peck	2	7.2	8	3.60	4.00
Quick Attack	2	6	8	3.00	4.00
Drill Peck		84	-40	2.10	
Aerial Ace		72	-45	1.60	
Swift		**66**	**-35**	**1.89**	
Brave Bird		156	-55	2.84	D↓3

15/15/15·50 (1357) 15/15/14·50 (1352)

100 CG 2 Gen I Kanto

Doduo → Dodrio (372)

#0085 Dodrio ✧ — 218 140 155 171.00 167.87

Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Peck	2	7.2	8	3.60	4.00
Trailblaze		*65*	*-45*	*1.44*	*A↑*
Drill Peck		84	-40	2.10	
Aerial Ace		72	-45	1.60	
Air Cutter		**54**	**-35**	**1.54**	**30%A↑**
Brave Bird		156	-55	2.84	D↓3

0/15/15·50 (2498) 0/15/14·50 (2491)
0/12/15·24 (1500)

300 CG 2 Gen I Kanto

Doduo (372) → **Dodrio**

#0163 Hoothoot ✧ — 67 88 155 103.33 97.04

Peck	2	7.2	8	3.60	4.00
Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Aerial Ace		72	-45	1.60	
Sky Attack		90	-50	1.80	
Night Shade		*80*	*-45*	*1.78*	*12.5%A↑2*

15/15/15·50 (766) 15/15/14·50 (763)

100 CG 1 Gen II Johto

Hoothoot → Noctowl (373)

#0164 Noctowl — 145 156 225 175.33 172.01

Wing Attack	2	6	7	3.00	3.50
Extrasensory	*3*	*8*	*10*	*2.67*	*3.33*
Shadow Ball		*100*	*-55*	*1.82*	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Sky Attack		90	-50	1.80	
Night Shade		*80*	*-45*	*1.78*	*12.5%A↑2*

15/15/15·50 (2288)
1/14/15·28.5 (1499)
Hoothoot (372) → **Noctowl**

300 CG 1 Gen II Johto

#0276 Taillow — 106 61 120 95.67 91.89

Peck	2	7.2	8	3.60	4.00
Quick Attack	2	6	8	3.00	4.00
Aerial Ace		72	-45	1.60	

15/15/15·50 (865)
Taillow → Swellow (373)

100 CG 1 Gen III Hoenn

Shadow Taillow — 127.2 50.8333 120 99.34 91.89

#0277 Swellow — 185 124 155 154.67 152.63

Wing Attack	2	6	7	3.00	3.50
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Aerial Ace		72	-45	1.60	
Brave Bird		156	-55	2.84	D↓3
Sky Attack		90	-50	1.80	

15/15/15·50 (2170) 15/15/14·50 (2164)
0/15/15·29.5 (1497)
Taillow (373) → **Swellow**

300 CG 1 Gen III Hoenn

Shadow Swellow — 222 103.333 155 160.11 152.63

#0333 Swablu — 76 132 128 112.00 108.69

Peck	2	7.2	8	3.60	4.00
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Ice Beam		*90*	*-55*	*1.64*	
Aerial Ace		72	-45	1.60	
Disarming Voice		*70*	*-45*	*1.56*	

15/15/15·50 (931)
Swablu → Altaria (236)

100 CG 1 Gen III Hoenn

#0396 Starly ✧ — 101 58 120 93.00 88.92

Quick Attack	2	6	8	3.00	4.00
Tackle	1	3.6	3	3.60	3.00
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Aerial Ace		72	-45	1.60	
Brave Bird		156	-55	2.84	D↓3
Fly		96	-45	2.13	

15/15/15·50 (813)

100 CG 1 Gen IV Sinnoh

Starly → Staravia (374) → Staraptor (374)

Shadow Starly — 121.2 48.3333 120 96.51 88.92

#0397 Staravia ✧ — 142 94 146 127.33 124.91

Wing Attack	2	6	7	3.00	3.50
Quick Attack	2	6	8	3.00	4.00
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Heat Wave		*95*	*-75*	*1.27*	
Aerial Ace		72	-45	1.60	
Brave Bird		156	-55	2.84	D↓3
Fly		96	-45	2.13	

15/15/15·50 (1468)

300 CG 1 Gen IV Sinnoh

Starly (374) → **Staravia** → Staraptor (374)

Shadow Staravia — 170.4 78.3333 146 131.58 124.91

#0398 Staraptor ✧ — 234 140 198 190.67 186.50

Wing Attack	2	6	7	3.00	3.50
Quick Attack	2	6	8	3.00	4.00
Gust	**4**	**19.2**	**12**	**4.80**	**3.00**
Sand Attack	*1*	*2*	*4*	*2.00*	*4.00*
Heat Wave		*95*	*-75*	*1.27*	
Close Combat		*100*	*-45*	*2.22*	*D↓2*
Brave Bird		156	-55	2.84	D↓3
Fly		96	-45	2.13	

2/15/14·35.5 (2500)
0/13/13·20 (1500)

500 CG 1 Gen IV Sinnoh

Starly (374) → Staravia (374) → **Staraptor**

Shadow Staraptor — 280.8 116.667 198 198.49 186.50

#0441 Chatot ✧ — 183 91 183 152.33 144.98

Peck	2	7.2	8	3.60	4.00
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Heat Wave		*95*	*-75*	*1.27*	
Sky Attack		90	-50	1.80	
Night Shade		*80*	*-45*	*1.78*	*12.5%A↑2*

15/15/15·50 (2025)
0/15/14·33.5 (1498)

100 CG 3 Gen IV Sinnoh

No evolution

#0519 Pidove ✧ — 98 80 137 105.00 102.41

Quick Attack	2	6	8	3.00	4.00
Air Slash	3	10.8	9	3.60	3.00
Heat Wave		*95*	*-75*	*1.27*	
Aerial Ace		72	-45	1.60	
Air Cutter		54	-35	1.54	30%A↑

15/15/15·50 (958)

100 CG 1 Gen V Unova

Pidove → Tranquill (375) → Unfezant (375)

Shadow Pidove — 117.6 66.6667 137 107.09 102.41

#0520 Tranquill ✧ — 144 107 158 136.33 134.52

Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Air Slash	3	10.8	9	3.60	3.00
Heat Wave		*95*	*-75*	*1.27*	
Aerial Ace		72	-45	1.60	
Sky Attack		90	-50	1.80	

15/15/15·50 (1631)
2/15/15·50 (1497)

300 CG 1 Gen V Unova

Pidove (375) → **Tranquill** → Unfezant (375)

Shadow Tranquill — 172.8 89.1667 158 139.99 134.52

#0521 Unfezant ✧ — 226 146 190 187.33 184.39

Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Air Slash	3	10.8	9	3.60	3.00
Hyper Beam		180	-80	2.25	
Heat Wave		*95*	*-75*	*1.27*	
Sky Attack		90	-50	1.80	

2/15/13·38 (2500)
0/15/14·20.5 (1498)

500 CG 1 Gen V Unova

Pidove (375) → Tranquill (375) → **Unfezant**

Shadow Unfezant — 271.2 121.667 190 194.29 184.39

#0627 Rufflet ✧ — 150 97 172 139.67 135.77

Wing Attack	2	6	7	3.00	3.50
Peck	2	7.2	8	3.60	4.00
Aerial Ace		72	-45	1.60	
Rock Tomb		*80*	*-50*	*1.60*	*OA↓*
Brave Bird		156	-55	2.84	D↓3
Fly		96	-45	2.13	

15/15/15·50 (1686)
0/15/15·48 (1496)
Rufflet → Braviary (376)

100 CG 3 Gen V Unova

#0628 Braviary ✧ — 232 152 225 203.00 199.45

Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Air Slash	3	10.8	9	3.60	3.00
Heat Wave		*95*	*-75*	*1.27*	
Rock Slide		*75*	*-45*	*1.67*	
Close Combat		*100*	*-45*	*2.22*	*D↓2*
Brave Bird		156	-55	2.84	D↓3
Fly		96	-45	2.13	

0/14/15·30.5 (2499)
1/15/15·18 (1498)
Rufflet (376) → **Braviary**

300 CG 3 Gen V Unova

#0661 Fletchling ✧ — 95 80 128 101.00 99.08

Peck	2	7.2	8	3.60	4.00
Quick Attack	2	6	8	3.00	4.00
Heat Wave		*95*	*-75*	*1.27*	
Aerial Ace		72	-45	1.60	
Swift		66	-35	1.89	
Fly		96	-45	2.13	

15/15/15·50 (905)
Fletchling → Fletchinder (288) → Talonflame (289)

100 CG 1 Gen VI Kalos

Shadow Fletchling — 114 66.6667 128 102.89 99.08

#0731 Pikipek — 136 59 111 102.00 96.21

Peck	2	7.2	8	3.60	4.00
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Drill Peck		84	-40	2.10	
Aerial Ace		72	-45	1.60	
Sky Attack		90	-50	1.80	

15/15/15·50 (1029) 15/15/14·50 (1025)
Pikipek → Trumbeak (377) → Toucannon (377)

100 CG 1 Gen VII Alola

Shadow Pikipek — 163.2 49.1667 111 107.79 96.21

#0732 Trumbeak — 159 100 146 135.00 132.41

Peck	2	7.2	8	3.60	4.00
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Drill Peck		84	-40	2.10	
Sky Attack		90	-50	1.80	
Rock Blast		*50*	*-40*	*1.25*	

15/15/15·50 (1671)
0/15/15·48.5 (1500)

300 CG 1 Gen VII Alola

Pikipek (376) → **Trumbeak** → Toucannon (377)

Shadow Trumbeak — **190.8 83.3333 146 140.04 132.41**

#0733 Toucannon — 222 146 190 186.00 183.30

Peck	2	7.2	8	3.60	4.00
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Bullet Seed	*3*	*5*	*13*	*1.67*	*4.33*
Flash Cannon		*110*	*-70*	*1.57*	
Drill Peck		84	-40	2.10	
Rock Blast		*50*	*-40*	*1.25*	

2/15/14·39 (2499)
0/14/13·21 (1499)

500 CG 1 Gen VII Alola

Pikipek (376) → Trumbeak (377) → **Toucannon**

Shadow Toucannon — **266.4 121.667 190 192.69 183.30**

#0570 Hisuian Zorua — 162 79 111 117.33 112.41

Scratch	1	4.8	2	4.80	2.00
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Dark Pulse		*80*	*-50*	*1.60*	
Shadow Ball		120	-55	2.18	
Night Shade		96	-45	2.13	12.5%A↑2
Foul Play		*60*	*-40*	*1.50*	

15/15/15·50 (1360) 15/15/14·50 (1354)

100 CG 3 Gen V Unova

Hisuian Zorua → Hisuian Zoroark (377)

#0571 Hisuian Zoroark — 261 128 146 178.33 169.59

Scratch	1	4.8	2	4.80	2.00
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Dark Pulse		*80*	*-50*	*1.60*	
Shadow Ball		120	-55	2.18	
Night Shade		96	-45	2.13	12.5%A↑2
Foul Play		*60*	*-40*	*1.50*	

0/14/15·41 (2496)
0/15/11·21.5 (1500)

300 CG 3 Gen V Unova

Hisuian Zorua (377) → **Hisuian Zoroark**

#0585 Deerling ✧ — 115 100 155 123.33 121.25

Tackle	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Seed Bomb		66	-40	1.65	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*
Energy Ball		108	-55	1.96	10%OD↓
Trailblaze		78	-45	1.73	A↑

15/15/15·50 (1283) 15/15/14·50 (1279)

100 CG 2 Gen V Unova

Deerling → Sawsbuck (378)

#0586 Sawsbuck ✧ — 198 146 190 178.00 176.44

Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Take Down	3	6	8	2.00	2.67
Hyper Beam		180	-80	2.25	
Megahorn		*110*	*-55*	*2.00*	
Solar Beam		180	-80	2.25	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*
Trailblaze		78	-45	1.73	A↑

0/15/11·49.5 (2500)
0/14/14·23.5 (1500)

300 CG 2 Gen V Unova

Deerling (378) → **Sawsbuck**

#0660 Diggersby ✧ — 112 155 198 155.00 150.92

Mud Shot	2	4.8	8	2.40	4.00
Quick Attack	2	6	8	3.00	4.00
Hyper Beam		180	-80	2.25	
Dig		84	-50	1.68	
Earthquake		132	-65	2.03	
Fire Punch		*60*	*-40*	*1.50*	
Scorching Sands		96	-50	1.92	10%OA↓

15/15/15·50 (1706) 15/15/14·50 (1702)
0/15/13·50 (1497)

300 CG 1 Gen VI Kalos

Bunnelby (365) → **Diggersby**

Shadow Diggersby — 134.4 129.167 198 153.86 150.92

#0203 Girafarig ✧ — 182 133 172 162.33 160.87

Tackle	1	3.6	3	3.60	3.00
Confusion	4	19.2	14	4.80	3.50
Double Kick	*3*	*8*	*12*	*2.67*	*4.00*
Thunderbolt		*90*	*-55*	*1.64*	
Psychic		90	-55	1.64	10%OD↓
Mirror Coat		72	-55	1.31	
Psychic Fangs		48	-35	1.37	OD↓
Trailblaze		*65*	*-45*	*1.44*	*A↑*

15/15/15·50 (2314)
0/15/12·28 (1500)
No evolution

100 CG 2 Gen II Johto

Shadow Girafarig 218.4 110.833 172 167.08 160.87

#0648 Aria Forme Meloetta — 250 225 225 233.33 233.04

Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Quick Attack	2	6	8	3.00	4.00
Hyper Beam		180	-80	2.25	
Ice Punch		*60*	*-40*	*1.50*	
Fire Punch		*60*	*-40*	*1.50*	
Close Combat		*100*	*-45*	*2.22*	*D↓2*

0/14/13·23.5 (2500)
0/15/15·14 (1499) 0/15/14·14 (1496)
No evolution

100 CG 4 Gen V Unova Mythical

#0765 Oranguru ✧ — 168 192 207 189.00 188.30

Zen Headbutt	3	9.6	6	3.20	2.00
Confusion	4	19.2	14	4.80	3.50
Yawn	4	0	12	0.00	3.00
Psychic		90	-55	1.64	10%OD↓
Future Sight		132	-65	2.03	
Foul Play		*60*	*-40*	*1.50*	
Brutal Swing		*55*	*-35*	*1.57*	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

0/13/15·49 (2500)
0/13/14·23.5 (1499)
No evolution

100 CG 3 Gen VII Alola

#0899 Wyrdeer ✧ — 206 145 230 193.67 190.10

Tackle	1	3.6	3	3.60	3.00
Zen Headbutt	3	9.6	6	3.20	2.00
Confusion	4	19.2	14	4.80	3.50
Megahorn		*110*	*-55*	*2.00*	
Psychic		90	-55	1.64	10%OD↓
Stomp		66	-40	1.65	
Wild Charge		*100*	*-45*	*2.22*	*D↓2*

0/15/13·39 (2500)
1/15/15·20.5 (1499)
No evolution

100 CG 3 Gen VIII Hisui

#0400 Bibarel ✧ — 162 119 188 156.33 153.61

Water Gun	1	3.6	3	3.60	3.00
Take Down	3	6	8	2.00	2.67
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Hyper Beam		180	-80	2.25	
Hyper Fang		96	-50	1.92	
Surf		90	-45	2.00	

15/15/15·50 (2061)
0/14/13·33.5 (1500)
300 CG 1 Gen IV Sinnoh — Bidoof (360) → **Bibarel**

Shadow Bibarel — 194.4 99.1667 188 160.52 153.61

#0023 Ekans ✧ — 110 97 111 106.00 105.80

Acid	2	7.2	8	3.60	4.00
Poison Sting	2	4.8	9	2.40	4.50
Wrap		*60*	*-45*	*1.33*	*D↑*
Poison Fang		54	-40	1.35	OD↓
Sludge Bomb		96	-50	1.92	
Gunk Shot		**156**	**-75**	**2.08**	

15/15/15·50 (1048) 15/15/14·50 (1044)
100 CG 2 Gen I Kanto — **Ekans** → Arbok (380)

Shadow Ekans — 132 80.8333 111 107.94 105.80

#0024 Arbok ✧ — 167 153 155 158.33 158.21

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Acid	2	7.2	8	3.60	4.00
Poison Sting	2	4.8	9	2.40	4.50
Dragon Tail	*3*	*9*	*12*	*3.00*	*4.00*
Dark Pulse		*80*	*-50*	*1.60*	
Sludge Wave		132	-65	2.03	
Gunk Shot		156	-75	2.08	
Acid Spray		24	-45	0.53	OD↓2

15/15/15·50 (2171) 15/15/14·50 (2165)
0/11/14·30.5 (1500)
300 CG 2 Gen I Kanto — Ekans (380) → **Arbok**

Shadow Arbok — 200.4 127.5 155 160.97 158.21

#0029 Nidoran♀ ✧ — 86 89 146 107.00 103.77

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Poison Sting	2	4.8	9	2.40	4.50
Poison Fang		54	-40	1.35	OD↓
Sludge Bomb		96	-50	1.92	
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (922)
100 CG 2 Gen I Kanto — **Nidoran♀** → Nidorina (381) → Nidoqueen (388)

Shadow Nidoran♀ — 103.2 74.1667 146 107.79 103.77

#0030 Nidorina ✧ — 117 120 172 136.33 134.16

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Poison Sting	2	4.8	9	2.40	4.50
Dig		*70*	*-50*	*1.40*	
Poison Fang		54	-40	1.35	OD↓
Thunderbolt		*90*	*-55*	*1.64*	
Sludge Bomb		96	-50	1.92	

15/15/15·50 (1480)

300 CG 2 Gen I Kanto

Nidoran♀ (380) → **Nidorina** → Nidoqueen (388)

Shadow Nidorina — 140.4 100 172 137.47 134.16

#0032 Nidoran♂ ✧ — 105 76 130 103.67 101.23

Peck	*2*	*6*	*8*	*3.00*	*4.00*
Poison Sting	2	4.8	9	2.40	4.50
Sludge Bomb		96	-50	1.92	
Horn Attack		*40*	*-35*	*1.14*	
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (973) 15/15/14·50 (969)

100 CG 2 Gen I Kanto

Nidoran♂ → Nidorino (381) → Nidoking (388)

Shadow Nidoran♂ — 126 63.3333 130 106.44 101.23

#0033 Nidorino ✧ — 137 111 156 134.67 133.37

Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Dig		*70*	*-50*	*1.40*	
Ice Beam		*90*	*-55*	*1.64*	
Sludge Bomb		96	-50	1.92	
Horn Attack		*40*	*-35*	*1.14*	

15/15/15·50 (1575)
8/15/15·49.5 (1493)

300 CG 2 Gen I Kanto

Nidoran♂ (381) → **Nidorino** → Nidoking (388)

Shadow Nidorino — 164.4 92.5 156 137.63 133.37

#0088 Grimer ✧ — 135 90 190 138.33 132.16

Poison Jab	2	8.4	7	4.20	3.50
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Sludge		84	-40	2.10	
Sludge Bomb		96	-50	1.92	
Mud Bomb		*60*	*-40*	*1.50*	

15/15/15·50 (1553)
10/15/14·50 (1498)

100 CG 2 Gen I Kanto

Grimer → Muk (382)

Shadow Grimer — 162 75 190 142.33 132.16

#0089 Muk ✧ — 190 172 233 198.33 196.73

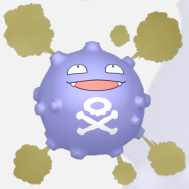
Lick	**1**	**3**	**3**	**3.00**	**3.00**
Poison Jab	2	8.4	7	4.20	3.50
Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Dark Pulse		*80*	*-50*	*1.60*	
Thunder Punch		*60*	*-40*	*1.50*	
Sludge Wave		132	-65	2.03	
Gunk Shot		156	-75	2.08	
Acid Spray		24	-45	0.53	OD↓2

0/15/15·38.5 (2500) 0/15/14·38.5 (2495)
0/15/15·20.5 (1496) 0/15/14·20.5 (1493)
Grimer (381) → **Muk**

300 CG 2 Gen I Kanto

Shadow Muk — 228 143.333 233 201.44 196.73

#0109 Koffing ✧ — 119 141 120 126.67 126.27



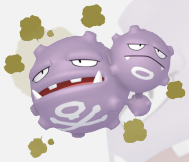
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Dark Pulse		*80*	*-50*	*1.60*	
Sludge		84	-40	2.10	
Sludge Bomb		96	-50	1.92	

15/15/15·50 (1373)
Koffing → Weezing (382)

100 CG 2 Gen I Kanto

Shadow Koffing — 142.8 117.5 120 126.77 126.27

#0110 Weezing ✧ — 174 197 163 178.00 177.45



Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Dark Pulse		*80*	*-50*	*1.60*	
Shadow Ball		*100*	*-55*	*1.82*	
Thunderbolt		*90*	*-55*	*1.64*	
Sludge Bomb		96	-50	1.92	

8/15/15·50 (2496)
0/14/14·25 (1500)
Koffing (382) → **Weezing**

300 CG 2 Gen I Kanto

Shadow Weezing — 208.8 164.167 163 178.66 177.45

#0316 Gulpin ✧ — 80 99 172 117.00 110.85

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Sludge		84	-40	2.10	
Ice Beam		*90*	*-55*	*1.64*	
Gunk Shot		156	-75	2.08	

15/15/15·50 (979)
Gulpin → Swalot (383)

100 CG 1 Gen III Hoenn

#0317 Swalot — 140 159 225 174.67 171.09

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Sludge		84	-40	2.10	
Ice Beam		*90*	*-55*	*1.64*	
Sludge Bomb		96	-50	1.92	
Gunk Shot		156	-75	2.08	
Acid Spray		24	-45	0.53	OD↓2

15/15/15·50 (2236)
0/14/14·29.5 (1498)
300 CG 1 Gen III Hoenn
Gulpin (382) → **Swalot**

#0336 Seviper — 196 118 177 163.67 159.97

Poison Jab	2	8.4	7	4.20	3.50
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Wrap		*60*	*-45*	*1.33*	*D↑*
Poison Fang		54	-40	1.35	OD↓
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (2380)
0/14/14·27 (1499)
100 CG 2 Gen III Hoenn
No evolution

#0568 Trubbish — 96 122 137 118.33 117.07

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Seed Bomb		*55*	*-40*	*1.38*	
Gunk Shot		156	-75	2.08	

15/15/15·50 (1131)
750 CG 2 Gen V Unova
Trubbish → Garbodor (383)

Shadow Trubbish — 115.2 101.667 137 117.96 117.07

#0569 Garbodor — 181 164 190 178.33 178.00

Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Seed Bomb		*55*	*-40*	*1.38*	
Gunk Shot		156	-75	2.08	
Body Slam		*55*	*-35*	*1.57*	
Acid Spray		24	-45	0.53	OD↓2

3/15/15·50 (2488)
0/13/13·24.5 (1500)
950 CG 2 Gen V Unova
Trubbish (383) → **Garbodor**

Shadow Garbodor — 217.2 136.667 190 181.29 178.00

#0803 Poipole ✧ — 145 133 167 148.33 147.68

Peck	*2*	*6*	*8*	*3.00*	*4.00*
Poison Jab	2	8.4	7	4.20	3.50
Sludge Bomb		96	-50	1.92	
Sludge Wave		132	-65	2.03	
Fell Stinger		*20*	*-35*	*0.57*	*A↑*

15/15/15·50 (1854) 15/15/14·50 (1849)
1/14/15·40.5 (1500)
Poipole → Naganadel (386)

100 CG 4 Gen VII Alola Ultra Beast

#0451 Skorupi ✧ — 93 151 120 121.33 119.00

Poison Sting	2	4.8	9	2.40	4.50
Infestation	3	7.2	12	2.40	4.00
Aqua Tail		*55*	*-35*	*1.57*	
Cross Poison		60	-35	1.71	12.5%A↑2
Sludge Bomb		96	-50	1.92	

15/15/15·50 (1141)
Skorupi → Drapion (385)

100 CG 3 Gen IV Sinnoh

Shadow Skorupi — 111.6 125.833 120 119.14 119.00

#0088 Alolan Grimer ✧ — 135 90 190 138.33 132.16

Bite	1	4.8	2	4.80	2.00
Poison Jab	2	8.4	7	4.20	3.50
Sludge Bomb		96	-50	1.92	
Gunk Shot		156	-75	2.08	
Crunch		84	-45	1.87	20%OD↓

15/15/15·50 (1553)
10/15/14·50 (1498)
Alolan Grimer → Alolan Muk (384)

100 CG 2 Gen I Kanto

Shadow Alolan Grimer — 162 75 190 142.33 132.16

#0089 Alolan Muk ✧ — 190 172 233 198.33 196.73

Bite	1	4.8	2	4.80	2.00
Poison Jab	2	8.4	7	4.20	3.50
Snarl	3	6	13	2.00	4.33
Dark Pulse		96	-50	1.92	
Sludge Wave		132	-65	2.03	
Gunk Shot		156	-75	2.08	
Acid Spray		24	-45	0.53	OD↓2

0/15/15·38.5 (2500) 0/15/14·38.5 (2495)
0/15/15·20.5 (1496) 0/15/14·20.5 (1493)
Alolan Grimer (384) → **Alolan Muk**

300 CG 2 Gen I Kanto

Shadow Alolan Muk — 228 143.333 233 201.44 196.73

#0434 Stunky — 121 90 160 123.67 120.33

Bite	1	4.8	2	4.80	2.00
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Flamethrower		*90*	*-55*	*1.64*	
Sludge Bomb		96	-50	1.92	
Crunch		84	-45	1.87	20%OD↓
Trailblaze		*65*	*-45*	*1.44*	A↑

100 CG 2 Gen IV Sinnoh

15/15/15·50 (1301)
Stunky → Skuntank (385)

Shadow Stunky 145.2 75 160 126.73 120.33

#0435 Skuntank — 184 132 230 182.00 177.44

Bite	1	4.8	2	4.80	2.00
Poison Jab	2	8.4	7	4.20	3.50
Flamethrower		*90*	*-55*	*1.64*	
Sludge Bomb		96	-50	1.92	
Crunch		84	-45	1.87	20%OD↓
Trailblaze		*65*	*-45*	*1.44*	A↑

300 CG 2 Gen IV Sinnoh

3/15/14·50 (2500)
0/15/15·24 (1495)
Stunky (385) → **Skuntank**

Shadow Skuntank 220.8 110 230 186.93 177.44

#0452 Drapion — 180 202 172 184.67 184.24

Bite	1	4.8	2	4.80	2.00
Poison Sting	2	4.8	9	2.40	4.50
Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Ice Fang	*2*	*8*	*6*	*4.00*	*3.00*
Aqua Tail		*55*	*-35*	*1.57*	
Sludge Bomb		96	-50	1.92	
Crunch		84	-45	1.87	20%OD↓
Fell Stinger		*20*	*-35*	*0.57*	A↑

300 CG 3 Gen IV Sinnoh

0/15/15·48 (2499)
2/15/14·23 (1500)
Skorupi (384) → **Drapion**

Shadow Drapion 216 168.333 172 185.44 184.24

#0691 Dragalge — 177 207 163 182.33 181.43

Acid	2	7.2	8	3.60	4.00
Water Gun	*1*	*3*	*3*	*3.00*	*3.00*
Dragon Tail	3	10.8	12	3.60	4.00
Aqua Tail		*55*	*-35*	*1.57*	
Sludge Bomb		96	-50	1.92	
Gunk Shot		156	-75	2.08	
Hydro Pump		*130*	*-75*	*1.73*	
Focus Blast		*150*	*-75*	*2.00*	
Outrage		132	-60	2.20	

300 CG 2 Gen VI Kalos

1/15/15·50 (2498)
0/15/13·24 (1498)
Skrelp (390) → **Dragalge**

#0804 Naganadel ✧ 263 159 177 199.67 194.88

Poison Jab	2	8.4	7	4.20	3.50
Air Slash	*3*	*9*	*9*	*3.00*	*3.00*
Dragon Pulse		108	-55	1.96	
Dragon Claw		96	-50	1.92	
Sludge Bomb		96	-50	1.92	
Fell Stinger		*20*	*-35*	*0.57*	*A↑*
Acrobatics		*110*	*-55*	*2.00*	*12.5%A↑2*

1/15/15·29 (2497)
1/15/13·17.5 (1499)

300 CG 4 Gen VII Alola Ultra Beast

Poipole (384) → **Naganadel**

#0110 Galarian Weezing ✧ 174 197 163 178.00 177.45

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Fairy Wind	2	4.8	9	2.40	4.50
Hyper Beam		*150*	*-80*	*1.88*	
Sludge		84	-40	2.10	
Play Rough		108	-60	1.80	
Overheat		*130*	*-55*	*2.36*	*A↓2*
Brutal Swing		*55*	*-35*	*1.57*	

8/15/15·50 (2496)
0/14/14·25 (1500)

100 CG 2 Gen I Kanto

No evolution

Shadow Galarian Weezing 208.8 164.167 163 178.66 177.45

#0453 Croagunk ✧ 116 76 134 108.67 105.71

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Low Sweep		48	-40	1.20	
Sludge Bomb		96	-50	1.92	
Brick Break		48	-40	1.20	OD↓

15/15/15·50 (1077)

100 CG 2 Gen IV Sinnoh

Croagunk → Toxicroak (386)

Shadow Croagunk 139.2 63.3333 134 112.18 105.71

#0454 Toxicroak ✧ 211 133 195 179.67 176.22

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Counter	2	9.6	6	4.80	3.00
Drain Punch		24	-40	0.60	D↑
Shadow Ball		*100*	*-55*	*1.82*	
Sludge Bomb		96	-50	1.92	
Mud Bomb		*60*	*-40*	*1.50*	
Dynamic Punch		108	-45	2.40	

0/15/12·46.5 (2500)
1/15/15·22.5 (1500)

300 CG 2 Gen IV Sinnoh

Croagunk (386) → **Toxicroak**

Shadow Toxicroak 253.2 110.833 195 186.34 176.22

#0757 Salandit — 136 80 134 116.67 113.39

Ember	2	4.8	9	2.40	4.50
Poison Jab	2	8.4	7	4.20	3.50
Flamethrower		108	-55	1.96	
Poison Fang		54	-40	1.35	OD↓
Dragon Pulse		*90*	*-55*	*1.64*	

100 CG 2 Gen VII Alola

15/15/15·50 (1268)
Salandit → Salazzle (387)

#0758 Salazzle — 228 130 169 175.67 171.10

Poison Jab	2	8.4	7	4.20	3.50
Incinerate	5	24	20	4.80	4.00
Poison Fang		54	-40	1.35	OD↓
Dragon Pulse		*90*	*-55*	*1.64*	
Sludge Wave		132	-65	2.03	
Fire Blast		168	-80	2.10	

300 CG 2 Gen VII Alola

0/15/14·46 (2499)
2/15/13·22.5 (1500)
Salandit (387) → **Salazzle**

#0041 Zubat — 83 73 120 92.00 89.92

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Poison Fang		54	-40	1.35	OD↓
Sludge Bomb		**96**	**-50**	**1.92**	
Air Cutter		54	-35	1.54	30%A↑
Swift		*55*	*-35*	*1.57*	

100 CG 1 Gen I Kanto

15/15/15·50 (754)
Zubat → Golbat (387) → Crobat (388)

Shadow Zubat — 99.6 60.8333 120 93.48 89.92

#0042 Golbat — 161 150 181 164.00 163.51

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Wing Attack	2	6	7	3.00	3.50
Poison Fang		54	-40	1.35	OD↓
Ominous Wind		***45***	***-45***	***1.00***	***10%A+D↑***
Shadow Ball		*100*	*-55*	*1.82*	
Air Cutter		54	-35	1.54	30%A↑

300 CG 1 Gen I Kanto

15/15/15·50 (2234)
0/15/15·29 (1498)
Zubat (387) → **Golbat** → Crobat (388)

Shadow Golbat — 193.2 125 181 166.40 163.51

#0169 Crobat ✧ — 194 178 198 190.00 189.80

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Air Slash	3	10.8	9	3.60	3.00
Poison Fang		54	-40	1.35	OD↓
Shadow Ball		*100*	*-55*	*1.82*	
Cross Poison		60	-35	1.71	12.5%A↑2
Sludge Bomb		96	-50	1.92	
Air Cutter		54	-35	1.54	30%A↑

0/15/14·41.5 (2497)
0/15/12·21.5 (1498)

500 CG 1 Gen II Johto

Zubat (387) → Golbat (387) → **Crobat**

Shadow Crobat — 232.8 148.333 198 193.04 189.80

#0031 Nidoqueen ✧ — 180 173 207 186.67 186.11

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Mud Slap	3	14.4	10	4.80	3.33
Earthquake		132	-65	2.03	
Stone Edge		*100*	*-55*	*1.82*	
Poison Fang		54	-40	1.35	OD↓
Sludge Wave		132	-65	2.03	
Earth Power		108	-55	1.96	10%OD↓

0/14/15·47 (2498)
0/15/12·23 (1499)

500 CG 2 Gen I Kanto

Nidoran♀ (380) → Nidorina (381) → **Nidoqueen**

Shadow Nidoqueen — 216 144.167 207 189.06 186.11

#0034 Nidoking ✧ — 204 156 191 183.67 182.50

Fury Cutter	**1**	**3**	**4**	**3.00**	**4.00**
Poison Jab	2	8.4	7	4.20	3.50
Poison Sting	2	4.8	9	2.40	4.50
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Double Kick	*3*	*8*	*12*	*2.67*	*4.00*
Megahorn		*110*	*-55*	*2.00*	
Earthquake		132	-65	2.03	
Sludge Wave		132	-65	2.03	
Sand Tomb		30	-40	0.75	OD↓
Earth Power		108	-55	1.96	10%OD↓

0/14/14·44 (2500)
0/14/15·22 (1498)

500 CG 2 Gen I Kanto

Nidoran♂ (381) → Nidorino (381) → **Nidoking**

Shadow Nidoking — 244.8 130 191 188.60 182.50

#0194 Paldean Wooper ✧ — 75 66 146 95.67 89.74

Mud Shot	2	4.8	8	2.40	4.00
Poison Jab	2	8.4	7	4.20	3.50
Dig		84	-50	1.68	
Sludge Wave		132	-65	2.03	
Body Slam		*55*	*-35*	*1.57*	

100 CG 2 Gen II Johto

15/15/15·50 (725)
Paldean Wooper → Clodsire (389)

Shadow Paldean Wooper — 90 55 146 97.00 89.74

#0980 Clodsire ✧ — 127 151 277 185.00 174.48

Mud Shot	2	4.8	8	2.40	4.00
Poison Sting	2	4.8	9	2.40	4.50
Megahorn		***110***	***-55***	***2.00***	
Earthquake		132	-65	2.03	
Stone Edge		*100*	*-55*	*1.82*	
Sludge Bomb		96	-50	1.92	
Water Pulse		*80*	*-50*	*1.60*	
Acid Spray		24	-45	0.53	OD↓2

300 CG 2 Gen IX Paldea

15/15/15·50 (2207)
0/14/13·30.5 (1499)
Paldean Wooper (389) → **Clodsire**

#0944 Shroodle — 124 70 120 104.67 101.37

Poison Jab	2	8.4	7	4.20	3.50
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Poison Fang		54	-40	1.35	OD↓
Sludge Bomb		96	-50	1.92	
Acid Spray		24	-45	0.53	OD↓2

100 CG 2 Gen IX Paldea

15/15/15·50 (1051)
Shroodle → Grafaiai (389)

#0945 Grafaiai — 199 149 160 169.33 168.03

Poison Jab	2	8.4	7	4.20	3.50
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Poison Fang		54	-40	1.35	OD↓
Sludge Bomb		96	-50	1.92	
Acid Spray		24	-45	0.53	OD↓2

300 CG 2 Gen IX Paldea

10/15/15·50 (2500)
0/15/14·25 (1499)
Shroodle (389) → **Grafaiai**

#0080 Galarian Slowbro ✧ — 182 156 216 184.67 183.04

Poison Jab	2	8.4	7	4.20	3.50
Confusion	4	19.2	14	4.80	3.50
Drain Punch		*20*	*-40*	*0.50*	*D↑*
Sludge Bomb		96	-50	1.92	
Scald		*85*	*-50*	*1.70*	*30%OA↓*
Psychic		90	-55	1.64	10%OD↓
Focus Blast		*150*	*-75*	*2.00*	
Surf		***75***	***-45***	***1.67***	
Brutal Swing		*55*	*-35*	*1.57*	

1/15/11·48.5 (2500)
0/14/11·23.5 (1499)

300 CG 2 Gen I Kanto

Galarian Slowpoke (392) → **Galarian Slowbro**

Shadow Galarian Slowbro — 218.4 130 216 188.13 183.04

#0199 Galarian Slowking ✧ — 190 180 216 195.33 194.76

Acid	2	7.2	8	3.60	4.00
Confusion	4	19.2	14	4.80	3.50
Hex	*3*	*7*	*13*	*2.33*	*4.33*
Psyshock		84	-40	2.10	
Shadow Ball		*100*	*-55*	*1.82*	
Sludge Wave		132	-65	2.03	
Scald		*85*	*-50*	*1.70*	*30%OA↓*
Future Sight		132	-65	2.03	
Surf		***75***	***-45***	***1.67***	

0/15/15·39.5 (2500) 0/15/14·39.5 (2495)
0/14/13·21 (1500)

300 CG 2 Gen II Johto

Galarian Slowpoke (392) → **Galarian Slowking**

Shadow Galarian Slowking — 228 150 216 198.00 194.76

#0690 Skrelp ✧ — 109 109 137 118.33 117.63

Acid	2	7.2	8	3.60	4.00
Water Gun	1	3.6	3	3.60	3.00
Aqua Tail		66	-35	1.89	
Twister		*45*	*-45*	*1.00*	
Sludge Bomb		96	-50	1.92	
Water Pulse		96	-50	1.92	

15/15/15·50 (1202)

100 CG 2 Gen VI Kalos

Skrelp → Dragalge (385)

#0747 Mareanie ✧ — 98 110 137 115.00 113.88

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Poison Sting	2	4.8	9	2.40	4.50
Sludge Wave		132	-65	2.03	
Gunk Shot		156	-75	2.08	
Brine		72	-50	1.44	

15/15/15·50 (1099)

100 CG 2 Gen VII Alola

Mareanie → Toxapex (391)

#0748 Toxapex ✧ — 114 273 137 174.67 162.15

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Poison Jab	2	8.4	7	4.20	3.50
Sludge Wave		132	-65	2.03	
Gunk Shot		156	-75	2.08	
Brine		72	-50	1.44	

300 CG 2 Gen VII Alola

15/15/15·50 (1905)
0/15/15·40.5 (1499)
Mareanie (390) → **Toxapex**

#0063 Abra ✧ — 195 82 93 123.33 114.14

Zen Headbutt	3	9.6	6	3.20	2.00
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Psyshock		84	-40	2.10	
Shadow Ball		*100*	*-55*	*1.82*	
Signal Beam		*75*	*-55*	*1.36*	*20%OA+D↓*

100 CG 2 Gen I Kanto

15/15/15·50 (1517)
15/15/15·49 (1499)
Abra → Kadabra (391) → Alakazam (391)

Shadow Abra — 234 68.3333 93 131.78 114.14

#0064 Kadabra ✧ — 232 117 120 156.33 148.24

Psycho Cut	2	3.6	9	1.80	4.50
Confusion	4	19.2	14	4.80	3.50
Psybeam		84	-60	1.40	
Shadow Ball		*100*	*-55*	*1.82*	
Dazzling Gleam		*90*	*-55*	*1.64*	

300 CG 2 Gen I Kanto

15/15/15·50 (2328)
2/15/14·27 (1499)
Abra (391) → **Kadabra** → Alakazam (391)

Shadow Kadabra — 278.4 97.5 120 165.30 148.24

#0065 Alakazam ✧ — 271 167 146 194.67 187.65

Psycho Cut	2	3.6	9	1.80	4.50
Confusion	4	19.2	14	4.80	3.50
Counter	**2**	**8**	**6**	**4.00**	**3.00**
Shadow Ball		*100*	*-55*	*1.82*	
Dazzling Gleam		***90***	***-55***	***1.64***	
Psychic		**90**	**-55**	**1.64**	**10%OD↓**
Fire Punch		*60*	*-40*	*1.50*	
Focus Blast		*150*	*-75*	*2.00*	
Future Sight		132	-65	2.03	

500 CG 2 Gen I Kanto

0/14/15·30.5 (2497)
1/15/15·18 (1495)
Abra (391) → Kadabra (391) → **Alakazam**

Shadow Alakazam — 325.2 139.167 146 203.46 187.65

#0077 Galarian Ponyta ✧ — 170 127 137 144.67 143.55

Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Psycho Cut	2	3.6	9	1.80	4.50
Psybeam		84	-60	1.40	
Play Rough		*90*	*-60*	*1.50*	
Swift		*55*	*-35*	*1.57*	

15/15/15·50 (1919)
0/15/14·37.5 (1499)

100 CG 2 Gen I Kanto

Galarian Ponyta → Galarian Rapidash (403)

Shadow Galarian Ponyta — 204 105.833 137 148.94 143.55

#0079 Galarian Slowpoke ✧ — 109 98 207 138.00 130.28

Confusion	4	19.2	14	4.80	3.50
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Psyshock		84	-40	2.10	
Psychic		90	-55	1.64	10%OD↓
Surf		*75*	*-45*	*1.67*	

15/15/15·50 (1386)

100 CG 2 Gen I Kanto

Galarian Slowpoke → Galarian Slowbro (390)

Shadow Galarian Slowpoke — 130.8 81.6667 207 139.82 130.28

#0096 Drowzee ✧ — 89 136 155 126.67 123.34

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Confusion	4	19.2	14	4.80	3.50
Psybeam		84	-60	1.40	
Psyshock		84	-40	2.10	
Psychic		90	-55	1.64	10%OD↓

15/15/15·50 (1176) 15/15/14·50 (1173)

100 CG 2 Gen I Kanto

Drowzee → Hypno (393)

Shadow Drowzee — 106.8 113.333 155 125.04 123.34

#0097 Hypno ✧ — 144 193 198 178.33 176.55

Zen Headbutt	3	9.6	6	3.20	2.00
Confusion	4	19.2	14	4.80	3.50
Ice Punch		*60*	*-40*	*1.50*	
Psyshock		**84**	**-40**	**2.10**	
Shadow Ball		*100*	*-55*	*1.82*	
Thunder Punch		*60*	*-40*	*1.50*	
Psychic		90	-55	1.64	10%OD↓
Fire Punch		*60*	*-40*	*1.50*	
Focus Blast		*150*	*-75*	*2.00*	
Future Sight		132	-65	2.03	

15/15/15·50 (2363) 15/15/14·50 (2357)
0/13/13·28 (1500)
Drowzee (392) → **Hypno**

300 CG 2 Gen I Kanto

Shadow Hypno — 172.8 160.833 198 177.21 176.55

#0150 Mewtwo ✧ — 300 182 214 232.00 226.92

Psycho Cut	2	3.6	9	1.80	4.50
Confusion	4	19.2	14	4.80	3.50
Hyper Beam		***150***	***-80***	***1.88***	
Flamethrower		*90*	*-55*	*1.64*	
Ice Beam		*90*	*-55*	*1.64*	
Shadow Ball		***100***	***-55***	***1.82***	
Thunderbolt		*90*	*-55*	*1.64*	
Psychic		90	-55	1.64	10%OD↓
Psystrike		**108**	**-45**	**2.40**	
Focus Blast		*150*	*-75*	*2.00*	

1/15/13·22 (2498)
4/15/15·13 (1498)
No evolution

100 CG 4 Gen I Kanto Legendary

Shadow Mewtwo — 360 151.667 214 241.89 226.92

#0150 Armored Mewtwo — 182 278 214 224.67 221.23

Confusion	4	19.2	14	4.80	3.50
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Earthquake		*110*	*-65*	*1.69*	
Rock Slide		*75*	*-45*	*1.67*	
Psystrike		**108**	**-45**	**2.40**	
Dynamic Punch		*90*	*-45*	*2.00*	
Future Sight		132	-65	2.03	

0/12/13·30 (2500)
0/11/14·18 (1500)
No evolution

100 CG 4 Gen I Kanto Legendary

#0151 Mew ✧

	210	210	225	215.00	214.89
Shadow Claw	2	6	8	3.00	4.00
Frost Breath	2	7	5	3.50	2.50
Pound	2	4	4	2.00	2.00
Cut	1	3	2	3.00	2.00
Poison Jab	2	7	7	3.50	3.50
Steel Wing	2	7	5	3.50	2.50
Rock Smash	3	9	7	3.00	2.33
Charge Beam	3	5	11	1.67	3.67
Volt Switch	4	14	16	3.50	4.00
Dragon Tail	3	9	12	3.00	4.00
Infestation	3	6	12	2.00	4.00
Struggle Bug	3	9	8	3.00	2.67
Snarl	3	5	13	1.67	4.33
Hyper Beam		150	-80	1.88	
Dark Pulse		80	-50	1.60	
Stone Edge		100	-55	1.82	
Flash Cannon		110	-70	1.57	
Ice Beam		90	-55	1.64	
Blizzard		140	-75	1.87	
Low Sweep		40	-40	1.00	
Psyshock		84	-40	2.10	
Ancient Power		60	-45	1.33	10%A↑
Rock Slide		75	-45	1.67	
Thunder		100	-60	1.67	
Thunderbolt		90	-55	1.64	
Dragon Claw		80	-50	1.60	
Dazzling Gleam		90	-55	1.64	
Bulldoze		45	-45	1.00	50%OD↓
Flame Charge		65	-50	1.30	A↑
Psychic		90	-55	1.64	10%OD↓
Solar Beam		150	-80	1.88	
Focus Blast		150	-75	2.00	
Wild Charge		100	-45	2.22	D↓2
Gyro Ball		80	-50	1.60	
Overheat		130	-55	2.36	A↓2
Grass Knot		90	-50	1.80	
Energy Ball		90	-55	1.64	10%OD↓
Surf		75	-45	1.67	

0/15/10·29 (2499)
0/10/13·17.5 (1500)
No evolution

100 CG 4 Gen I Kanto Mythical

#0196 Espeon ✧ — 261 175 163 199.67 195.26

Zen Headbutt	3	9.6	6	3.20	2.00
Confusion	4	19.2	14	4.80	3.50
Psybeam		84	-60	1.40	
Shadow Ball		***100***	***-55***	***1.82***	
Psychic		90	-55	1.64	10%OD↓
Future Sight		132	-65	2.03	
Last Resort		***90***	***-55***	***1.64***	
Psychic Fangs		48	-35	1.37	OD↓

1/15/15·29 (2493)
0/15/15·17.5 (1498)

300 CG 3 Gen II Johto

Eevee (353) → **Espeon**

#0201 Unown ✧ — 136 91 134 120.33 118.37

Hidden Power	3	10.8	8	3.60	2.67
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (1339)

100 CG 3 Gen II Johto

No evolution

#0202 Wobbuffet ✧ — 60 106 382 182.67 134.43

Splash	*4*	*0*	*12*	*0.00*	*3.00*
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Mirror Coat		72	-55	1.31	

15/15/15·50 (1160)

300 CG 2 Gen II Johto

Wynaut (396) → **Wobbuffet**

Shadow Wobbuffet — 72 88.3333 382 180.78 134.43

#0325 Spoink ✧ — 125 122 155 134.00 133.21

Splash	*4*	*0*	*12*	*0.00*	*3.00*
Zen Headbutt	3	9.6	6	3.20	2.00
Psybeam		84	-60	1.40	
Shadow Ball		*100*	*-55*	*1.82*	
Mirror Coat		72	-55	1.31	

15/15/15·50 (1508) 15/15/14·50 (1504)
15/15/15·49.5 (1499)

100 CG 1 Gen III Hoenn

Spoink → Grumpig (396)

Shadow Spoink — 150 101.667 155 135.56 133.21

#0326 Grumpig ✧ — 171 188 190 183.00 182.80

Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Extrasensory	3	9.6	10	3.20	3.33
Psywave	1	3.6	4	3.60	4.00
Psychic		90	-55	1.64	10%OD↓
Shadow Ball		*100*	*-55*	*1.82*	
Dynamic Punch		*90*	*-45*	*2.00*	
Mirror Coat		72	-55	1.31	

300 CG 1 Gen III Hoenn

3/14/15·50 (2500)
1/14/15·24 (1499)
Spoink (395) → **Grumpig**

Shadow Grumpig — 205.2 156.667 190 183.96 182.80

#0358 Chimecho ✧ — 175 170 181 175.33 175.28

Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Extrasensory	3	9.6	10	3.20	3.33
Psyshock		84	-40	2.10	
Shadow Ball		*100*	*-55*	*1.82*	
Energy Ball		*90*	*-55*	*1.64*	*10%OD↓*

1000 CG 3 Gen III Hoenn

11/15/15·50 (2500)
0/14/12·25.5 (1500)
Chingling (397) → **Chimecho**

#0360 Wynaut ✧ — 41 86 216 114.33 91.32

Splash	*4*	*0*	*12*	*0.00*	*3.00*
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Mirror Coat		72	-55	1.31	

100 CG 1 Gen III Hoenn Baby

15/15/15·50 (603)
Wynaut → Wobbuffet (395)

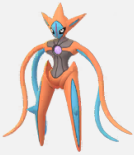
#0386 Deoxys ✧ — 345 115 137 199.00 175.82

Zen Headbutt	3	9.6	6	3.20	2.00
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Hyper Beam		*150*	*-80*	*1.88*	
Thunderbolt		*90*	*-55*	*1.64*	
Psycho Boost		84	-35	2.40	A↓2

100 CG 4 Gen III Hoenn Mythical

0/14/15·29 (2500)
0/15/12·17.5 (1499)
No evolution

#0386 Deoxys Attack ✧ — 414 46 137 199.00 137.67



Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Zen Headbutt	3	9.6	6	3.20	2.00
Dark Pulse		*80*	*-50*	*1.60*	
Zap Cannon		*150*	*-80*	*1.88*	*33%OA↓*
Psycho Boost		84	-35	2.40	A↓2

1/15/15·40 (2495)
1/15/15·21 (1497)
No evolution

100 CG 4 Gen III Hoenn Mythical

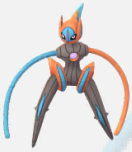
#0386 Deoxys Defense ✧ — 144 330 137 203.67 186.72

Zen Headbutt	3	9.6	6	3.20	2.00
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Rock Slide		*75*	*-45*	*1.67*	
Thunderbolt		*90*	*-55*	*1.64*	
Psycho Boost		84	-35	2.40	A↓2

12/13/15·49.5 (2500)
0/15/15·25.5 (1500)
No evolution

100 CG 4 Gen III Hoenn Mythical

#0386 Deoxys Speed ✧ — 230 218 137 195.00 190.09



Zen Headbutt	3	9.6	6	3.20	2.00
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Thunderbolt		*90*	*-55*	*1.64*	
Swift		*55*	*-35*	*1.57*	
Psycho Boost		84	-35	2.40	A↓2

1/14/15·34.5 (2496)
0/14/14·19.5 (1497)
No evolution

100 CG 4 Gen III Hoenn Mythical

#0433 Chingling ✧ — 114 94 128 112.00 111.11

Zen Headbutt	3	9.6	6	3.20	2.00
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Wrap		*60*	*-45*	*1.33*	*D↑*
Psyshock		84	-40	2.10	
Shadow Ball		*100*	*-55*	*1.82*	

15/15/15·50 (1137)
Chingling → Chimecho (396)

100 CG 1 Gen IV Sinnoh

#0480 Uxie ✧ — 156 270 181 202.33 196.81

Confusion	4	19.2	14	4.80	3.50
Extrasensory	3	9.6	10	3.20	3.33
Thunder		*100*	*-60*	*1.67*	
Swift		*55*	*-35*	*1.57*	
Future Sight		132	-65	2.03	

0/15/15·46.5 (2496)
0/13/13·23 (1500)
No evolution

100 CG 4 Gen IV Sinnoh Legendary

#0481 Mesprit ✧ — 212 212 190 204.67 204.40

Confusion	4	19.2	14	4.80	3.50
Extrasensory	3	9.6	10	3.20	3.33
Blizzard		*140*	*-75*	*1.87*	
Swift		*55*	*-35*	*1.57*	
Future Sight		132	-65	2.03	

1/15/15·31 (2500)
0/15/12·18.5 (1498)
No evolution

100 CG 4 Gen IV Sinnoh Legendary

#0482 Azelf ✧ — 270 151 181 200.67 194.69

Confusion	4	19.2	14	4.80	3.50
Extrasensory	3	9.6	10	3.20	3.33
Fire Blast		*140*	*-80*	*1.75*	
Swift		*55*	*-35*	*1.57*	
Future Sight		132	-65	2.03	

0/12/15·29 (2497)
0/14/11·17.5 (1500)
No evolution

100 CG 4 Gen IV Sinnoh Legendary

#0488 Cresselia ✧ — 152 258 260 223.33 216.84

Psycho Cut	2	3.6	9	1.80	4.50
Confusion	4	19.2	14	4.80	3.50
Moonblast		*110*	*-60*	*1.83*	*10%OA↓*
Aurora Beam		*80*	*-60*	*1.33*	
Grass Knot		***90***	***-50***	***1.80***	
Future Sight		132	-65	2.03	

0/13/15·37.5 (2499)
2/15/13·20 (1500)
No evolution

100 CG 4 Gen IV Sinnoh Legendary

#0517 Munna ✧ — 111 92 183 128.67 123.17

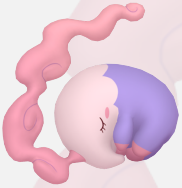
Zen Headbutt	3	9.6	6	3.20	2.00
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Psybeam		84	-60	1.40	
Psyshock		84	-40	2.10	
Dazzling Gleam		*90*	*-55*	*1.64*	

15/15/15·50 (1294)

100 CG 2 Gen V Unova

Munna → Musharna (399)

#0518 Musharna ✧ — 183 166 253 200.67 197.35



Zen Headbutt	3	9.6	6	3.20	2.00
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Psyshock		84	-40	2.10	
Dazzling Gleam		*90*	*-55*	*1.64*	
Future Sight		132	-65	2.03	

0/15/15·39.5 (2499)
0/12/15·21 (1497)

300 CG 2 Gen V Unova

Munna (399) → **Musharna**

#0574 Gothita ✧ — 98 112 128 112.67 112.00

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Confusion	4	19.2	14	4.80	3.50
Psybeam		84	-60	1.40	
Psyshock		84	-40	2.10	
Psychic		90	-55	1.64	10%OD↓

15/15/15·50 (1075)

100 CG 2 Gen V Unova

Gothita → Gothorita (399) → Gothitelle (400)

Shadow Gothita — 117.6 93.3333 128 112.98 112.00

#0575 Gothorita ✧ — 137 153 155 148.33 148.11

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Confusion	4	19.2	14	4.80	3.50
Psybeam		84	-60	1.40	
Psychic		90	-55	1.64	10%OD↓
Future Sight		132	-65	2.03	

15/15/15·50 (1813) 15/15/14·50 (1808)
0/15/14·43 (1497)

300 CG 2 Gen V Unova

Gothita (399) → **Gothorita** → Gothitelle (400)

Shadow Gothorita — 164.4 127.5 155 148.97 148.11

#0576 Gothitelle ✧ — 176 205 172 184.33 183.77

Confusion	4	19.2	14	4.80	3.50
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Rock Slide		*75*	*-45*	*1.67*	
Psychic		90	-55	1.64	10%OD↓
Future Sight		132	-65	2.03	

0/14/15·49.5 (2499)
0/15/15·23.5 (1497)
500 CG 2 Gen V Unova — Gothita (399) → Gothorita (399) → **Gothitelle**

Shadow Gothitelle — 211.2 170.833 172 184.68 183.77

#0577 Solosis ✧ — 170 83 128 127.00 121.78

Zen Headbutt	3	9.6	6	3.20	2.00
Hidden Power	3	10.8	8	3.60	2.67
Psyshock		84	-40	2.10	
Thunder		*100*	*-60*	*1.67*	
Night Shade		*80*	*-45*	*1.78*	*12.5%A↑2*

15/15/15·50 (1546)
9/15/15·50 (1496)
100 CG 2 Gen V Unova — **Solosis** → Duosion (400) → Reuniclus (400)

Shadow Solosis — 204 69.1667 128 133.72 121.78

#0578 Duosion ✧ — 208 103 163 158.00 151.72

Zen Headbutt	3	9.6	6	3.20	2.00
Hidden Power	3	10.8	8	3.60	2.67
Psyshock		84	-40	2.10	
Thunder		*100*	*-60*	*1.67*	
Night Shade		*80*	*-45*	*1.78*	*12.5%A↑2*

15/15/15·50 (2282)
0/15/13·28 (1497)
300 CG 2 Gen V Unova — Solosis (400) → **Duosion** → Reuniclus (400)

Shadow Duosion — 249.6 85.8333 163 166.14 151.72

#0579 Reuniclus ✧ — 214 148 242 201.33 197.17

Zen Headbutt	3	9.6	6	3.20	2.00
Hidden Power	3	10.8	8	3.60	2.67
Psyshock		84	-40	2.10	
Shadow Ball		*100*	*-55*	*1.82*	
Thunder		*100*	*-60*	*1.67*	
Future Sight		132	-65	2.03	

0/13/14·34.5 (2500)
2/15/15·19 (1498) 2/15/14·19 (1495)
500 CG 2 Gen V Unova — Solosis (400) → Duosion (400) → **Reuniclus**

Shadow Reuniclus — 256.8 123.333 242 207.38 197.17

#0605 Elgyem ✧ — 148 100 146 131.33 129.28

Confusion	4	19.2	14	4.80	3.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Dark Pulse		*80*	*-50*	*1.60*	
Psybeam		84	-60	1.40	
Psychic		90	-55	1.64	10%OD↓

100 CG 2 Gen V Unova

15/15/15·50 (1566)
8/15/15·50 (1498)
Elgyem → Beheeyem (401)

#0606 Beheeyem ✧ — 221 163 181 188.33 186.82

Confusion	4	19.2	14	4.80	3.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Dark Pulse		*80*	*-50*	*1.60*	
Rock Slide		*75*	*-45*	*1.67*	
Psychic		90	-55	1.64	10%OD↓

300 CG 2 Gen V Unova

1/15/15·37.5 (2497)
0/14/13·20.5 (1498)
Elgyem (401) → **Beheeyem**

#0677 Espurr ✧ — 120 114 158 130.67 129.29

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Confusion	4	19.2	14	4.80	3.50
Psyshock		84	-40	2.10	
Psychic		90	-55	1.64	10%OD↓
Energy Ball		*90*	*-55*	*1.64*	*10%OD↓*

100 CG 2 Gen VI Kalos

15/15/15·50 (1424)
Espurr → Meowstic (401)

#0678 Meowstic ✧ — 166 167 179 170.67 170.57

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Confusion	4	19.2	14	4.80	3.50
Thunderbolt		*90*	*-55*	*1.64*	
Psychic		90	-55	1.64	10%OD↓
Energy Ball		*90*	*-55*	*1.64*	*10%OD↓*

300 CG 2 Gen VI Kalos

15/15/15·50 (2401)
0/14/15·27 (1498)
Espurr (401) → **Meowstic**

#0789 Cosmog — 54 57 125 78.67 72.73

Splash	*4*	*0*	*12*	*0.00*	*3.00*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (489)

100 CG 4 Gen VII Alola Legendary

Cosmog → Cosmoem (402) → Solgaleo (409)

#0790 Cosmoem — 54 242 125 140.33 117.77

Splash	*4*	*0*	*12*	*0.00*	*3.00*
Struggle		*35*	*-100*	*0.35*	

15/15/15·50 (924)

300 CG 4 Gen VII Alola Legendary

Cosmog (402) → **Cosmoem** → Solgaleo (409)

#0800 Necrozma ✧ — 251 195 219 221.67 220.49

Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Psycho Cut	2	3.6	9	1.80	4.50
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Dark Pulse		*80*	*-50*	*1.60*	
Iron Head		*70*	*-50*	*1.40*	
Future Sight		132	-65	2.03	
Outrage		*110*	*-60*	*1.83*	

1/15/15·25 (2492)
1/15/15·15 (1495)

100 CG 4 Gen VII Alola Legendary

Necrozma → Necrozma Dusk Mane (409)

#0856 Hatenna ✧ — 98 93 123 104.67 103.88

Confusion	4	19.2	14	4.80	3.50
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Psyshock		84	-40	2.10	
Dazzling Gleam		*90*	*-55*	*1.64*	
Psychic		90	-55	1.64	10%OD↓

15/15/15·50 (974) 15/15/14·50 (970)

100 CG 2 Gen VIII Galar

Hatenna → Hattrem (403) → Hatterene (405)

#0857 Hattrem ✧ — 153 133 149 145.00 144.74

Confusion	4	19.2	14	4.80	3.50
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Psyshock		84	-40	2.10	
Dazzling Gleam		*90*	*-55*	*1.64*	
Psychic		90	-55	1.64	10%OD↓

15/15/15·50 (1848)
0/15/15·40.5 (1498)

300 CG 2 Gen VIII Galar

Hatenna (402) → **Hattrem** → Hatterene (405)

#0720 Hoopa Unbound — 311 191 173 225.00 217.41

Confusion	4	19.2	14	4.80	3.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Dark Pulse		96	-50	1.92	
Shadow Ball		*100*	*-55*	*1.82*	
Psychic		90	-55	1.64	10%OD↓

0/15/13·23 (2498)
5/15/15·13.5 (1498)

100 CG 4 Gen VI Kalos Mythical

No evolution

#0078 Galarian Rapidash ✧ — 207 162 163 177.33 176.15

Low Kick	*2*	*4*	*5*	*2.00*	*2.50*
Psycho Cut	2	3.6	9	1.80	4.50
Fairy Wind	2	4.8	9	2.40	4.50
Megahorn		*110*	*-55*	*2.00*	
Play Rough		108	-60	1.80	
Psychic		90	-55	1.64	10%OD↓
Body Slam		*55*	*-35*	*1.57*	
Wild Charge		***100***	***-45***	***2.22***	***D↓2***
High Horsepower		*100*	*-60*	*1.67*	

0/15/14·47 (2495)
0/13/15·23 (1499)

300 CG 2 Gen I Kanto

Galarian Ponyta (392) → **Galarian Rapidash**

Shadow Galarian Rapidash — 248.4 135 163 182.13 176.15

#0122 Mr. Mime ✧ — 192 205 120 172.33 167.78

Zen Headbutt	3	9.6	6	3.20	2.00
Confusion	4	19.2	14	4.80	3.50
Magical Leaf	*3*	*10*	*10*	*3.33*	*3.33*
Psywave	1	3.6	4	3.60	4.00
Psybeam		84	-60	1.40	
Shadow Ball		*100*	*-55*	*1.82*	
Psychic		90	-55	1.64	10%OD↓

13/15/15·50 (2494)
0/13/15·25.5 (1498)

300 CG 3 Gen I Kanto

Mime Jr. (404) → **Mr. Mime**

Shadow Mr. Mime — 230.4 170.833 120 173.74 167.78

#0280 Ralts ✧ — 79 59 99 79.00 77.27

Confusion	4	19.2	14	4.80	3.50
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Psyshock		84	-40	2.10	
Shadow Sneak		*50*	*-45*	*1.11*	
Disarming Voice		84	-45	1.87	

15/15/15·50 (609)

100 CG 3 Gen III Hoenn

Ralts → Kirlia (404) → Gardevoir (404)

Shadow Ralts — 94.8 49.1667 99 80.99 77.27

#0281 Kirlia ✧ — 117 90 116 107.67 106.90

Confusion	4	19.2	14	4.80	3.50
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Magical Leaf	*3*	*10*	*10*	*3.33*	*3.33*
Shadow Sneak		*50*	*-45*	*1.11*	
Disarming Voice		84	-45	1.87	
Draining Kiss		72	-55	1.31	
Psychic		90	-55	1.64	10%OD↓
Triple Axel		*60*	*-45*	*1.33*	A↑

15/15/15·50 (1093)

300 CG 3 Gen III Hoenn

Ralts (404) → **Kirlia** → Gardevoir (404)

Shadow Kirlia — 140.4 75 116 110.47 106.90

#0282 Gardevoir ✧ — 237 195 169 200.33 198.41

Confusion	4	19.2	14	4.80	3.50
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Charm	3	15.6	8	5.20	2.67
Magical Leaf	*3*	*10*	*10*	*3.33*	*3.33*
Shadow Ball		*100*	*-55*	*1.82*	
Dazzling Gleam		108	-55	1.96	
Psychic		90	-55	1.64	10%OD↓
Synchronoise		**96**	**-50**	**1.92**	
Triple Axel		*60*	*-45*	*1.33*	A↑

0/12/15·30.5 (2496)
0/15/15·18 (1496)

500 CG 3 Gen III Hoenn

Ralts (404) → Kirlia (404) → **Gardevoir**

Shadow Gardevoir — 284.4 162.5 169 205.30 198.41

#0439 Mime Jr. ✧ — 125 142 85 117.33 114.69

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Confusion	4	19.2	14	4.80	3.50
Psybeam		84	-60	1.40	
Psyshock		84	-40	2.10	
Psychic		90	-55	1.64	10%OD↓

15/15/15·50 (1238)

100 CG 1 Gen IV Sinnoh Baby

Mime Jr. → Mr. Mime (403)

#0786 Tapu Lele ✧ — 259 208 172 213.00 210.04

Confusion	4	19.2	14	4.80	3.50
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Psyshock		84	-40	2.10	
Draining Kiss		72	-55	1.31	
Moonblast		132	-60	2.20	10%OA↓
Focus Blast		*150*	*-75*	*2.00*	
Future Sight		132	-65	2.03	
Nature's Madness		**96**	**-50**	**1.92**	**OD↓**

1/15/13·26.5 (2497)
0/13/14·16 (1499)
No evolution

100 CG 4 Gen VII Alola Legendary

#0858 Hatterene ✧ — 237 182 149 189.33 185.92

Psycho Cut	2	3.6	9	1.80	4.50
Confusion	4	19.2	14	4.80	3.50
Charm	3	15.6	8	5.20	2.67
Psyshock		84	-40	2.10	
Dazzling Gleam		108	-55	1.96	
Psychic		90	-55	1.64	10%OD↓
Power Whip		*90*	*-50*	*1.80*	

1/15/15·35.5 (2500)
0/11/14·20 (1500)

500 CG 2 Gen VIII Galar

Hatenna (402) → Hattrem (403) → **Hatterene**

#0475 Gallade ✧ — 237 195 169 200.33 198.41

Low Kick	2	4.8	5	2.40	2.50
Psycho Cut	2	3.6	9	1.80	4.50
Confusion	4	19.2	14	4.80	3.50
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Psychic		90	-55	1.64	10%OD↓
Leaf Blade		*70*	*-35*	*2.00*	
Close Combat		120	-45	2.67	D↓2
Synchronoise		**96**	**-50**	**1.92**	

0/12/15·30.5 (2496)
0/15/15·18 (1496)

500 CG 3 Gen IV Sinnoh

Ralts (404) → Kirlia (404) → **Gallade**

Shadow Gallade — 284.4 162.5 169 205.30 198.41

#0494 Victini — 210 210 225 215.00 214.89

Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Confusion	4	19.2	14	4.80	3.50
Psyshock		84	-40	2.10	
Psychic		90	-55	1.64	10%OD↓
Focus Blast		*150*	*-75*	*2.00*	
Overheat		156	-55	2.84	A↓2
V-Create		114	-40	2.85	D↓3

0/15/10·29 (2499)
0/10/13·17.5 (1500)
No evolution

100 CG 4 Gen V Unova Mythical

#0144 Galarian Articuno ✧ — 250 197 207 218.00 216.83

Psycho Cut	2	3.6	9	1.80	4.50
Confusion	4	19.2	14	4.80	3.50
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Brave Bird		156	-55	2.84	D↓3
Future Sight		132	-65	2.03	
Fly		96	-45	2.13	

100 CG 4 Gen I Kanto Legendary

0/15/12·26 (2499)
0/15/15·15.5 (1500) 0/15/14·15.5 (1496)
No evolution

Shadow Galarian Articuno — 300 164.167 207 223.72 216.83

#0177 Natu ✧ — 134 89 120 114.33 112.69

Peck	2	7.2	8	3.60	4.00
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Drill Peck		84	-40	2.10	
Psyshock		84	-40	2.10	
Night Shade		*80*	*-45*	*1.78*	*12.5%A↑2*

100 CG 2 Gen II Johto

15/15/15·50 (1246)
Natu → Xatu (406)

Shadow Natu — 160.8 74.1667 120 118.32 112.69

#0178 Xatu ✧ — 192 146 163 167.00 165.94

Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Air Slash	3	10.8	9	3.60	3.00
Peck	2	7.2	8	3.60	4.00
Psyshock		84	-40	2.10	
Aerial Ace		72	-45	1.60	
Ominous Wind		*45*	*-45*	*1.00*	*10%A+D↑*
Future Sight		132	-65	2.03	

300 CG 2 Gen II Johto

15/15/15·50 (2474)
0/13/15·26 (1498)
Natu (406) → **Xatu**

Shadow Xatu — 230.4 121.667 163 171.69 165.94

#0249 Lugia ✧ — 193 310 235 246.00 241.36

Dragon Tail	*3*	*9*	*12*	*3.00*	*4.00*
Extrasensory	3	9.6	10	3.20	3.33
Hydro Pump		*130*	*-75*	*1.73*	
Sky Attack		90	-50	1.80	
Future Sight		132	-65	2.03	
Aeroblast		**204**	**-75**	**2.72**	
Fly		96	-45	2.13	

100 CG 4 Gen II Johto Legendary

0/14/15·25.5 (2499)
0/11/11·15.5 (1500)
No evolution

Shadow Lugia — 231.6 258.333 235 241.64 241.36

#0527 Woobat ✧ 107 85 163 118.33 114.02

Confusion	4	19.2	14	4.80	3.50
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Psyshock		84	-40	2.10	
Air Cutter		54	-35	1.54	30%A↑

100 CG 1 Gen V Unova

15/15/15·50 (1149)
Woobat → Swoobat (407)

#0528 Swoobat ✧ 161 119 167 149.00 147.35

Confusion	4	19.2	14	4.80	3.50
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Psychic		90	-55	1.64	10%OD↓
Future Sight		132	-65	2.03	
Fly		96	-45	2.13	
Psychic Fangs		48	-35	1.37	OD↓

300 CG 1 Gen V Unova

15/15/15·50 (1940) 15/15/14·50 (1935)
0/15/9·38 (1500)
Woobat (407) → **Swoobat**

#0561 Sigilyph ✧ 204 167 176 182.33 181.67

Zen Headbutt	3	9.6	6	3.20	2.00
Air Slash	3	10.8	9	3.60	3.00
Psybeam		84	-60	1.40	
Ancient Power		*60*	*-45*	*1.33*	*10%A↑*
Signal Beam		*75*	*-55*	*1.36*	*20%OA+D↓*
Air Cutter		54	-35	1.54	30%A↑

100 CG 3 Gen V Unova

0/13/15·44.5 (2498)
1/15/15·22 (1500) 1/15/14·22 (1496)
No evolution

#0628 Hisuian Braviary ✧ 213 137 242 197.33 191.85

Zen Headbutt	3	9.6	6	3.20	2.00
Air Slash	3	10.8	9	3.60	3.00
Ominous Wind		*45*	*-45*	*1.00*	*10%A+D↑*
Dazzling Gleam		*90*	*-55*	*1.64*	
Psychic		90	-55	1.64	10%OD↓
Brave Bird		156	-55	2.84	D↓3
Fly		96	-45	2.13	

100 CG 3 Gen V Unova

0/14/13·37 (2498)
0/15/14·20 (1499) 0/15/13·20 (1496)
No evolution

#0741 Oricorio (Pa'u) ✧ — 196 145 181 174.00 172.62

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Air Slash	3	10.8	9	3.60	3.00
Aerial Ace		72	-45	1.60	
Air Cutter		54	-35	1.54	30%A↑
Hurricane		132	-65	2.03	

4/15/15·50 (2500)
0/13/13·24.5 (1500)
No evolution

100 CG 3 Gen VII Alola

#0720 Hoopa Confined — 261 187 173 207.00 203.63

Confusion	4	19.2	14	4.80	3.50
Astonish	3	14.4	10	4.80	3.33
Psybeam		84	-60	1.40	
Shadow Ball		120	-55	2.18	
Psychic		90	-55	1.64	10%OD↓

1/15/14·27.5 (2499)
0/15/15·16.5 (1497)
No evolution

100 CG 4 Gen VI Kalos Mythical

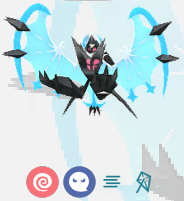
#0792 Lunala — 255 191 264 236.67 234.27

Shadow Claw	2	7.2	8	3.60	4.00
Confusion	4	19.2	14	4.80	3.50
Air Slash	*3*	*9*	*9*	*3.00*	*3.00*
Shadow Ball		120	-55	2.18	
Moonblast		*110*	*-60*	*1.83*	*10%OA↓*
Psychic		90	-55	1.64	10%OD↓
Future Sight		132	-65	2.03	

0/14/14·23 (2498)
0/12/9·14 (1499)
Cosmog (402) → Cosmoem (402) → **Lunala**

500 CG 4 Gen VII Alola Legendary

#0800 Necrozma Dawn Wings ✧ — 277 220 200 232.33 230.13



Shadow Claw	2	7.2	8	3.60	4.00
Psycho Cut	2	3.6	9	1.80	4.50
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Dark Pulse		*80*	*-50*	*1.60*	
Iron Head		*70*	*-50*	*1.40*	
Future Sight		132	-65	2.03	
Outrage		*110*	*-60*	*1.83*	
Moongeist Beam		162	-65	2.49	

0/15/15·22.5 (2499)
0/15/15·13.5 (1500) 0/15/14·13.5 (1496)
Necrozma (402) → **Necrozma Dawn Wings**

300 CG 4 Gen VII Alola Legendary

#0251 Celebi ✧ — 210 210 225 215.00 214.89

Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Confusion	4	19.2	14	4.80	3.50
Magical Leaf	**3**	**12**	**10**	**4.00**	**3.33**
Hyper Beam		*150*	*-80*	*1.88*	
Aura Sphere		*80*	*-40*	*2.00*	
Seed Bomb		66	-40	1.65	
Leaf Storm		156	-55	2.84	A↓2
Psychic		90	-55	1.64	10%OD↓
Dazzling Gleam		*90*	*-55*	*1.64*	

0/15/10·29 (2499)
0/10/13·17.5 (1500)
No evolution

100 CG 4 Gen II Johto Mythical

#0876 Indeedee — 208 166 155 176.33 174.92

Extrasensory	3	9.6	10	3.20	3.33
Psybeam		84	-60	1.40	
Shadow Ball		*100*	*-55*	*1.82*	
Psychic		90	-55	1.64	10%OD↓

0/14/14·48 (2500)
1/15/14·23 (1500)
No evolution

100 CG 2 Gen VIII Galar

#0791 Solgaleo — 255 191 264 236.67 234.27

Zen Headbutt	3	9.6	6	3.20	2.00
Fire Spin	*3*	*11*	*10*	*3.67*	*3.33*
Flamethrower		*90*	*-55*	*1.64*	
Iron Head		84	-50	1.68	
Solar Beam		*150*	*-80*	*1.88*	
Psychic Fangs		48	-35	1.37	OD↓

0/14/14·23 (2498)
0/12/9·14 (1499)
Cosmog (402) → Cosmoem (402) → **Solgaleo**

500 CG 4 Gen VII Alola Legendary

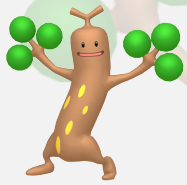
#0800 Necrozma Dusk Mane ✧ — 277 220 200 232.33 230.13

Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Psycho Cut	2	3.6	9	1.80	4.50
Metal Claw	2	6	7	3.00	3.50
Dark Pulse		*80*	*-50*	*1.60*	
Iron Head		84	-50	1.68	
Future Sight		132	-65	2.03	
Outrage		*110*	*-60*	*1.83*	
Sunsteel Strike		162	-65	2.49	

0/15/15·22.5 (2499)
0/15/15·13.5 (1500) 0/15/14·13.5 (1496)
Necrozma (402) → **Necrozma Dusk Mane**

300 CG 4 Gen VII Alola Legendary

#0185 Sudowoodo ✧ — 167 176 172 171.67 171.63



Rock Throw	2	9.6	5	4.80	2.50
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Earthquake		*110*	*-65*	*1.69*	
Stone Edge		120	-55	2.18	
Rock Tomb		96	-50	1.92	OA↓
Rock Slide		90	-45	2.00	
Meteor Beam		144	-60	2.40	A↑
Trailblaze		*65*	*-45*	*1.44*	A↑

15/15/15·50 (2428)
0/14/11·27 (1500)

300 CG 3 Gen II Johto

Bonsly (411) → **Sudowoodo**

#0299 Nosepass ✧ — 82 215 102 133.00 121.60

Spark	*2*	*5*	*7*	*2.50*	*3.50*
Rock Throw	2	9.6	5	4.80	2.50
Rock Slide		90	-45	2.00	
Thunderbolt		*90*	*-55*	*1.64*	
Rock Blast		60	-40	1.50	

15/15/15·50 (1123)

100 CG 2 Gen III Hoenn

Nosepass → Probopass (422)

Shadow Nosepass — 98.4 179.167 102 126.52 121.60

#0377 Regirock ✧ — 179 309 190 226.00 219.04

Rock Throw	2	9.6	5	4.80	2.50
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Lock On	*1*	*1*	*5*	*1.00*	*5.00*
Earthquake		***110***	***-65***	***1.69***	
Stone Edge		120	-55	2.18	
Focus Blast		*150*	*-75*	*2.00*	
Zap Cannon		*150*	*-80*	*1.88*	*33%OA↓*

0/12/15·31 (2499)
0/10/12·18.5 (1500)

100 CG 4 Gen III Hoenn Legendary

No evolution

Shadow Regirock — 214.8 257.5 190 220.77 219.04

#0408 Cranidos ✧ — 218 71 167 152.00 137.24

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Ancient Power		72	-45	1.60	10%A↑
Rock Tomb		96	-50	1.92	OA↓
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*

15/15/15·50 (2058) 15/15/14·50 (2052)
1/15/14·31.5 (1499)

100 CG 3 Gen IV Sinnoh

Cranidos → Rampardos (411)

Shadow Cranidos — 261.6 59.1667 167 162.59 137.24

#0409 Rampardos ✧ — 295 109 219 207.67 191.67

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Smack Down	3	14.4	8	4.80	2.67
Flamethrower		*90*	*-55*	*1.64*	
Rock Slide		90	-45	2.00	
Outrage		*110*	*-60*	*1.83*	

0/14/15·28 (2500)
1/14/8·17 (1500)

300 CG 3 Gen IV Sinnoh

Cranidos (410) → **Rampardos**

Shadow Rampardos — 354 90.8333 219 221.28 191.67

#0438 Bonsly ✧ — 124 133 137 131.33 131.22

Rock Throw	2	9.6	5	4.80	2.50
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Earthquake		*110*	*-65*	*1.69*	
Rock Tomb		96	-50	1.92	OA↓
Rock Slide		90	-45	2.00	

15/15/15·50 (1472)

100 CG 1 Gen IV Sinnoh Baby

Bonsly → Sudowoodo (410)

#0524 Roggenrola ✧ — 121 110 146 125.67 124.79

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Smack Down	3	14.4	8	4.80	2.67
Stone Edge		120	-55	2.18	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*
Rock Blast		60	-40	1.50	

15/15/15·50 (1362)

100 CG 2 Gen V Unova

Roggenrola → Boldore (411) → Gigalith (412)

Shadow Roggenrola — 145.2 91.6667 146 127.62 124.79

#0525 Boldore ✧ — 174 143 172 163.00 162.36

Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Smack Down	3	14.4	8	4.80	2.67
Stone Edge		120	-55	2.18	
Rock Slide		90	-45	2.00	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*

15/15/15·50 (2293)
0/15/15·28 (1494)

300 CG 2 Gen V Unova

Roggenrola (411) → **Boldore** → Gigalith (412)

Shadow Boldore — 208.8 119.167 172 166.66 162.36

#0526 Gigalith ✧ — 226 201 198 208.33 207.96

Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Smack Down	3	14.4	8	4.80	2.67
Rock Slide		90	-45	2.00	
Solar Beam		*150*	*-80*	*1.88*	
Heavy Slam		*70*	*-50*	*1.40*	
Superpower		*85*	*-40*	*2.12*	*A+D↓*
Meteor Beam		**144**	**-60**	**2.40**	**A↑**

0/13/15·29 (2497)
0/11/15·17.5 (1499)

500 CG 2 Gen V Unova

Roggenrola (411) → Boldore (411) → **Gigalith**

Shadow Gigalith — 271.2 167.5 198 212.23 207.96

#0744 Rockruff ✧ — 117 78 128 107.67 105.32

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Rock Throw	2	9.6	5	4.80	2.50
Stone Edge		120	-55	2.18	
Rock Tomb		96	-50	1.92	OA↓
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Trailblaze		*65*	*-45*	*1.44*	*A↑*

15/15/15·50 (1074)

100 CG 2 Gen VII Alola

Rockruff → Lycanroc Midday (412)

#0745 Lycanroc Midday ✧ — 231 140 181 184.00 180.22

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Rock Throw	2	9.6	5	4.80	2.50
Stone Edge		120	-55	2.18	
Drill Run		*80*	*-45*	*1.78*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Trailblaze		*65*	*-45*	*1.44*	*A↑*

0/14/14·40 (2500)
0/14/14·21 (1500)

300 CG 2 Gen VII Alola

Rockruff (412) → **Lycanroc Midday**

#0745 Lycanroc Midnight ✧ — 218 152 198 189.33 187.21

Rock Throw	2	9.6	5	4.80	2.50
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Stone Edge		120	-55	2.18	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Psychic Fangs		*40*	*-35*	*1.14*	*OD↓*
Trailblaze		*65*	*-45*	*1.44*	*A↑*

1/15/14·38 (2500)
0/15/14·20.5 (1500)

300 CG 2 Gen VII Alola

Rockruff (412) → **Lycanroc Midnight**

#0745 Lycanroc Dusk ✧ — 234 139 181 184.67 180.57

Sucker Punch	*2*	*8*	*7*	*4.00*	*3.50*
Rock Throw	2	9.6	5	4.80	2.50
Counter	*2*	*8*	*6*	*4.00*	*3.00*
Stone Edge		120	-55	2.18	
Iron Head		*70*	*-50*	*1.40*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Trailblaze		*65*	*-45*	*1.44*	*A↑*

300 CG 2 Gen VII Alola

0/15/14·39 (2496)
2/15/15·20.5 (1499)
Rockruff (412) → **Lycanroc Dusk**

#0874 Stonjourner — 222 182 225 209.67 208.71

Rock Throw	2	9.6	5	4.80	2.50
Stone Edge		120	-55	2.18	
Rock Slide		90	-45	2.00	
Stomp		*55*	*-40*	*1.38*	

100 CG 3 Gen VIII Galar

0/15/15·29 (2498)
0/13/15·17.5 (1499)
No evolution

#0347 Anorith ✧ — 176 100 128 134.67 131.09

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Struggle Bug	3	10.8	8	3.60	2.67
Aqua Jet		*70*	*-40*	*1.75*	
Ancient Power		72	-45	1.60	10%A↑
Cross Poison		*50*	*-35*	*1.43*	*12.5%A↑2*

100 CG 2 Gen III Hoenn

15/15/15·50 (1729)
0/15/15·45 (1500)
Anorith → Armaldo (413)

Shadow Anorith — 211.2 83.3333 128 140.84 131.09

#0348 Armaldo ✧ — 222 174 181 192.33 191.22

Fury Cutter	1	3.6	4	3.60	4.00
Struggle Bug	3	10.8	8	3.60	2.67
Cross Poison		*50*	*-35*	*1.43*	*12.5%A↑2*
Water Pulse		*80*	*-50*	*1.60*	
Rock Blast		60	-40	1.50	
Liquidation		*70*	*-45*	*1.56*	*30%OD↓*

300 CG 2 Gen III Hoenn

2/15/15·35 (2500)
0/9/15·20 (1500)
Anorith (413) → **Armaldo**

Shadow Armaldo — 266.4 145 181 197.47 191.22

#0248 Tyranitar — 251 207 225 227.67 226.96

Bite	1	4.8	2	4.80	2.00
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Smack Down	**3**	**14.4**	**8**	**4.80**	**2.67**
Stone Edge		120	-55	2.18	
Fire Blast		*140*	*-80*	*1.75*	
Crunch		84	-45	1.87	20%OD↓
Brutal Swing		66	-35	1.89	

0/13/11·24.5 (2500)
0/15/15·14.5 (1499)

500 CG 3 Gen II Johto

Larvitar (419) → Pupitar (420) → **Tyranitar**

Shadow Tyranitar 301.2 172.5 225 232.90 226.96

#0696 Tyrunt — 158 123 151 144.00 143.17

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Dragon Tail	3	10.8	12	3.60	4.00
Rock Tomb		96	-50	1.92	OA↓
Ancient Power		72	-45	1.60	10%A↑
Dragon Claw		96	-50	1.92	
Stomp		*55*	*-40*	*1.38*	

15/15/15·50 (1848)
0/15/15·40 (1493)

100 CG 3 Gen VI Kalos

Tyrunt → Tyrantrum (414)

Shadow Tyrunt 189.6 102.5 151 147.70 143.17

#0697 Tyrantrum — 227 191 193 203.67 203.02

Rock Throw	2	9.6	5	4.80	2.50
Dragon Tail	3	10.8	12	3.60	4.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Rock Tomb		96	-50	1.92	OA↓
Earthquake		*110*	*-65*	*1.69*	
Stone Edge		120	-55	2.18	
Outrage		132	-60	2.20	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Meteor Beam		144	-60	2.40	A↑

0/12/15·30 (2497)
0/15/12·18 (1498)

300 CG 3 Gen VI Kalos

Tyrunt (414) → **Tyrantrum**

Shadow Tyrantrum 272.4 159.167 193 208.19 203.02

#0074 Alolan Geodude ✧ — 132 132 120 128.00 127.87

Rock Throw	2	9.6	5	4.80	2.50
Volt Switch	4	16.8	16	4.20	4.00
Rock Tomb		96	-50	1.92	OA↓
Rock Slide		90	-45	2.00	
Thunderbolt		108	-55	1.96	

15/15/15·50 (1462)

100 CG 1 Gen I Kanto — **Alolan Geodude** → Alolan Graveler (415) → Alolan Golem (415)

Shadow Alolan Geodude — 158.4 110 120 129.47 127.87

#0075 Alolan Graveler ✧ — 164 164 146 158.00 157.77

Rock Throw	2	9.6	5	4.80	2.50
Volt Switch	4	16.8	16	4.20	4.00
Stone Edge		120	-55	2.18	
Thunderbolt		108	-55	1.96	
Rock Blast		60	-40	1.50	

15/15/15·50 (2145)
0/14/15·30.5 (1498)

300 CG 1 Gen I Kanto — Alolan Geodude (415) → **Alolan Graveler** → Alolan Golem (415)

Shadow Alolan Graveler — 196.8 136.667 146 159.82 157.77

#0076 Alolan Golem ✧ — 211 198 190 199.67 199.48

Rock Throw	2	9.6	5	4.80	2.50
Volt Switch	4	16.8	16	4.20	4.00
Rollout	**3**	**8.4**	**13**	**2.80**	**4.33**
Stone Edge		120	-55	2.18	
Wild Charge		120	-45	2.67	D↓2
Rock Blast		60	-40	1.50	

0/15/15·33.5 (2498)
1/14/15·19 (1498)

500 CG 1 Gen I Kanto — Alolan Geodude (415) → Alolan Graveler (415) → **Alolan Golem**

Shadow Alolan Golem — 253.2 165 190 202.73 199.48

#0703 Carbink ✧ — 95 285 137 172.33 154.80

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Rock Throw	2	9.6	5	4.80	2.50
Rock Slide		90	-45	2.00	
Power Gem		102	-50	2.04	
Moonblast		132	-60	2.20	10%OA↓

15/15/15·50 (1658)
5/15/15·49.5 (1498)

100 CG 3 Gen VI Kalos — No evolution

#0719 Diancie ✧ — 190 285 137 204.00 195.03

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Rock Throw	2	9.6	5	4.80	2.50
Rock Slide		90	-45	2.00	
Power Gem		102	-50	2.04	
Moonblast		132	-60	2.20	10%OA↓

0/15/15·39 (2497)
0/7/15·21 (1500)

100 CG 4 Gen VI Kalos Mythical

No evolution

#0639 Terrakion ✧ — 260 192 209 220.33 218.51

Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Smack Down	3	14.4	8	4.80	2.67
Double Kick	3	9.6	12	3.20	4.00
Earthquake		*110*	*-65*	*1.69*	
Rock Slide		90	-45	2.00	
Close Combat		120	-45	2.67	D↓2
Sacred Sword		**72**	**-35**	**2.06**	

0/15/15·25 (2497)
0/15/15·15 (1498) 0/15/14·15 (1495)

100 CG 4 Gen V Unova Legendary

No evolution

Shadow Terrakion — 312 160 209 227.00 218.51

#0142 Aerodactyl ✧ — 221 159 190 190.00 188.30

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Rock Throw	2	9.6	5	4.80	2.50
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Hyper Beam		*150*	*-80*	*1.88*	
Ancient Power		72	-45	1.60	10%A↑
Rock Slide		90	-45	2.00	
Iron Head		*70*	*-50*	*1.40*	
Earth Power		*90*	*-55*	*1.64*	*10%OD↓*

0/13/15·37.5 (2499)
1/15/15·20 (1496)

100 CG 3 Gen I Kanto

No evolution

Shadow Aerodactyl — 265.2 132.5 190 195.90 188.30

#0566 Archen ✧ — 213 89 146 149.33 140.40

Wing Attack	2	6	7	3.00	3.50
Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Ancient Power		72	-45	1.60	10%A↑
Dragon Claw		*80*	*-50*	*1.60*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (2083)
0/15/15·31 (1500) 0/15/14·31 (1495)
Archen → Archeops (417)

100 CG 3 Gen V Unova

Shadow Archen — 255.6 74.1667 146 158.59 140.40

#0567 Archeops ✧ — 292 139 181 204.00 194.40

Wing Attack	2	6	7	3.00	3.50
Steel Wing	*2*	*7*	*5*	*3.50*	*2.50*
Ancient Power		72	-45	1.60	10%A↑
Dragon Claw		*80*	*-50*	*1.60*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

1/15/15·27.5 (2498)
1/15/15·16.5 (1498)
Archen (417) → **Archeops**

300 CG 3 Gen V Unova

Shadow Archeops — 350.4 115.833 181 215.74 194.40

#0345 Lileep ✧ — 105 150 165 140.00 137.48

Acid	*2*	*6*	*8*	*3.00*	*4.00*
Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Bullet Seed	3	6	13	2.00	4.33
Ancient Power		72	-45	1.60	10%A↑
Grass Knot		108	-50	2.16	
Mirror Coat		*60*	*-55*	*1.09*	

15/15/15·50 (1460)

Lileep → Cradily (418)

100 CG 2 Gen III Hoenn

Shadow Lileep — 126 125 165 138.67 137.48

#0346 Cradily ✧ — 152 194 200 182.00 180.67

Acid	*2*	*6*	*8*	*3.00*	*4.00*
Infestation	*3*	*6*	*12*	*2.00*	*4.00*
Bullet Seed	3	6	13	2.00	4.33
Stone Edge		120	-55	2.18	
Rock Tomb		96	-50	1.92	OA↓
Rock Slide		90	-45	2.00	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*
Grass Knot		108	-50	2.16	

15/15/15·50 (2499)
0/15/15·26 (1494)

300 CG 2 Gen III Hoenn

Lileep (417) → **Cradily**

Shadow Cradily — 182.4 161.667 200 181.36 180.67

#0074 Geodude ✧ — 132 132 120 128.00 127.87

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Rock Throw	2	9.6	5	4.80	2.50
Dig		84	-50	1.68	
Rock Tomb		96	-50	1.92	OA↓
Rock Slide		90	-45	2.00	

15/15/15·50 (1462)

100 CG 1 Gen I Kanto

Geodude → Graveler (418) → Golem (419)

Shadow Geodude — 158.4 110 120 129.47 127.87

#0075 Graveler ✧ — 164 164 146 158.00 157.77

Mud Shot	2	4.8	8	2.40	4.00
Rock Throw	2	9.6	5	4.80	2.50
Mud Slap	3	14.4	10	4.80	3.33
Dig		84	-50	1.68	
Stone Edge		120	-55	2.18	
Rock Slide		**90**	**-45**	**2.00**	
Rock Blast		60	-40	1.50	

15/15/15·50 (2145)
0/14/15·30.5 (1498)

300 CG 1 Gen I Kanto

Geodude (418) → **Graveler** → Golem (419)

Shadow Graveler — 196.8 136.667 146 159.82 157.77

#0076 Golem ✧ — 211 198 190 199.67 199.48

Mud Shot	2	4.8	8	2.40	4.00
Rock Throw	2	9.6	5	4.80	2.50
Mud Slap	3	14.4	10	4.80	3.33
Earthquake		132	-65	2.03	
Stone Edge		120	-55	2.18	
Ancient Power		72	-45	1.60	10%A↑
Rock Blast		60	-40	1.50	

0/15/15·33.5 (2498)
1/14/15·19 (1498)

500 CG 1 Gen I Kanto

Geodude (418) → Graveler (418) → **Golem**

Shadow Golem — 253.2 165 190 202.73 199.48

#0095 Onix ✧ — 85 232 111 142.67 129.84

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Rock Throw	2	9.6	5	4.80	2.50
Stone Edge		120	-55	2.18	
Rock Slide		**90**	**-45**	**2.00**	
Iron Head		***70***	***-50***	***1.40***	
Sand Tomb		30	-40	0.75	OD↓
Heavy Slam		*70*	*-50*	*1.40*	
Breaking Swipe		*50*	*-50*	*1.00*	*OA↓*

15/15/15·50 (1245) 15/15/14·50 (1240)

100 CG 3 Gen I Kanto

Onix → Steelix (428)

Shadow Onix — 102 193.333 111 135.44 129.84

#0246 Larvitar ✧ — 115 93 137 115.00 113.58

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Ancient Power		72	-45	1.60	10%A↑
Stomp		*55*	*-40*	*1.38*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1176)

100 CG 3 Gen II Johto

Larvitar → Pupitar (420) → Tyranitar (414)

Shadow Larvitar — 138 77.5 137 117.50 113.58

#0247 Pupitar — 155 133 172 153.33 152.49

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Dig		84	-50	1.68	
Ancient Power		72	-45	1.60	10%A↑
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

15/15/15·50 (1996)
0/14/14·35.5 (1497)

300 CG 3 Gen II Johto

Larvitar (419) → **Pupitar** → Tyranitar (414)

Shadow Pupitar — 186 110.833 172 156.28 152.49

#0698 Amaura — 124 109 184 139.00 135.48

Frost Breath	2	8.4	5	4.20	2.50
Powder Snow	2	6	8	3.00	4.00
Ancient Power		72	-45	1.60	10%A↑
Thunderbolt		*90*	*-55*	*1.64*	
Aurora Beam		96	-60	1.60	
Weather Ball (Ice)		72	-35	2.06	

15/15/15·50 (1541)
11/15/15·50 (1497)

100 CG 3 Gen VI Kalos

Amaura → Aurorus (420)

Shadow Amaura — 148.8 90.8333 184 141.21 135.48

#0699 Aurorus — 186 163 265 204.67 200.29

Frost Breath	2	8.4	5	4.20	2.50
Rock Throw	2	9.6	5	4.80	2.50
Powder Snow	2	6	8	3.00	4.00
Hyper Beam		*150*	*-80*	*1.88*	
Blizzard		168	-75	2.24	
Ancient Power		72	-45	1.60	10%A↑
Thunderbolt		*90*	*-55*	*1.64*	
Weather Ball (Ice)		72	-35	2.06	
Meteor Beam		144	-60	2.40	A↑

0/15/15·37.5 (2500)
0/12/13·20.5 (1500)

300 CG 3 Gen VI Kalos

Amaura (420) → **Aurorus**

Shadow Aurorus — 223.2 135.833 265 208.01 200.29

#0793 Nihilego — 249 210 240 233.00 232.39

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Poison Jab	2	8.4	7	4.20	3.50
Acid	2	7.2	8	3.60	4.00
Rock Slide		90	-45	2.00	
Power Gem		102	-50	2.04	
Sludge Bomb		96	-50	1.92	
Gunk Shot		156	-75	2.08	

0/14/15·23.5 (2495)
1/15/15·14 (1496)

100 CG 4 Gen VII Alola Ultra Beast

No evolution

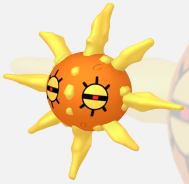
#0337 Lunatone — 178 153 207 179.33 177.98

Rock Throw	2	9.6	5	4.80	2.50
Confusion	4	19.2	14	4.80	3.50
Psywave	1	3.6	4	3.60	4.00
Rock Slide		90	-45	2.00	
Moonblast		*110*	*-60*	*1.83*	*10%OA↓*
Psychic		90	-55	1.64	10%OD↓

100 CG 2 Gen III Hoenn

5/15/15·50 (2495)
0/15/14·24.5 (1499)
No evolution

#0338 Solrock — 178 153 207 179.33 177.98



Rock Throw	2	9.6	5	4.80	2.50
Confusion	4	19.2	14	4.80	3.50
Psywave	1	3.6	4	3.60	4.00
Rock Slide		90	-45	2.00	
Psychic		90	-55	1.64	10%OD↓
Solar Beam		*150*	*-80*	*1.88*	

100 CG 2 Gen III Hoenn

5/15/15·50 (2495)
0/15/14·24.5 (1499)
No evolution

#0410 Shieldon — 76 195 102 124.33 114.77

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Iron Tail	3	12	7	4.00	2.33
Ancient Power		72	-45	1.60	10%A↑
Rock Tomb		96	-50	1.92	OA↓
Heavy Slam		84	-50	1.68	

100 CG 3 Gen IV Sinnoh

15/15/15·50 (1007)
Shieldon → Bastiodon (421)

Shadow Shieldon — 91.2 162.5 102 118.57 114.77

#0411 Bastiodon — 94 286 155 178.33 160.92

Iron Tail	3	12	7	4.00	2.33
Smack Down	3	14.4	8	4.80	2.67
Flamethrower		*90*	*-55*	*1.64*	
Stone Edge		120	-55	2.18	
Flash Cannon		132	-70	1.89	

300 CG 3 Gen IV Sinnoh

15/15/15·50 (1741) 15/15/14·50 (1735)
0/15/14·50 (1497)
Shieldon (421) → **Bastiodon**

Shadow Bastiodon — 112.8 238.333 155 168.71 160.92

#0476 Probopass ✧ — 135 275 155 188.33 179.20

Spark	*2*	*5*	*7*	*2.50*	*3.50*
Rock Throw	2	9.6	5	4.80	2.50
Rock Slide		90	-45	2.00	
Magnet Bomb		84	-45	1.87	
Thunderbolt		*90*	*-55*	*1.64*	
Zap Cannon		*150*	*-80*	*1.88*	*33%OA↓*

300 CG 2 Gen IV Sinnoh

15/15/15·50 (2351) 15/15/14·50 (2344)
0/15/15·28 (1497)
Nosepass (410) → **Probopass**

Shadow Probopass — 162 229.167 155 182.06 179.20

#0805 Stakataka ✧ — 213 298 156 222.33 214.74

Rock Throw	2	9.6	5	4.80	2.50
Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Stone Edge		120	-55	2.18	
Flash Cannon		132	-70	1.89	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*

100 CG 4 Gen VII Alola Ultra Beast

0/15/14·28.5 (2498)
1/14/15·17 (1499)
No evolution

#0138 Omanyte ✧ — 155 153 111 139.67 138.08

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Water Gun	1	3.6	3	3.60	3.00
Bubble Beam		30	-40	0.75	OA↓
Ancient Power		72	-45	1.60	10%A↑
Rock Tomb		**96**	**-50**	**1.92**	**OA↓**
Brine		**72**	**-50**	**1.44**	
Rock Blast		60	-40	1.50	

100 CG 3 Gen I Kanto

15/15/15·50 (1746) 15/15/14·50 (1739)
0/13/15·45.5 (1499)
Omanyte → Omastar (422)

Shadow Omanyte — 186 127.5 111 141.50 138.08

#0139 Omastar ✧ — 207 201 172 193.33 192.71

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Rock Throw	**2**	**9.6**	**5**	**4.80**	**2.50**
Water Gun	1	3.6	3	3.60	3.00
Ancient Power		72	-45	1.60	10%A↑
Rock Slide		**90**	**-45**	**2.00**	
Hydro Pump		156	-75	2.08	
Rock Blast		60	-40	1.50	

300 CG 3 Gen I Kanto

0/14/15·37.5 (2499)
0/9/15·20.5 (1500)
Omanyte (422) → **Omastar**

Shadow Omastar — 248.4 167.5 172 195.97 192.71

#0140 Kabuto — 148 140 102 130.00 128.33

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Aqua Jet		84	-40	2.10	
Ancient Power		72	-45	1.60	10%A↑
Rock Tomb		96	-50	1.92	OA↓

100 CG 3 Gen I Kanto

15/15/15·50 (1549)
10/15/15·49.5 (1493)
Kabuto → Kabutops (423)

Shadow Kabuto — 177.6 116.667 102 132.09 128.33

#0141 Kabutops — 220 186 155 187.00 185.11

Fury Cutter	**1**	**3**	**4**	**3.00**	**4.00**
Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Waterfall	3	14.4	8	4.80	2.67
Stone Edge		120	-55	2.18	
Ancient Power		72	-45	1.60	10%A↑
Water Pulse		96	-50	1.92	

300 CG 3 Gen I Kanto

0/14/15·39 (2497)
0/14/10·21 (1497)
Kabuto (423) → **Kabutops**

Shadow Kabutops — 264 155 155 191.33 185.11

#0688 Binacle — 96 120 123 113.00 112.32

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Dig		*70*	*-50*	*1.40*	
Cross Chop		*55*	*-35*	*1.57*	
Ancient Power		72	-45	1.60	10%A↑

100 CG 2 Gen VI Kalos

15/15/15·50 (1069) 15/15/14·50 (1065)
Binacle → Barbaracle (423)

#0689 Barbaracle — 194 205 176 191.67 191.29

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Water Gun	1	3.6	3	3.60	3.00
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Cross Chop		*55*	*-35*	*1.57*	
Stone Edge		120	-55	2.18	
Grass Knot		*90*	*-50*	*1.80*	
Skull Bash		*130*	*-75*	*1.73*	*D↑*
Razor Shell		42	-35	1.20	50%OD↓

300 CG 2 Gen VI Kalos

0/15/15·40.5 (2499)
0/10/13·21.5 (1500)
Binacle (423) → **Barbaracle**

#0052 Galarian Meowth ✧ — 115 92 137 114.67 113.17

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Metal Claw	2	6	7	3.00	3.50
Metal Sound	2	6	8	3.00	4.00
Dig		*70*	*-50*	*1.40*	
Night Slash		*50*	*-35*	*1.43*	
Gyro Ball		96	-50	1.92	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

100 CG 2 Gen I Kanto

15/15/15·50 (1170)

Galarian Meowth → Perrserker (425)

Shadow Galarian Meowth — 138 76.6667 137 117.22 113.17

#0379 Registeel ✧ — 143 285 190 206.00 197.84

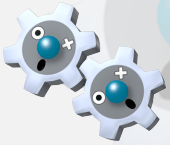
Metal Claw	2	6	7	3.00	3.50
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Lock On	*1*	*1*	*5*	*1.00*	*5.00*
Hyper Beam		*150*	*-80*	*1.88*	
Flash Cannon		132	-70	1.89	
Focus Blast		*150*	*-75*	*2.00*	
Zap Cannon		***150***	***-80***	***1.88***	***33%OA↓***

100 CG 4 Gen III Hoenn Legendary

0/14/15·50 (2499)
0/12/12·24 (1500)
No evolution

Shadow Registeel — 171.6 237.5 190 199.70 197.84

#0599 Klink ✧ — 98 121 120 113.00 112.48



Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Volt Switch	*4*	*14*	*16*	*3.50*	*4.00*
Metal Sound	2	6	8	3.00	4.00
Vise Grip		*40*	*-40*	*1.00*	
Discharge		*55*	*-40*	*1.38*	
Zap Cannon		*150*	*-80*	*1.88*	*33%OA↓*

100 CG 3 Gen V Unova

15/15/15·50 (1081)

Klink → Klang (424) → Klinklang (425)

#0600 Klang ✧ — 150 174 155 159.67 159.34

Thunder Shock	*2*	*4*	*9*	*2.00*	*4.50*
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Metal Sound	2	6	8	3.00	4.00
Vise Grip		*40*	*-40*	*1.00*	
Thunderbolt		*90*	*-55*	*1.64*	
Zap Cannon		*150*	*-80*	*1.88*	*33%OA↓*

300 CG 3 Gen V Unova

15/15/15·50 (2088) 15/15/14·50 (2082)
0/15/15·32.5 (1499) 0/15/14·32.5 (1495)
Klink (424) → **Klang** → Klinklang (425)

#0601 Klinklang — 199 214 155 189.33 187.59

Thunder Shock	*2*	*4*	*9*	*2.00*	*4.50*
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Metal Sound	2	6	8	3.00	4.00
Hyper Beam		*150*	*-80*	*1.88*	
Flash Cannon		132	-70	1.89	
Zap Cannon		*150*	*-80*	*1.88*	*33%OA↓*
Mirror Shot		42	-35	1.20	30%OA↓

0/12/15·42 (2498)
0/13/15·21.5 (1499)

500 CG 3 Gen V Unova

Klink (424) → Klang (424) → **Klinklang**

#0808 Meltan — 118 99 130 115.67 114.94

Thunder Shock	*2*	*4*	*9*	*2.00*	*4.50*
Flash Cannon		132	-70	1.89	
Thunderbolt		*90*	*-55*	*1.64*	

15/15/15·50 (1207) 15/15/14·50 (1203)

100 CG 4 Gen VII Unknown Mythical

Meltan → Melmetal (425)

#0809 Melmetal — 226 190 264 226.67 224.64

Thunder Shock	*2*	*4*	*9*	*2.00*	*4.50*
Hyper Beam		*150*	*-80*	*1.88*	
Flash Cannon		132	-70	1.89	
Rock Slide		*75*	*-45*	*1.67*	
Thunderbolt		*90*	*-55*	*1.64*	
Superpower		*85*	*-40*	*2.12*	*A+D↓*
Double Iron Bash		**66**	**-35**	**1.89**	

0/13/15·26 (2495)
1/15/14·15.5 (1499)

300 CG 4 Gen VII Unknown Mythical

Meltan (425) → **Melmetal**

#0863 Perrserker — 195 162 172 176.33 175.80

Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Metal Claw	2	6	7	3.00	3.50
Metal Sound	2	6	8	3.00	4.00
Iron Head		84	-50	1.68	
Play Rough		*90*	*-60*	*1.50*	
Close Combat		*100*	*-45*	*2.22*	*D↓2*
Foul Play		*60*	*-40*	*1.50*	
Trailblaze		*65*	*-45*	*1.44*	*A↑*

0/14/15·50 (2497)
1/15/15·23.5 (1495)

300 CG 2 Gen VIII Galar

Galarian Meowth (424) → **Perrserker**

Shadow Perrserker — 234 135 172 180.33 175.80

#0483 Dialga ✧ — 275 211 205 230.33 228.27

Dragon Breath	1	3.6	4	3.60	4.00
Metal Claw	2	6	7	3.00	3.50
Iron Head		84	-50	1.68	
Thunder		*100*	*-60*	*1.67*	
Draco Meteor		180	-65	2.77	A↓2

0/15/12·23 (2499)
0/13/8·14 (1500)
No evolution

100 CG 4 Gen IV Sinnoh Legendary

Shadow Dialga — 330 175.833 205 236.94 228.27

#0483 Origin Forme Dialga ✧ — 270 225 205 233.33 231.79

Dragon Breath	1	3.6	4	3.60	4.00
Metal Claw	2	6	7	3.00	3.50
Iron Head		84	-50	1.68	
Thunder		*100*	*-60*	*1.67*	
Draco Meteor		180	-65	2.77	A↓2
Roar of Time		**180**	**-65**	**2.77**	

1/15/15·22.5 (2500)
2/15/13·13.5 (1499)
No evolution

100 CG 4 Gen IV Sinnoh Legendary

Shadow Origin Forme Dialga — 324 187.5 205 238.83 231.79

#0303 Mawile ✧ — 155 141 137 144.33 144.13

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Fire Fang	*2*	*8*	*6*	*4.00*	*3.00*
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Ice Fang	*2*	*8*	*6*	*4.00*	*3.00*
Fairy Wind	2	4.8	9	2.40	4.50
Vise Grip		*40*	*-40*	*1.00*	
Iron Head		84	-50	1.68	
Play Rough		108	-60	1.80	
Power-Up Punch		*20*	*-35*	*0.57*	*A↑*

15/15/15·50 (1848)
1/15/15·40 (1500)
No evolution

100 CG 3 Gen III Hoenn

Shadow Mawile — 186 117.5 137 146.83 144.13

#0707 Klefki — 160 179 149 162.67 162.20

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Astonish	*3*	*12*	*10*	*4.00*	*3.33*
Flash Cannon		132	-70	1.89	
Draining Kiss		72	-55	1.31	
Play Rough		108	-60	1.80	
Foul Play		*60*	*-40*	*1.50*	

15/15/15·50 (2204)
0/15/14·29.5 (1497)
No evolution

100 CG 2 Gen VI Kalos

#0638 Cobalion ✧ — 192 229 209 210.00 209.46

Metal Claw	2	6	7	3.00	3.50
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Double Kick	3	9.6	12	3.20	4.00
Stone Edge		*100*	*-55*	*1.82*	
Iron Head		84	-50	1.68	
Close Combat		120	-45	2.67	D↓2
Sacred Sword		**72**	**-35**	**2.06**	

0/14/15·32.5 (2498)
0/12/11·19 (1498)
No evolution

100 CG 4 Gen V Unova Legendary

#0227 Skarmory ✧ — 148 226 163 179.00 176.00

Steel Wing	2	8.4	5	4.20	2.50
Air Slash	3	10.8	9	3.60	3.00
Flash Cannon		132	-70	1.89	
Brave Bird		156	-55	2.84	D↓3
Sky Attack		90	-50	1.80	

15/15/15·50 (2383)
0/15/14·27.5 (1500) 0/15/13·27.5 (1495)
No evolution

100 CG 3 Gen II Johto

Shadow Skarmory — 177.6 188.333 163 176.31 176.00

#0797 Celesteela ✧ — 207 199 219 208.33 208.17

Air Slash	3	10.8	9	3.60	3.00
Smack Down	*3*	*12*	*8*	*4.00*	*2.67*
Iron Head		84	-50	1.68	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*
Body Slam		*55*	*-35*	*1.57*	
Heavy Slam		84	-50	1.68	

0/15/15·30.5 (2500) 0/15/14·30.5 (2495)
2/15/14·18 (1499)
No evolution

100 CG 4 Gen VII Alola Ultra Beast

#0679 Honedge — 135 139 128 134.00 133.92

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Iron Head		84	-50	1.68	
Gyro Ball		96	-50	1.92	

15/15/15·50 (1571)
8/15/15·50 (1498)
Honedge → Doublade (428) → Aegislash (428)

100 CG 3 Gen VI Kalos

#0680 Doublade — 188 206 153 182.33 180.96

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Psycho Cut	*2*	*3*	*9*	*1.50*	*4.50*
Iron Head		84	-50	1.68	
Gyro Ball		96	-50	1.92	

0/14/14·48.5 (2499)
0/11/14·23.5 (1500)

300 CG 3 Gen VI Kalos

Honedge (427) → **Doublade** → Aegislash (428)

#0681 Aegislash — 97 291 155 181.00 163.56

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Psycho Cut	*2*	*3*	*9*	*1.50*	*4.50*
Flash Cannon		132	-70	1.89	
Shadow Ball		120	-55	2.18	
Gyro Ball		96	-50	1.92	

15/15/15·50 (1803) 15/15/14·50 (1798)
0/12/15·47 (1499)

500 CG 3 Gen VI Kalos

Honedge (427) → Doublade (428) → **Aegislash**

#1000 Gholdengo ✧ — 252 190 202 214.67 213.06

Astonish	3	14.4	10	4.80	3.33
Hex	3	8.4	13	2.80	4.33
Power Gem		*85*	*-50*	*1.70*	
Shadow Ball		120	-55	2.18	
Dazzling Gleam		*90*	*-55*	*1.64*	
Focus Blast		*150*	*-75*	*2.00*	

0/15/12·26.5 (2496)
0/15/10·16 (1500)

300 CG 1 Gen IX Paldea

Gimmighoul (299) → **Gholdengo**

#0208 Steelix ✧ — 148 272 181 200.33 193.87

Dragon Tail	*3*	*9*	*12*	*3.00*	*4.00*
Iron Tail	3	12	7	4.00	2.33
Thunder Fang	*2*	*8*	*6*	*4.00*	*3.00*
Earthquake		132	-65	2.03	
Heavy Slam		84	-50	1.68	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Psychic Fangs		*40*	*-35*	*1.14*	*OD↓*
Breaking Swipe		*50*	*-50*	*1.00*	*OA↓*

2/15/15·49.5 (2497)
0/14/15·24 (1500)

300 CG 3 Gen II Johto

Onix (419) → **Steelix**

Shadow Steelix — 177.6 226.667 181 195.09 193.87

#0965 Varoom — 123 107 128 119.33 118.99

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Poison Jab	2	8.4	7	4.20	3.50
Metal Sound	2	6	8	3.00	4.00
Gunk Shot		156	-75	2.08	
Gyro Ball		96	-50	1.92	
Acid Spray		24	-45	0.53	OD↓2

100 CG 2 Gen IX Paldea

15/15/15·50 (1287)

Varoom → Revavroom (429)

#0966 Revavroom — 229 168 190 195.67 194.07

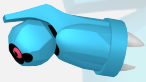
Lick	*1*	*3*	*3*	*3.00*	*3.00*
Poison Jab	2	8.4	7	4.20	3.50
Metal Sound	2	6	8	3.00	4.00
Gunk Shot		156	-75	2.08	
Gyro Ball		96	-50	1.92	
Overheat		*130*	*-55*	*2.36*	*A↓2*
Acid Spray		24	-45	0.53	OD↓2

300 CG 2 Gen IX Paldea

0/13/15·33.5 (2499)
0/14/15·19 (1499)

Varoom (429) → **Revavroom**

#0374 Beldum ✧ — 96 132 120 116.00 114.99



Take Down	*3*	*5*	*8*	*1.67*	*2.67*
Iron Head		84	-50	1.68	

100 CG 3 Gen III Hoenn

15/15/15·50 (1104)

Beldum → Metang (429) → Metagross (430)

Shadow Beldum — 115.2 110 120 115.07 114.99

#0375 Metang ✧ — 138 176 155 156.33 155.56

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Metal Claw	2	6	7	3.00	3.50
Zen Headbutt	3	9.6	6	3.20	2.00
Psyshock		84	-40	2.10	
Psychic		90	-55	1.64	10%OD↓
Gyro Ball		96	-50	1.92	

300 CG 3 Gen III Hoenn

15/15/15·50 (1946) 15/15/14·50 (1940)
0/13/15·38 (1500)

Beldum (429) → **Metang** → Metagross (430)

Shadow Metang — 165.6 146.667 155 155.76 155.56

#0376 Metagross ✧ — 257 228 190 225.00 223.29

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Bullet Punch	2	9.6	7	4.80	3.50
Zen Headbutt	3	9.6	6	3.20	2.00
Earthquake		*110*	*-65*	*1.69*	
Flash Cannon		132	-70	1.89	
Psychic		90	-55	1.64	10%OD↓
Meteor Mash		**120**	**-50**	**2.40**	

0/15/13·24.5 (2495)
2/15/15·14.5 (1495)

500 CG 3 Gen III Hoenn

Beldum (429) → Metang (429) → **Metagross**

Shadow Metagross — 308.4 190 190 229.47 223.29

#0385 Jirachi ✧ — 210 210 225 215.00 214.89

Confusion	4	19.2	14	4.80	3.50
Charge Beam	*3*	*5*	*11*	*1.67*	*3.67*
Aura Sphere		*80*	*-40*	*2.00*	
Dazzling Gleam		*90*	*-55*	*1.64*	
Psychic		90	-55	1.64	10%OD↓
Doom Desire		96	-40	2.40	

0/15/10·29 (2499)
0/10/13·17.5 (1500)

100 CG 4 Gen III Hoenn Mythical

No evolution

#0436 Bronzor ✧ — 43 154 149 115.33 99.55

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Confusion	4	19.2	14	4.80	3.50
Psyshock		84	-40	2.10	
Gyro Ball		96	-50	1.92	
Heavy Slam		84	-50	1.68	
Payback		*110*	*-60*	*1.83*	

15/15/15·50 (681)

100 CG 2 Gen IV Sinnoh

Bronzor → Bronzong (430)

#0437 Bronzong ✧ — 161 213 167 180.33 178.91

Confusion	4	19.2	14	4.80	3.50
Feint Attack	*2*	*6*	*6*	*3.00*	*3.00*
Metal Sound	2	6	8	3.00	4.00
Flash Cannon		132	-70	1.89	
Psyshock		84	-40	2.10	
Bulldoze		*45*	*-45*	*1.00*	*50%OD↓*
Psychic		90	-55	1.64	10%OD↓
Heavy Slam		84	-50	1.68	
Payback		*110*	*-60*	*1.83*	

13/15/14·50 (2495)
1/15/14·25.5 (1497)

300 CG 2 Gen IV Sinnoh

Bronzor (430) → **Bronzong**

#0304 Aron ✧ — 121 141 137 133.00 132.71

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Metal Claw	2	6	7	3.00	3.50
Metal Sound	2	6	8	3.00	4.00
Rock Tomb		96	-50	1.92	OA↓
Iron Head		84	-50	1.68	
Body Slam		*55*	*-35*	*1.57*	

100 CG 1 Gen III Hoenn

15/15/15·50 (1478)

Aron → Lairon (431) → Aggron (431)

Shadow Aron 145.2 117.5 137 133.23 132.71

#0305 Lairon ✧ — 158 198 155 170.33 169.26

Metal Claw	2	6	7	3.00	3.50
Iron Tail	3	12	7	4.00	2.33
Metal Sound	2	6	8	3.00	4.00
Rock Tomb		96	-50	1.92	OA↓
Rock Slide		90	-45	2.00	
Body Slam		*55*	*-35*	*1.57*	
Heavy Slam		84	-50	1.68	

300 CG 1 Gen III Hoenn

15/15/15·50 (2324) 15/15/14·50 (2317)
0/14/15·28 (1498)

Aron (431) → **Lairon** → Aggron (431)

Shadow Lairon 189.6 165 155 169.87 169.26

#0306 Aggron ✧ — 198 257 172 209.00 206.08

Dragon Tail	*3*	*9*	*12*	*3.00*	*4.00*
Iron Tail	3	12	7	4.00	2.33
Smack Down	3	14.4	8	4.80	2.67
Stone Edge		120	-55	2.18	
Rock Tomb		96	-50	1.92	OA↓
Thunder		*100*	*-60*	*1.67*	
Heavy Slam		84	-50	1.68	
Meteor Beam		144	-60	2.40	A↑

500 CG 1 Gen III Hoenn

0/13/15·33 (2500)
0/14/12·19 (1499)

Aron (431) → Lairon (431) → **Aggron**

Shadow Aggron 237.6 214.167 172 207.92 206.08

#0007 Squirtle ✧ — 94 121 127 114.00 113.04

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Bubble	3	9.6	11	3.20	3.67
Aqua Jet		84	-40	2.10	
Aqua Tail		66	-35	1.89	
Water Pulse		96	-50	1.92	

100 CG 1 Gen I Kanto

15/15/15·50 (1069)

Squirtle → Wartortle (432) → Blastoise (432)

Shadow Squirtle 112.8 100.833 127 113.54 113.04

#0008 Wartortle ✧ — 126 155 153 144.67 144.03

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Ice Beam		*90*	*-55*	*1.64*	
Aqua Jet		84	-40	2.10	
Hydro Pump		156	-75	2.08	

15/15/15·50 (1682)
0/14/15·50 (1499)

300 CG 1 Gen I Kanto

Squirtle (431) → **Wartortle** → Blastoise (432)

Shadow Wartortle — 151.2 129.167 153 144.46 144.03

#0009 Blastoise ✧ — 171 207 188 188.67 188.09

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Flash Cannon		*110*	*-70*	*1.57*	
Ice Beam		*90*	*-55*	*1.64*	
Hydro Pump		156	-75	2.08	
Hydro Cannon		**96**	**-40**	**2.40**	
Skull Bash		*130*	*-75*	*1.73*	*D↑*

0/12/15·48.5 (2500)
1/15/15·23 (1498)

500 CG 1 Gen I Kanto

Squirtle (431) → Wartortle (432) → **Blastoise**

Shadow Blastoise — 205.2 172.5 188 188.57 188.09

#0054 Psyduck ✧ — 122 95 137 118.00 116.66

Water Gun	1	3.6	3	3.60	3.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Cross Chop		*55*	*-35*	*1.57*	
Psybeam		*70*	*-60*	*1.17*	
Aqua Tail		66	-35	1.89	

15/15/15·50 (1250)

100 CG 2 Gen I Kanto

Psyduck → Golduck (433)

Shadow Psyduck — 146.4 79.1667 137 120.86 116.66

#0055 Golduck ✧ — 191 162 190 181.00 180.48

Water Gun	1	3.6	3	3.60	3.00
Confusion	*4*	*16*	*14*	*4.00*	*3.50*
Cross Chop		*55*	*-35*	*1.57*	
Ice Beam		*90*	*-55*	*1.64*	
Bubble Beam		30	-40	0.75	OA↓
Hydro Pump		156	-75	2.08	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Synchronoise		*80*	*-50*	*1.60*	
Liquidation		84	-45	1.87	30%OD↓

0/13/13·48.5 (2496)
0/10/14·23.5 (1500)

300 CG 2 Gen I Kanto

Psyduck (432) → **Golduck**

Shadow Golduck — 229.2 135 190 184.73 180.48

#0060 Poliwag ✧ — 101 82 120 101.00 99.79

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Bubble	3	9.6	11	3.20	3.67
Bubble Beam		30	-40	0.75	OA↓
Mud Bomb		*60*	*-40*	*1.50*	
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (937)

100 CG 2 Gen I Kanto

Poliwag → Poliwhirl (433) → Poliwrath (452)

Shadow Poliwag — 121.2 68.3333 120 103.18 99.79

#0061 Poliwhirl ✧ — 130 123 163 138.67 137.62

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Bubble	3	9.6	11	3.20	3.67
Bubble Beam		30	-40	0.75	OA↓
Mud Bomb		*60*	*-40*	*1.50*	
Water Pulse		96	-50	1.92	
Scald		**102**	**-50**	**2.04**	**30%OA↓**

15/15/15·50 (1604)
6/15/15·49.5 (1496)

300 CG 2 Gen I Kanto

Poliwag (433) → **Poliwhirl** → Poliwrath (452)

Shadow Poliwhirl — 156 102.5 163 140.50 137.62

#0086 Seel ✧ — 85 121 163 123.00 118.79

Lick	*1*	*3*	*3*	*3.00*	*3.00*
Ice Shard	*3*	*9*	*10*	*3.00*	*3.33*
Water Gun	**1**	**3.6**	**3**	**3.60**	**3.00**
Aqua Jet		**84**	**-40**	**2.10**	
Aqua Tail		66	-35	1.89	
Icy Wind		*60*	*-45*	*1.33*	*OA↓*
Aurora Beam		*80*	*-60*	*1.33*	

15/15/15·50 (1098)

100 CG 2 Gen I Kanto

Seel → Dewgong (458)

#0090 Shellder ✧ 116 134 102 117.33 116.61

Ice Shard	*3*	*9*	*10*	*3.00*	*3.33*
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Bubble Beam		30	-40	0.75	OA↓
Water Pulse		96	-50	1.92	
Icy Wind		*60*	*-45*	*1.33*	OA↓
Razor Shell		42	-35	1.20	50%OD↓

15/15/15·50 (1221)

1000 CG 2 Gen I Kanto

Shellder → Cloyster (458)

Shadow Shellder 139.2 111.667 102 117.62 116.61

#0098 Krabby ✧ 181 124 102 135.67 131.80

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Bubble	3	9.6	11	3.20	3.67
Vise Grip		*40*	*-40*	*1.00*	
Bubble Beam		30	-40	0.75	OA↓
Water Pulse		96	-50	1.92	
Razor Shell		42	-35	1.20	50%OD↓

15/15/15·50 (1764)
0/15/15·43 (1496)

100 CG 2 Gen I Kanto

Krabby → Kingler (434)

Shadow Krabby 217.2 103.333 102 140.84 131.80

#0099 Kingler ✧ 240 181 146 189.00 185.10

Mud Shot	**2**	**4**	**8**	**2.00**	**4.00**
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Bubble	3	9.6	11	3.20	3.67
Vise Grip		*40*	*-40*	*1.00*	
X-Scissor		*65*	*-40*	*1.62*	
Water Pulse		96	-50	1.92	
Crabhammer		102	-50	2.04	12.5%A↑2
Razor Shell		42	-35	1.20	50%OD↓

0/15/15·35.5 (2491)
0/9/15·20 (1498)

300 CG 2 Gen I Kanto

Krabby (434) → **Kingler**

Shadow Kingler 288 150.833 146 194.94 185.10

#0116 Horsea ✧ 129 103 102 111.33 110.66

Water Gun	1	3.6	3	3.60	3.00
Bubble	3	9.6	11	3.20	3.67
Flash Cannon		*110*	*-70*	*1.57*	
Bubble Beam		30	-40	0.75	OA↓
Dragon Pulse		*90*	*-55*	*1.64*	

15/15/15·50 (1194)

100 CG 2 Gen I Kanto

Horsea → Seadra (435) → Kingdra (450)

Shadow Horsea 154.8 85.8333 102 114.21 110.66

#0117 Seadra ✧ 187 156 146 163.00 162.10

Dragon Breath	*1*	*3*	*4*	*3.00*	*4.00*
Water Gun	1	3.6	3	3.60	3.00
Blizzard		***140***	***-75***	***1.87***	
Dragon Pulse		*90*	*-55*	*1.64*	
Hydro Pump		156	-75	2.08	
Aurora Beam		*80*	*-60*	*1.33*	

15/15/15·50 (2366)
1/15/14·27 (1498)

300 CG 2 Gen I Kanto

Horsea (434) → **Seadra** → Kingdra (450)

Shadow Seadra 224.4 130 146 166.80 162.10

#0118 Goldeen ✧ 123 110 128 120.33 120.09

Peck	*2*	*6*	*8*	*3.00*	*4.00*
Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Aqua Tail		66	-35	1.89	
Water Pulse		96	-50	1.92	
Horn Attack		*40*	*-35*	*1.14*	

15/15/15·50 (1302)

100 CG 2 Gen I Kanto

Goldeen → Seaking (435)

#0119 Seaking ✧ 175 147 190 170.67 169.71

Peck	*2*	*6*	*8*	*3.00*	*4.00*
Poison Jab	**2**	**7**	**7**	**3.50**	**3.50**
Waterfall	3	14.4	8	4.80	2.67
Megahorn		*110*	*-55*	*2.00*	
Ice Beam		*90*	*-55*	*1.64*	
Drill Run		***80***	***-45***	***1.78***	
Water Pulse		96	-50	1.92	
Icy Wind		***60***	***-45***	***1.33***	OA↓

15/15/15·50 (2444)
0/14/14·26.5 (1499)

300 CG 2 Gen I Kanto

Goldeen (435) → **Seaking**

#0120 Staryu ✧ 137 112 102 117.00 116.10

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Water Gun	1	3.6	3	3.60	3.00
Bubble Beam		30	-40	0.75	OA↓
Power Gem		*85*	*-50*	*1.70*	
Swift		*55*	*-35*	*1.57*	

15/15/15·50 (1308)

750 CG 2 Gen I Kanto

Staryu → Starmie (460)

Shadow Staryu 164.4 93.3333 102 119.91 116.10

#0129 Magikarp ✧ — 29 85 85 66.33 59.39

Splash	4	0	12	0.00	3.00
Struggle		*35*	*-100*	*0.35*	

100 CG 1 Gen I Kanto

15/15/15·50 (310)
Magikarp → Gyarados (453)

Shadow Magikarp — 34.8 70.8333 85 63.54 59.39

#0134 Vaporeon ✧ — 205 161 277 214.33 209.10

Water Gun	1	3.6	3	3.60	3.00
Aqua Tail		66	-35	1.89	
Water Pulse		96	-50	1.92	
Scald		**102**	**-50**	**2.04**	**30%OA↓**
Hydro Pump		156	-75	2.08	
Last Resort		***90***	***-55***	***1.64***	
Liquidation		84	-45	1.87	30%OD↓

300 CG 3 Gen I Kanto

0/15/13·30.5 (2500)
1/15/15·18 (1500)
Eevee (353) → **Vaporeon**

#0158 Totodile ✧ — 117 109 137 121.00 120.44

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Aqua Jet		84	-40	2.10	
Water Pulse		96	-50	1.92	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

100 CG 1 Gen II Johto

15/15/15·50 (1279)
Totodile → Croconaw (436) → Feraligatr (437)

Shadow Totodile — 140.4 90.8333 137 122.74 120.44

#0159 Croconaw ✧ — 150 142 163 151.67 151.42

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Ice Punch		*60*	*-40*	*1.50*	
Water Pulse		96	-50	1.92	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

300 CG 1 Gen II Johto

15/15/15·50 (1947)
0/13/15·37.5 (1500)
Totodile (436) → **Croconaw** → Feraligatr (437)

Shadow Croconaw — 180 118.333 163 153.78 151.42

#0160 Feraligatr ✧ — 205 188 198 197.00 196.88

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Shadow Claw	*2*	*6*	*8*	*3.00*	*4.00*
Water Gun	**1**	**3.6**	**3**	**3.60**	**3.00**
Waterfall	3	14.4	8	4.80	2.67
Ice Fang	*2*	*8*	*6*	*4.00*	*3.00*
Ice Beam		*90*	*-55*	*1.64*	
Hydro Pump		156	-75	2.08	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Hydro Cannon		**96**	**-40**	**2.40**	

1/15/14·35.5 (2497)
0/11/13·20 (1499)

500 CG 1 Gen II Johto

Totodile (436) → Croconaw (436) → **Feraligatr**

Shadow Feraligatr — 246 156.667 198 200.22 196.88

#0186 Politoed ✧ — 174 179 207 186.67 186.12

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Bubble	3	9.6	11	3.20	3.67
Earthquake		***110***	***-65***	***1.69***	
Ice Beam		***90***	***-55***	***1.64***	
Blizzard		*140*	*-75*	*1.87*	
Scald		102	-50	2.04	30%OA↓
Hydro Pump		156	-75	2.08	
Surf		90	-45	2.00	
Weather Ball (Water)		72	-35	2.06	

0/15/14·48.5 (2498)
0/15/11·23.5 (1500)

500 CG 2 Gen II Johto

Poliwag (433) → Poliwhirl (433) → **Politoed**

Shadow Politoed — 208.8 149.167 207 188.32 186.12

#0223 Remoraid ✧ — 127 69 111 102.33 99.08

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Water Gun	1	3.6	3	3.60	3.00
Water Pulse		96	-50	1.92	
Aurora Beam		*80*	*-60*	*1.33*	
Rock Blast		*50*	*-40*	*1.25*	

15/15/15·50 (1031) 15/15/14·50 (1027)

100 CG 1 Gen II Johto

Remoraid → Octillery (437)

Shadow Remoraid — 152.4 57.5 111 106.97 99.08

#0224 Octillery ✧ — 197 141 181 173.00 171.31

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Water Gun	1	3.6	3	3.60	3.00
Lock On	*1*	*1*	*5*	*1.00*	*5.00*
Gunk Shot		*130*	*-75*	*1.73*	
Water Pulse		96	-50	1.92	
Aurora Beam		*80*	*-60*	*1.33*	
Acid Spray		*20*	*-45*	*0.44*	*OD↓2*
Octazooka		60	-50	1.20	50%OA↓2

5/15/15·50 (2494)
0/15/13·24.5 (1498)

300 CG 1 Gen II Johto

Remoraid (437) → **Octillery**

Shadow Octillery — 236.4 117.5 181 178.30 171.31

#0245 Suicune ✧ — 180 235 225 213.33 211.92

Extrasensory	*3*	*8*	*10*	*2.67*	*3.33*
Snarl	*3*	*5*	*13*	*1.67*	*4.33*
Hidden Power	**3**	**10.8**	**8**	**3.60**	**2.67**
Ice Fang	*2*	*8*	*6*	*4.00*	*3.00*
Ice Beam		*90*	*-55*	*1.64*	
Bubble Beam		30	-40	0.75	OA↓
Water Pulse		96	-50	1.92	
Scald		102	-50	2.04	30%OA↓
Hydro Pump		156	-75	2.08	

0/15/15·33.5 (2498)
1/15/14·19 (1500)
No evolution

100 CG 4 Gen II Johto Legendary

Shadow Suicune — 216 195.833 225 212.28 211.92

#0258 Mudkip ✧ — 126 93 137 118.67 117.09

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Water Gun	1	3.6	3	3.60	3.00
Sludge		*70*	*-40*	*1.75*	
Dig		*70*	*-50*	*1.40*	
Stomp		*55*	*-40*	*1.38*	

15/15/15·50 (1275)
Mudkip → Marshtomp (456) → Swampert (457)

100 CG 1 Gen III Hoenn

Shadow Mudkip — 151.2 77.5 137 121.90 117.09

#0320 Wailmer ✧ — 136 68 277 160.33 136.83

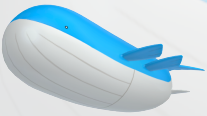
Water Gun	1	3.6	3	3.60	3.00
Splash	4	0	12	0.00	3.00
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Water Pulse		96	-50	1.92	
Scald		102	-50	2.04	30%OA↓
Body Slam		*55*	*-35*	*1.57*	
Heavy Slam		*70*	*-50*	*1.40*	

15/15/15·50 (1659)
0/15/15·50 (1494)
Wailmer → Wailord (438)

100 CG 1 Gen III Hoenn

Shadow Wailmer — 163.2 56.6667 277 165.62 136.83

#0321 Wailord ✧ — 175 87 347 203.00 174.17



Water Gun	1	3.6	3	3.60	3.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Rollout	*3*	*7*	*13*	*2.33*	*4.33*
Hyper Beam		*150*	*-80*	*1.88*	
Blizzard		*140*	*-75*	*1.87*	
Scald		102	-50	2.04	30%OA↓
Surf		90	-45	2.00	

9/15/15·50 (2496)
0/15/15·25 (1500) 0/15/14·25 (1498)
Wailmer (438) → **Wailord**

300 CG 1 Gen III Hoenn

Shadow Wailord — 210 72.5 347 209.83 174.17

#0341 Corphish ✧ — 141 99 125 121.67 120.39

Bubble	3	9.6	11	3.20	3.67
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Vise Grip		*40*	*-40*	*1.00*	
Bubble Beam		30	-40	0.75	OA↓
Aqua Jet		84	-40	2.10	
Scald		102	-50	2.04	30%OA↓
Razor Shell		42	-35	1.20	50%OD↓

100 CG 2 Gen III Hoenn

15/15/15·50 (1391)
Corphish → Crawdaunt (449)

Shadow Corphish — 169.2 82.5 125 125.57 120.39

#0349 Feebas ✧ — 29 85 85 66.33 59.39

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Splash	4	0	12	0.00	3.00
Mirror Coat		*60*	*-55*	*1.09*	

100 CG 3 Gen III Hoenn

15/15/15·50 (310)
Feebas → Milotic (439)

Shadow Feebas — 34.8 70.8333 85 63.54 59.39

#0350 Milotic ✧ — 192 219 216 209.00 208.64

Dragon Tail	*3*	*9*	*12*	*3.00*	*4.00*
Waterfall	3	14.4	8	4.80	2.67
Wrap		*60*	*-45*	*1.33*	*D↑*
Hyper Beam		*150*	*-80*	*1.88*	
Blizzard		*140*	*-75*	*1.87*	
Surf		90	-45	2.00	

300 CG 3 Gen III Hoenn

0/13/15·33 (2498)
0/15/11·19 (1500)
Feebas (439) → **Milotic**

Shadow Milotic — 230.4 182.5 216 209.63 208.64

#0351 Castform (Rainy) ✧ — 139 139 172 150.00 149.23

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Water Gun	1	3.6	3	3.60	3.00
Thunder		*100*	*-60*	*1.67*	
Hydro Pump		156	-75	2.08	
Weather Ball (Water)		72	-35	2.06	

100 CG 3 Gen III Hoenn

15/15/15·50 (1845)
0/14/15·41.5 (1496)
No evolution

#0366 Clamperl ✧ — 133 135 111 126.33 125.85

Water Gun	1	3.6	3	3.60	3.00
Ice Beam		*90*	*-55*	*1.64*	
Water Pulse		96	-50	1.92	
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (1436) 15/15/14·50 (1430)

100 CG 2 Gen III Hoenn

Clamperl → Huntail (440)

#0367 Huntail ✧ — 197 179 146 174.00 172.67

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Ice Beam		*90*	*-55*	*1.64*	
Aqua Tail		66	-35	1.89	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

3/15/15·50 (2495)
1/15/15·24 (1498)

300 CG 2 Gen III Hoenn

Clamperl (440) → **Huntail**

#0368 Gorebyss ✧ — 211 179 146 178.67 176.67

Water Gun	1	3.6	3	3.60	3.00
Confusion	*4*	*16*	*14*	*4.00*	*3.50*
Draining Kiss		*60*	*-55*	*1.09*	
Water Pulse		96	-50	1.92	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

0/15/12·46.5 (2500)
0/15/15·22.5 (1497)

300 CG 2 Gen III Hoenn

Clamperl (440) → **Gorebyss**

#0370 Luvdisc ✧ — 81 128 125 111.33 109.03

Water Gun	1	3.6	3	3.60	3.00
Splash	4	0	12	0.00	3.00
Aqua Jet		84	-40	2.10	
Draining Kiss		*60*	*-55*	*1.09*	
Water Pulse		96	-50	1.92	

15/15/15·50 (959)

100 CG 2 Gen III Hoenn

No evolution

#0382 Kyogre ✧ — 270 228 205 234.33 232.82

Waterfall	3	14.4	8	4.80	2.67
Blizzard		*140*	*-75*	*1.87*	
Thunder		*100*	*-60*	*1.67*	
Hydro Pump		156	-75	2.08	
Surf		90	-45	2.00	
Origin Pulse		**156**	**-60**	**2.60**	

0/15/14·22.5 (2500) 0/15/13·22.5 (2495)
0/15/14·13.5 (1500) 0/15/13·13.5 (1497)

100 CG 4 Gen III Hoenn Legendary — No evolution

Shadow Kyogre — 324 190 205 239.67 232.82

#0393 Piplup ✧ — 112 102 142 118.67 117.50

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Bubble	3	9.6	11	3.20	3.67
Drill Peck		*70*	*-40*	*1.75*	
Bubble Beam		30	-40	0.75	OA↓
Icy Wind		*60*	*-45*	*1.33*	*OA↓*

15/15/15·50 (1215) 15/15/14·50 (1211)

100 CG 1 Gen IV Sinnoh — **Piplup** → Prinplup (441) → Empoleon (462)

Shadow Piplup — 134.4 85 142 120.47 117.50

#0394 Prinplup ✧ — 150 139 162 150.33 150.04

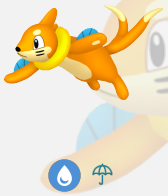
Metal Claw	*2*	*5*	*7*	*2.50*	*3.50*
Bubble	3	9.6	11	3.20	3.67
Bubble Beam		30	-40	0.75	OA↓
Hydro Pump		156	-75	2.08	
Icy Wind		*60*	*-45*	*1.33*	*OA↓*

15/15/15·50 (1923)
0/15/14·38 (1498)

300 CG 1 Gen IV Sinnoh — Piplup (441) → **Prinplup** → Empoleon (462)

Shadow Prinplup — 180 115.833 162 152.61 150.04

#0418 Buizel ✧ — 132 67 146 115.00 108.89



Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Water Gun	1	3.6	3	3.60	3.00
Aqua Jet		84	-40	2.10	
Water Pulse		96	-50	1.92	
Swift		*55*	*-35*	*1.57*	

15/15/15·50 (1192)

100 CG 2 Gen IV Sinnoh — **Buizel** → Floatzel (442)

#0419 Floatzel ✧ 221 114 198 177.67 170.87

Water Gun	1	3.6	3	3.60	3.00
Waterfall	3	14.4	8	4.80	2.67
Aqua Jet		84	-40	2.10	
Hydro Pump		156	-75	2.08	
Swift		*55*	*-35*	*1.57*	
Liquidation		84	-45	1.87	30%OD↓

0/14/15·47.5 (2500)
0/15/14·23 (1500) 0/15/13·23 (1496)
Buizel (441) → **Floatzel**

300 CG 2 Gen IV Sinnoh

#0422 Shellos ✧ 103 105 183 130.33 125.55

Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Hidden Power	3	10.8	8	3.60	2.67
Mud Bomb		*60*	*-40*	*1.50*	
Water Pulse		96	-50	1.92	
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (1284)
Shellos → Gastrodon (457)

100 CG 2 Gen IV Sinnoh

#0456 Finneon ✧ 96 116 135 115.67 114.56

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Ice Beam		*90*	*-55*	*1.64*	
Water Pulse		96	-50	1.92	
Silver Wind		*60*	*-45*	*1.33*	*10%A+D↑*

15/15/15·50 (1098)
Finneon → Lumineon (442)

100 CG 2 Gen IV Sinnoh

#0457 Lumineon ✧ 142 170 170 160.67 160.10

Water Gun	1	3.6	3	3.60	3.00
Waterfall	3	14.4	8	4.80	2.67
Blizzard		*140*	*-75*	*1.87*	
Water Pulse		96	-50	1.92	
Silver Wind		*60*	*-45*	*1.33*	*10%A+D↑*

15/15/15·50 (2050)
0/15/12·34.5 (1499)
Finneon (442) → **Lumineon**

300 CG 2 Gen IV Sinnoh

#0501 Oshawott ✧ — 117 85 146 116.00 113.24

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Water Gun	1	3.6	3	3.60	3.00
Night Slash		*50*	*-35*	*1.43*	
Aqua Tail		66	-35	1.89	
Water Pulse		96	-50	1.92	

15/15/15·50 (1182)

100 CG 1 Gen V Unova

Oshawott → Dewott (443) → Samurott (443)

Shadow Oshawott — 140.4 70.8333 146 119.08 113.24

#0502 Dewott ✧ — 159 116 181 152.00 149.46

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Water Gun	1	3.6	3	3.60	3.00
Aqua Tail		66	-35	1.89	
X-Scissor		*65*	*-40*	*1.62*	
Water Pulse		96	-50	1.92	

15/15/15·50 (1968)
0/15/15·36 (1500)

300 CG 1 Gen V Unova

Oshawott (443) → **Dewott** → Samurott (443)

Shadow Dewott — 190.8 96.6667 181 156.16 149.46

#0503 Samurott ✧ — 212 157 216 195.00 193.00

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Waterfall	3	14.4	8	4.80	2.67
Megahorn		*110*	*-55*	*2.00*	
Blizzard		*140*	*-75*	*1.87*	
Hydro Pump		156	-75	2.08	
Hydro Cannon		**96**	**-40**	**2.40**	
Razor Shell		42	-35	1.20	50%OD↓
Liquidation		84	-45	1.87	30%OD↓

1/15/15·36 (2500)
0/14/14·20 (1500)

500 CG 1 Gen V Unova

Oshawott (443) → Dewott (443) → **Samurott**

Shadow Samurott — 254.4 130.833 216 200.41 193.00

#0515 Panpour ✧ — 104 94 137 111.67 110.23

Scratch	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Water Pulse		96	-50	1.92	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Surf		90	-45	2.00	

15/15/15·50 (1081)

100 CG 2 Gen V Unova

Panpour → Simipour (444)

#0516 Simipour — 206 133 181 173.33 170.53

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Hydro Pump		156	-75	2.08	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Surf		90	-45	2.00	

300 CG 2 Gen V Unova

3/15/15·49.5 (2498)
0/14/15·24 (1497)
Panpour (443) → **Simipour**

#0535 Tympole — 98 78 137 104.33 101.55

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Bubble	3	9.6	11	3.20	3.67
Sludge Wave		*110*	*-65*	*1.69*	
Mud Bomb		*60*	*-40*	*1.50*	
Water Pulse		96	-50	1.92	

100 CG 2 Gen V Unova

15/15/15·50 (948)
Tympole → Palpitoad (458) → Seismitoad (458)

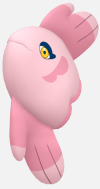
#0550 Basculin — 189 129 172 163.33 161.26

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Water Gun	1	3.6	3	3.60	3.00
Aqua Jet		84	-40	2.10	
Aqua Tail		66	-35	1.89	
Muddy Water		42	-35	1.20	30%OA↓

100 CG 1 Gen V Unova

15/15/15·50 (2363)
0/11/15·27.5 (1500)
No evolution

#0594 Alomomola — 138 131 338 202.33 182.82



Hidden Power	3	10.8	8	3.60	2.67
Waterfall	3	14.4	8	4.80	2.67
Blizzard		*140*	*-75*	*1.87*	
Hydro Pump		156	-75	2.08	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*

100 CG 3 Gen V Unova

15/15/15·50 (2452)
0/15/11·27 (1500)
No evolution

#0656 Froakie ✧ — 122 84 121 109.00 107.43

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Bubble	3	9.6	11	3.20	3.67
Aerial Ace		*60*	*-45*	*1.33*	
Water Pulse		96	-50	1.92	
Surf		90	-45	2.00	

15/15/15·50 (1122)

100 CG 1 Gen VI Kalos

Froakie → Frogadier (445) → Greninja (450)

#0657 Frogadier ✧ — 168 114 144 142.00 140.24

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Bubble	3	9.6	11	3.20	3.67
Aerial Ace		*60*	*-45*	*1.33*	
Water Pulse		96	-50	1.92	
Surf		90	-45	2.00	

15/15/15·50 (1850)
1/15/15·39.5 (1500)

300 CG 1 Gen VI Kalos

Froakie (445) → **Frogadier** → Greninja (450)

#0692 Clauncher ✧ — 108 117 137 120.67 120.07

Water Gun	1	3.6	3	3.60	3.00
Smack Down	*3*	*12*	*8*	*4.00*	*2.67*
Aqua Jet		84	-40	2.10	
Water Pulse		96	-50	1.92	
Crabhammer		102	-50	2.04	12.5%A↑2

15/15/15·50 (1230)

100 CG 2 Gen VI Kalos

Clauncher → Clawitzer (445)

#0693 Clawitzer ✧ — 221 171 174 188.67 187.35

Water Gun	1	3.6	3	3.60	3.00
Smack Down	*3*	*12*	*8*	*4.00*	*2.67*
Dark Pulse		*80*	*-50*	*1.60*	
Ice Beam		*90*	*-55*	*1.64*	
Water Pulse		96	-50	1.92	
Crabhammer		102	-50	2.04	12.5%A↑2

0/13/15·38 (2500)
0/13/13·20.5 (1499)

300 CG 2 Gen VI Kalos

Clauncher (445) → **Clawitzer**

#0728 Popplio ✧ — 120 103 137 120.00 119.19

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Aqua Jet		84	-40	2.10	
Aqua Tail		66	-35	1.89	
Water Pulse		96	-50	1.92	

15/15/15·50 (1276)

100 CG 1 Gen VII Alola

Popplio → Brionne (446) → Primarina (452)

#0729 Brionne ✧ — 168 145 155 156.00 155.72

Water Gun	1	3.6	3	3.60	3.00
Charm	*3*	*13*	*8*	*4.33*	*2.67*
Aqua Jet		84	-40	2.10	
Disarming Voice		*70*	*-45*	*1.56*	
Water Pulse		96	-50	1.92	

15/15/15·50 (2131) 15/15/14·50 (2124)
1/15/14·30.5 (1500)

300 CG 1 Gen VII Alola

Popplio (446) → **Brionne** → Primarina (452)

#0816 Sobble — 132 79 137 116.00 112.63

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Water Pulse		96	-50	1.92	
Surf		90	-45	2.00	

15/15/15·50 (1240)

100 CG 1 Gen VIII Galar

Sobble → Drizzile (446) → Inteleon (447)

#0817 Drizzile — 186 113 163 154.00 150.75

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Water Pulse		96	-50	1.92	
Surf		90	-45	2.00	

15/15/15·50 (2142)
0/13/14·30.5 (1499)

300 CG 1 Gen VIII Galar

Sobble (446) → **Drizzile** → Inteleon (447)

#0818 Inteleon — 262 142 172 192.00 185.65

Pound	*2*	*4*	*4*	*2.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Shadow Ball		*100*	*-55*	*1.82*	
Water Pulse		96	-50	1.92	
Surf		90	-45	2.00	

1/15/13·32.5 (2499)
0/13/12·19 (1500)

500 CG 1 Gen VIII Galar

Sobble (446) → Drizzile (446) → **Inteleon**

#0912 Quaxly ✧ — 120 86 146 117.33 114.64

Wing Attack	*2*	*5*	*7*	*2.50*	*3.50*
Water Gun	1	3.6	3	3.60	3.00
Aerial Ace		*60*	*-45*	*1.33*	
Aqua Jet		84	-40	2.10	
Liquidation		84	-45	1.87	30%OD↓

15/15/15·50 (1215)

100 CG 1 Gen IX Paldea

Quaxly → Quaxwell (447) → Quaquaval (453)

#0913 Quaxwell ✧ — 162 123 172 152.33 150.77

Wing Attack	*2*	*5*	*7*	*2.50*	*3.50*
Water Gun	1	3.6	3	3.60	3.00
Aerial Ace		*60*	*-45*	*1.33*	
Aqua Jet		84	-40	2.10	
Liquidation		84	-45	1.87	30%OD↓

15/15/15·50 (2007)
0/15/10·35.5 (1500)

300 CG 1 Gen IX Paldea

Quaxly (447) → **Quaxwell** → Quaquaval (453)

#0960 Wiglett ✧ — 109 52 67 76.00 72.42

Water Gun	1	3.6	3	3.60	3.00
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Dig		*70*	*-50*	*1.40*	
Surf		90	-45	2.00	
Liquidation		84	-45	1.87	30%OD↓

15/15/15·50 (648) 15/15/14·50 (645)

100 CG 2 Gen IX Paldea

Wiglett → Wugtrio (448)

#0961 Wugtrio ✧ — 205 136 111 150.67 145.73

Water Gun	1	3.6	3	3.60	3.00
Mud Slap	*3*	*12*	*10*	*4.00*	*3.33*
Dig		*70*	*-50*	*1.40*	
Surf		90	-45	2.00	
Liquidation		84	-45	1.87	30%OD↓

15/15/15·50 (2142) 15/15/14·50 (2134)
0/12/15·30 (1498)
Wiglett (447) → **Wugtrio**

300 CG 2 Gen IX Paldea

#0977 Dondozo — 176 178 312 222.00 213.81

Water Gun	1	3.6	3	3.60	3.00
Waterfall	3	14.4	8	4.80	2.67
Hydro Pump		156	-75	2.08	
Outrage		*110*	*-60*	*1.83*	
Surf		90	-45	2.00	
Liquidation		84	-45	1.87	30%OD↓

0/14/15·33.5 (2498)
0/15/15·19 (1499)
No evolution

100 CG 3 Gen IX Paldea

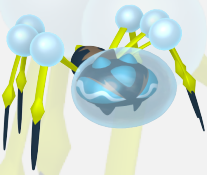
#0751 Dewpider ✧ — 72 117 116 101.67 99.23

Bug Bite	1	4.8	3	4.80	3.00
Infestation	3	7.2	12	2.40	4.00
Bubble Beam		30	-40	0.75	OA↓
Water Pulse		96	-50	1.92	
Mirror Coat		*60*	*-55*	*1.09*	

15/15/15·50 (807)
Dewpider → Araquanid (448)

100 CG 2 Gen VII Alola

#0752 Araquanid ✧ — 126 219 169 171.33 167.07



Bug Bite	1	4.8	3	4.80	3.00
Infestation	3	7.2	12	2.40	4.00
Bug Buzz		120	-60	2.00	30%OD↓
Bubble Beam		30	-40	0.75	OA↓
Water Pulse		96	-50	1.92	
Mirror Coat		*60*	*-55*	*1.09*	

15/15/15·50 (2065)
0/10/15·35 (1500)
Dewpider (448) → **Araquanid**

300 CG 2 Gen VII Alola

#0318 Carvanha — 171 39 128 112.67 94.86

Bite	1	4.8	2	4.80	2.00
Snarl	3	6	13	2.00	4.33
Poison Fang		*45*	*-40*	*1.12*	*OD↓*
Aqua Jet		84	-40	2.10	
Crunch		84	-45	1.87	20%OD↓

100 CG 2 Gen III Hoenn

15/15/15·50 (1154)
Carvanha → Sharpedo (449)

Shadow Carvanha — 205.2 32.5 128 121.90 94.86

#0319 Sharpedo — 243 83 172 166.00 151.38

Bite	1	4.8	2	4.80	2.00
Waterfall	3	14.4	8	4.80	2.67
Poison Fang		*45*	*-40*	*1.12*	*OD↓*
Hydro Pump		156	-75	2.08	
Crunch		84	-45	1.87	20%OD↓

300 CG 2 Gen III Hoenn

15/15/15·50 (2466)
0/15/15·25.5 (1496)
Carvanha (449) → **Sharpedo**

Shadow Sharpedo — 291.6 69.1667 172 177.59 151.38

#0342 Crawdaunt — 224 142 160 175.33 172.01

Snarl	3	6	13	2.00	4.33
Waterfall	3	14.4	8	4.80	2.67
Vise Grip		*40*	*-40*	*1.00*	
Night Slash		60	-35	1.71	
Bubble Beam		30	-40	0.75	OA↓
Scald		102	-50	2.04	30%OA↓
Crabhammer		102	-50	2.04	12.5%A↑2
Razor Shell		42	-35	1.20	50%OD↓

300 CG 2 Gen III Hoenn

0/15/15·46 (2498)
2/15/14·22.5 (1499)
Corphish (439) → **Crawdaunt**

Shadow Crawdaunt — 268.8 118.333 160 182.38 172.01

#0503 Hisuian Samurott — 218 152 207 192.33 190.00

Fury Cutter	*1*	*3*	*4*	*3.00*	*4.00*
Snarl	3	6	13	2.00	4.33
Waterfall	3	14.4	8	4.80	2.67
Dark Pulse		96	-50	1.92	
X-Scissor		*65*	*-40*	*1.62*	
Icy Wind		*60*	*-45*	*1.33*	*OA↓*
Razor Shell		42	-35	1.20	50%OD↓

100 CG 1 Gen V Unova

0/15/13·37 (2498)
0/15/15·20 (1498) 0/15/14·20 (1494)
No evolution

Shadow Hisuian Samurott — 261.6 126.667 207 198.42 190.00

#0658 Greninja — 223 152 176 183.67 181.37

Bubble	3	9.6	11	3.20	3.67
Feint Attack	2	7.2	6	3.60	3.00
Water Shuriken	3	7.2	14	2.40	4.67
Aerial Ace		*60*	*-45*	*1.33*	
Night Slash		60	-35	1.71	
Hydro Pump		156	-75	2.08	
Surf		90	-45	2.00	
Hydro Cannon		**96**	**-40**	**2.40**	

0/13/14·41 (2497)
3/15/12·21 (1500)

500 CG 1 Gen VI Kalos

Froakie (445) → Frogadier (445) → **Greninja**

#0230 Kingdra — 194 194 181 189.67 189.57

Waterfall	3	14.4	8	4.80	2.67
Dragon Breath	1	3.6	4	3.60	4.00
Water Gun	**1**	**3.6**	**3**	**3.60**	**3.00**
Swift		*55*	*-35*	*1.57*	
Hydro Pump		156	-75	2.08	
Octazooka		60	-50	1.20	50%OA↓2
Blizzard		*140*	*-75*	*1.87*	
Outrage		132	-60	2.20	

0/15/15·41.5 (2499)
0/15/13·21.5 (1498)

500 CG 2 Gen II Johto

Horsea (434) → Seadra (435) → **Kingdra**

Shadow Kingdra 232.8 161.667 181 191.82 189.57

#0484 Palkia — 280 215 189 228.00 224.92

Dragon Breath	1	3.6	4	3.60	4.00
Dragon Tail	3	10.8	12	3.60	4.00
Aqua Tail		66	-35	1.89	
Fire Blast		*140*	*-80*	*1.75*	
Hydro Pump		156	-75	2.08	
Draco Meteor		180	-65	2.77	A↓2

2/15/14·23 (2500)
0/14/12·14 (1500)

100 CG 4 Gen IV Sinnoh Legendary

No evolution

Shadow Palkia 336 179.167 189 234.72 224.92

#0484 Origin Forme Palkia — 286 223 189 232.67 229.29

Dragon Breath	1	3.6	4	3.60	4.00
Dragon Tail	3	10.8	12	3.60	4.00
Aqua Tail		66	-35	1.89	
Fire Blast		*140*	*-80*	*1.75*	
Hydro Pump		156	-75	2.08	
Draco Meteor		180	-65	2.77	A↓2
Spacial Rend		**114**	**-50**	**2.28**	

0/15/10·22.5 (2499)
0/14/11·13.5 (1500)

100 CG 4 Gen IV Sinnoh Legendary

No evolution

Shadow Origin Forme Palkia 343.2 185.833 189 239.34 229.29

#0170 Chinchou ✧ 106 97 181 128.00 123.00

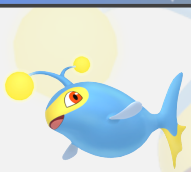
Spark	2	6	7	3.00	3.50
Bubble	3	9.6	11	3.20	3.67
Bubble Beam		30	-40	0.75	OA↓
Thunderbolt		108	-55	1.96	
Water Pulse		96	-50	1.92	

15/15/15·50 (1265)

100 CG 2 Gen II Johto

Chinchou → Lanturn (451)

#0171 Lanturn ✧ 146 137 268 183.67 175.01



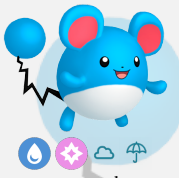
Spark	2	6	7	3.00	3.50
Water Gun	1	3.6	3	3.60	3.00
Charge Beam	3	6	11	2.00	3.67
Thunder		120	-60	2.00	
Thunderbolt		108	-55	1.96	
Hydro Pump		156	-75	2.08	
Surf		90	-45	2.00	

15/15/15·50 (2357)
0/13/14·28 (1500)

300 CG 2 Gen II Johto

Chinchou (451) → **Lanturn**

#0183 Marill ✧ 37 93 172 100.67 83.96



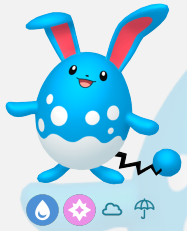
Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Bubble	3	9.6	11	3.20	3.67
Bubble Beam		30	-40	0.75	OA↓
Aqua Tail		66	-35	1.89	
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (521)

300 CG 2 Gen II Johto

Azurill (370) → **Marill** → Azumarill (451)

#0184 Azumarill ✧ 112 152 225 163.00 156.46



Bubble	3	9.6	11	3.20	3.67
Rock Smash	*3*	*9*	*7*	*3.00*	*2.33*
Ice Beam		*90*	*-55*	*1.64*	
Play Rough		108	-60	1.80	
Hydro Pump		156	-75	2.08	

15/15/15·50 (1795)
0/15/15·45.5 (1499)

500 CG 2 Gen II Johto

Azurill (370) → Marill (451) → **Azumarill**

#0730 Primarina — 232 195 190 205.67 204.85

Waterfall	3	14.4	8	4.80	2.67
Charm	3	15.6	8	5.20	2.67
Disarming Voice		84	-45	1.87	
Moonblast		132	-60	2.20	10%OA↓
Hydro Pump		156	-75	2.08	
Psychic		*75*	*-55*	*1.36*	*10%OD↓*
Hydro Cannon		**96**	**-40**	**2.40**	
Sparkling Aria		96	-45	2.13	

2/15/13·29 (2500)
0/15/14·17.5 (1499)

500 CG 1 Gen VII Alola

Popplio (446) → Brionne (446) → **Primarina**

#0788 Tapu Fini — 189 254 172 205.00 202.12

Water Gun	1	3.6	3	3.60	3.00
Hidden Power	*3*	*9*	*8*	*3.00*	*2.67*
Ice Beam		*90*	*-55*	*1.64*	
Moonblast		132	-60	2.20	10%OA↓
Hydro Pump		156	-75	2.08	
Surf		90	-45	2.00	
Nature's Madness		**96**	**-50**	**1.92**	**OD↓**

0/13/14·36.5 (2499)
0/12/14·20 (1500)

100 CG 4 Gen VII Alola Legendary

No evolution

#0062 Poliwrath — 182 184 207 191.00 190.67

Mud Shot	*2*	*4*	*8*	*2.00*	*4.00*
Bubble	3	9.6	11	3.20	3.67
Rock Smash	3	10.8	7	3.60	2.33
Counter	**2**	**9.6**	**6**	**4.80**	**3.00**
Ice Punch		*60*	*-40*	*1.50*	
Submission		**72**	**-50**	**1.44**	
Scald		102	-50	2.04	30%OA↓
Hydro Pump		156	-75	2.08	
Icy Wind		*60*	*-45*	*1.33*	*OA↓*
Dynamic Punch		108	-45	2.40	
Power-Up Punch		24	-35	0.69	A↑

0/14/14·44 (2499)
0/14/15·22 (1498)

500 CG 2 Gen I Kanto

Poliwag (433) → Poliwhirl (433) → **Poliwrath**

Shadow Poliwrath 218.4 153.333 207 192.91 190.67

#0647 Keldeo — 260 192 209 220.33 218.51

Low Kick	2	4.8	5	2.40	2.50
Poison Jab	*2*	*7*	*7*	*3.50*	*3.50*
Aqua Jet		84	-40	2.10	
X-Scissor		*65*	*-40*	*1.62*	
Hydro Pump		156	-75	2.08	
Close Combat		120	-45	2.67	D↓2
Sacred Sword		72	-35	2.06	

0/15/15·25 (2497)
0/15/15·15 (1498) 0/15/14·15 (1495)

100 CG 4 Gen V Unova Mythical

No evolution

#0914 Quaquaval — 236 159 198 197.67 195.13

Wing Attack	*2*	*5*	*7*	*2.50*	*3.50*
Water Gun	1	3.6	3	3.60	3.00
Aerial Ace		*60*	*-45*	*1.33*	
Aqua Jet		84	-40	2.10	
Aqua Step		66	-40	1.65	A↑
Close Combat		120	-45	2.67	D↓2
Liquidation		84	-45	1.87	30%OD↓
Hydro Cannon		**96**	**-40**	**2.40**	

1/15/14·31.5 (2497)
0/15/15·18.5 (1499)

500 CG 1 Gen IX Paldea

Quaxly (447) → Quaxwell (447) → **Quaquaval**

#0130 Gyarados — 237 186 216 213.00 211.95

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Dragon Breath	*1*	*3*	*4*	*3.00*	*4.00*
Dragon Tail	**3**	**9**	**12**	**3.00**	**4.00**
Waterfall	3	14.4	8	4.80	2.67
Aqua Tail		**66**	**-35**	**1.89**	
Twister		*45*	*-45*	*1.00*	
Dragon Pulse		***90***	***-55***	***1.64***	
Hydro Pump		156	-75	2.08	
Outrage		*110*	*-60*	*1.83*	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*

0/15/14·27.5 (2500)
0/14/15·16.5 (1499)

300 CG 1 Gen I Kanto

Magikarp (436) → **Gyarados**

Shadow Gyarados — 284.4 155 216 218.47 211.95

#0226 Mantine — 148 226 163 179.00 176.00

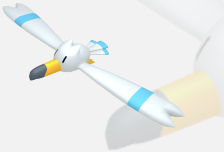
Wing Attack	2	6	7	3.00	3.50
Bubble	3	9.6	11	3.20	3.67
Bullet Seed	*3*	*5*	*13*	*1.67*	*4.33*
Ice Beam		*90*	*-55*	*1.64*	
Aerial Ace		72	-45	1.60	
Bubble Beam		30	-40	0.75	OA↓
Water Pulse		96	-50	1.92	

15/15/15·50 (2383)
0/15/14·27.5 (1500) 0/15/13·27.5 (1495)

300 CG 3 Gen II Johto

Mantyke (454) → **Mantine**

#0278 Wingull — 106 61 120 95.67 91.89



Quick Attack	*2*	*5*	*8*	*2.50*	*4.00*
Water Gun	1	3.6	3	3.60	3.00
Ice Beam		*90*	*-55*	*1.64*	
Water Pulse		96	-50	1.92	
Air Cutter		54	-35	1.54	30%A↑

15/15/15·50 (865)

100 CG 2 Gen III Hoenn

Wingull → Pelipper (454)

#0279 Pelipper ✧ — 175 174 155 168.00 167.74

Wing Attack	2	6	7	3.00	3.50
Water Gun	1	3.6	3	3.60	3.00
Blizzard		*140*	*-75*	*1.87*	
Hydro Pump		156	-75	2.08	
Hurricane		132	-65	2.03	
Weather Ball (Water)		72	-35	2.06	

15/15/15·50 (2404) 15/15/14·50 (2397)
0/12/15·27 (1499)
Wingull (453) → **Pelipper**

300 CG 2 Gen III Hoenn

#0458 Mantyke ✧ — 105 179 128 137.33 133.99

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Bubble	3	9.6	11	3.20	3.67
Ice Beam		*90*	*-55*	*1.64*	
Aerial Ace		72	-45	1.60	
Water Pulse		96	-50	1.92	

15/15/15·50 (1411)
Mantyke → Mantine (453)

100 CG 1 Gen IV Sinnoh Baby

#0580 Ducklett ✧ — 84 96 158 112.67 108.41

Wing Attack	2	6	7	3.00	3.50
Water Gun	1	3.6	3	3.60	3.00
Aerial Ace		72	-45	1.60	
Bubble Beam		30	-40	0.75	OA↓
Brave Bird		156	-55	2.84	D↓3

15/15/15·50 (968)
Ducklett → Swanna (454)

100 CG 2 Gen V Unova

Shadow Ducklett — 100.8 80 158 112.93 108.41

#0581 Swanna ✧ — 182 132 181 165.00 163.22

Water Gun	1	3.6	3	3.60	3.00
Air Slash	3	10.8	9	3.60	3.00
Ice Beam		*90*	*-55*	*1.64*	
Bubble Beam		30	-40	0.75	OA↓
Hurricane		132	-65	2.03	
Fly		96	-45	2.13	

15/15/15·50 (2361)
1/15/15·27 (1496)
Ducklett (454) → **Swanna**

300 CG 2 Gen V Unova

Shadow Swanna — 218.4 110 181 169.80 163.22

#0592 Frillish — 115 134 146 131.67 131.03

Bubble	3	9.6	11	3.20	3.67
Hex	3	8.4	13	2.80	4.33
Ice Beam		*90*	*-55*	*1.64*	
Ominous Wind		54	-45	1.20	10%A+D↑
Night Shade		96	-45	2.13	12.5%A↑2

100 CG 2 Gen V Unova

15/15/15·50 (1421)

Frillish → Jellicent (455)

#0593 Jellicent — 159 178 225 187.33 185.35

Bubble	3	9.6	11	3.20	3.67
Hex	3	8.4	13	2.80	4.33
Ice Beam		*90*	*-55*	*1.64*	
Bubble Beam		30	-40	0.75	OA↓
Shadow Ball		120	-55	2.18	
Surf		90	-45	2.00	

300 CG 2 Gen V Unova

6/14/15·50 (2500)
1/14/14·24.5 (1498)

Frillish (455) → **Jellicent**

#0270 Lotad — 71 77 120 89.33 86.89

Razor Leaf	2	10.8	4	5.40	2.00
Water Gun	1	3.6	3	3.60	3.00
Bubble Beam		30	-40	0.75	OA↓
Scald		102	-50	2.04	30%OA↓
Energy Ball		108	-55	1.96	10%OD↓

100 CG 2 Gen III Hoenn

15/15/15·50 (676)

Lotad → Lombre (455) → Ludicolo (456)

#0271 Lombre — 112 119 155 128.67 127.36

Razor Leaf	2	10.8	4	5.40	2.00
Bubble	3	9.6	11	3.20	3.67
Ice Beam		*90*	*-55*	*1.64*	
Bubble Beam		30	-40	0.75	OA↓
Scald		102	-50	2.04	30%OA↓
Grass Knot		108	-50	2.16	

300 CG 2 Gen III Hoenn

15/15/15·50 (1353) 15/15/14·50 (1349)

Lotad (455) → **Lombre** → Ludicolo (456)

#0272 Ludicolo ✧ — 173 176 190 179.67 179.52

Razor Leaf	2	10.8	4	5.40	2.00
Bubble	3	9.6	11	3.20	3.67
Ice Beam		*90*	*-55*	*1.64*	
Blizzard		*140*	*-75*	*1.87*	
Scald		102	-50	2.04	30%OA↓
Hydro Pump		156	-75	2.08	
Solar Beam		180	-80	2.25	
Energy Ball		108	-55	1.96	10%OD↓
Leaf Storm		156	-55	2.84	A↓2

6/14/15·50 (2494)
0/15/15·24.5 (1496)

500 CG 2 Gen III Hoenn

Lotad (455) → Lombre (455) → **Ludicolo**

#0194 Wooper ✧ — 75 66 146 95.67 89.74

Mud Shot	2	4.8	8	2.40	4.00
Water Gun	1	3.6	3	3.60	3.00
Dig		84	-50	1.68	
Mud Bomb		72	-40	1.80	
Body Slam		*55*	*-35*	*1.57*	

15/15/15·50 (725)

100 CG 2 Gen II Johto

Wooper → Quagsire (456)

Shadow Wooper — 90 55 146 97.00 89.74

#0195 Quagsire ✧ — 152 143 216 170.33 167.45

Mud Shot	2	4.8	8	2.40	4.00
Water Gun	1	3.6	3	3.60	3.00
Drain Punch		*20*	*-40*	*0.50*	*D↑*
Earthquake		132	-65	2.03	
Stone Edge		*100*	*-55*	*1.82*	
Aqua Tail		**66**	**-35**	**1.89**	
Sludge Bomb		*80*	*-50*	*1.60*	
Mud Bomb		72	-40	1.80	
Acid Spray		*20*	*-45*	*0.44*	*OD↓2*

15/15/15·50 (2252)
0/15/14·29 (1499)

300 CG 2 Gen II Johto

Wooper (456) → **Quagsire**

Shadow Quagsire — 182.4 119.167 216 172.52 167.45

#0259 Marshtomp ✧ — 156 133 172 153.67 152.82

Mud Shot	2	4.8	8	2.40	4.00
Water Gun	1	3.6	3	3.60	3.00
Sludge		*70*	*-40*	*1.75*	
Mud Bomb		72	-40	1.80	
Surf		90	-45	2.00	

15/15/15·50 (2008)
0/14/15·35 (1500)

300 CG 1 Gen III Hoenn

Mudkip (438) → **Marshtomp** → Swampert (457)

Shadow Marshtomp — 187.2 110.833 172 156.68 152.82

#0260 Swampert — 208 175 225 202.67 201.57

Mud Shot	2	4.8	8	2.40	4.00
Water Gun	1	3.6	3	3.60	3.00
Sludge		*70*	*-40*	*1.75*	
Earthquake		132	-65	2.03	
Sludge Wave		*110*	*-65*	*1.69*	
Surf		90	-45	2.00	
Hydro Cannon		**96**	**-40**	**2.40**	
Muddy Water		42	-35	1.20	30%OA↓

0/14/13·33.5 (2499)
0/14/14·19 (1498)

500 CG 1 Gen III Hoenn

Mudkip (438) → Marshtomp (456) → **Swampert**

Shadow Swampert — 249.6 145.833 225 206.81 201.57

#0339 Barboach — 93 82 137 104.00 101.47

Mud Shot	2	4.8	8	2.40	4.00
Water Gun	1	3.6	3	3.60	3.00
Ice Beam		*90*	*-55*	*1.64*	
Aqua Tail		66	-35	1.89	
Mud Bomb		72	-40	1.80	
Scald		102	-50	2.04	30%OA↓

15/15/15·50 (925)

100 CG 1 Gen III Hoenn

Barboach → Whiscash (457)

Shadow Barboach — 111.6 68.3333 137 105.64 101.47

#0340 Whiscash — 151 141 242 178.00 172.72

Mud Shot	2	4.8	8	2.40	4.00
Water Gun	1	3.6	3	3.60	3.00
Blizzard		*140*	*-75*	*1.87*	
Mud Bomb		72	-40	1.80	
Water Pulse		96	-50	1.92	
Scald		102	-50	2.04	30%OA↓

15/15/15·50 (2346) 15/15/14·50 (2342)
0/14/13·28 (1500)

300 CG 1 Gen III Hoenn

Barboach (457) → **Whiscash**

Shadow Whiscash — 181.2 117.5 242 180.23 172.72

#0423 Gastrodon — 169 143 244 185.33 180.66

Mud Slap	3	14.4	10	4.80	3.33
Hidden Power	*3*	*9*	*8*	*3.00*	*2.67*
Earthquake		132	-65	2.03	
Water Pulse		96	-50	1.92	
Body Slam		*55*	*-35*	*1.57*	
Earth Power		108	-55	1.96	10%OD↓

6/15/15·50 (2499)
1/15/14·24.5 (1500)

300 CG 2 Gen IV Sinnoh

Shellos (442) → **Gastrodon**

#0536 Palpitoad — 128 109 181 139.33 136.18

Mud Shot	2	4.8	8	2.40	4.00
Bubble	3	9.6	11	3.20	3.67
Sludge Wave		*110*	*-65*	*1.69*	
Water Pulse		96	-50	1.92	
Earth Power		108	-55	1.96	10%OD↓

15/15/15·50 (1574)
9/15/15·49.5 (1499)

300 CG 2 Gen V Unova

Tympole (444) → **Palpitoad** → Seismitoad (458)

#0537 Seismitoad — 188 150 233 190.33 187.30

Mud Shot	2	4.8	8	2.40	4.00
Bubble	3	9.6	11	3.20	3.67
Sludge Bomb		*80*	*-50*	*1.60*	
Earth Power		108	-55	1.96	10%OD↓
Muddy Water		42	-35	1.20	30%OA↓

0/15/12·44.5 (2497)
1/15/15·22 (1500)

500 CG 2 Gen V Unova

Tympole (444) → Palpitoad (458) → **Seismitoad**

#0087 Dewgong — 139 177 207 174.33 172.05

Ice Shard	**3**	**10.8**	**10**	**3.60**	**3.33**
Frost Breath	2	8.4	5	4.20	2.50
Iron Tail	*3*	*10*	*7*	*3.33*	*2.33*
Blizzard		168	-75	2.24	
Drill Run		*80*	*-45*	*1.78*	
Aqua Jet		**84**	**-40**	**2.10**	
Water Pulse		96	-50	1.92	
Icy Wind		**72**	**-45**	**1.60**	**OA↓**
Aurora Beam		96	-60	1.60	
Liquidation		84	-45	1.87	30%OD↓

15/15/15·50 (2245)
0/12/15·29.5 (1498)

300 CG 2 Gen I Kanto

Seel (433) → **Dewgong**

#0091 Cloyster — 186 256 137 193.00 186.85

Ice Shard	3	10.8	10	3.60	3.33
Frost Breath	2	8.4	5	4.20	2.50
Blizzard		**168**	**-75**	**2.24**	
Hydro Pump		156	-75	2.08	
Icy Wind		72	-45	1.60	OA↓
Aurora Beam		96	-60	1.60	
Avalanche		108	-45	2.40	
Razor Shell		42	-35	1.20	50%OD↓
Liquidation		84	-45	1.87	30%OD↓

0/14/14·45 (2496)
0/13/13·22.5 (1500)

1200 CG 2 Gen I Kanto

Shellder (434) → **Cloyster**

Shadow Cloyster — 223.2 213.333 137 191.18 186.85

#0131 Lapras — 165 174 277 205.33 199.60

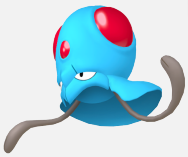
Ice Shard	**3**	**10.8**	**10**	**3.60**	**3.33**
Frost Breath	2	8.4	5	4.20	2.50
Water Gun	1	3.6	3	3.60	3.00
Psywave	*1*	*3*	*4*	*3.00*	*4.00*
Ice Beam		**108**	**-55**	**1.96**	
Blizzard		168	-75	2.24	
Dragon Pulse		***90***	***-55***	***1.64***	
Hydro Pump		156	-75	2.08	
Surf		90	-45	2.00	
Skull Bash		*130*	*-75*	*1.73*	*D↑*
Sparkling Aria		96	-45	2.13	

0/15/15·42.5 (2498)
0/10/14·22 (1498)
No evolution

100 CG 3 Gen I Kanto

Shadow Lapras — 198 145 277 206.67 199.60

#0072 Tentacool — 97 149 120 122.00 120.15



Poison Sting	2	4.8	9	2.40	4.50
Bubble	3	9.6	11	3.20	3.67
Wrap		*60*	*-45*	*1.33*	*D↑*
Bubble Beam		30	-40	0.75	OA↓
Water Pulse		96	-50	1.92	

15/15/15·50 (1176)
Tentacool → Tentacruel (459)

100 CG 2 Gen I Kanto

Shadow Tentacool — 116.4 124.167 120 120.19 120.15

#0073 Tentacruel — 166 209 190 188.33 187.50

Poison Jab	2	8.4	7	4.20	3.50
Acid	2	7.2	8	3.60	4.00
Poison Sting	2	4.8	9	2.40	4.50
Blizzard		*140*	*-75*	*1.87*	
Sludge Wave		132	-65	2.03	
Scald		102	-50	2.04	30%OA↓
Hydro Pump		156	-75	2.08	
Acid Spray		24	-45	0.53	OD↓2

0/13/15·50 (2500)
1/15/15·23.5 (1500) 1/15/14·23.5 (1497)
Tentacool (459) → **Tentacruel**

300 CG 2 Gen I Kanto

Shadow Tentacruel — 199.2 174.167 190 187.79 187.50

#0211 Qwilfish — 184 138 163 161.67 160.56

Water Gun	1	3.6	3	3.60	3.00
Poison Sting	2	4.8	9	2.40	4.50
Ice Beam		*90*	*-55*	*1.64*	
Aqua Tail		66	-35	1.89	
Sludge Wave		132	-65	2.03	
Scald		102	-50	2.04	30%OA↓
Acid Spray		24	-45	0.53	OD↓2
Fell Stinger		*20*	*-35*	*0.57*	*A↑*

15/15/15·50 (2318)
0/12/14·28 (1498)
No evolution

100 CG 2 Gen II Johto

#0079 Slowpoke ✧ — 109 98 207 138.00 130.28

Water Gun	1	3.6	3	3.60	3.00
Confusion	4	19.2	14	4.80	3.50
Psyshock		84	-40	2.10	
Water Pulse		96	-50	1.92	
Psychic		90	-55	1.64	10%OD↓

15/15/15·50 (1386)

100 CG 2 Gen I Kanto

Slowpoke → Slowbro (460)

Shadow Slowpoke — 130.8 81.6667 207 139.82 130.28

#0080 Slowbro ✧ — 177 180 216 191.00 190.21

Water Gun	1	3.6	3	3.60	3.00
Confusion	4	19.2	14	4.80	3.50
Drain Punch		*20*	*-40*	*0.50*	*D↑*
Ice Beam		*90*	*-55*	*1.64*	
Water Pulse		96	-50	1.92	
Scald		102	-50	2.04	30%OA↓
Psychic		90	-55	1.64	10%OD↓
Surf		**90**	**-45**	**2.00**	

0/14/14·45.5 (2500)
0/13/15·22.5 (1500)

300 CG 2 Gen I Kanto

Slowpoke (460) → **Slowbro**

Shadow Slowbro — 212.4 150 216 192.80 190.21

#0121 Starmie ✧ — 210 184 155 183.00 181.60

Tackle	**1**	**3**	**3**	**3.00**	**3.00**
Water Gun	1	3.6	3	3.60	3.00
Hidden Power	*3*	*9*	*8*	*3.00*	*2.67*
Psywave	1	3.6	4	3.60	4.00
Psybeam		84	-60	1.40	
Ice Beam		*90*	*-55*	*1.64*	
Power Gem		*85*	*-50*	*1.70*	
Thunder		*100*	*-60*	*1.67*	
Hydro Pump		156	-75	2.08	
Psychic		90	-55	1.64	10%OD↓
Surf		90	-45	2.00	

0/15/14·43 (2497)
0/15/11·22 (1498)

950 CG 2 Gen I Kanto

Staryu (435) → **Starmie**

Shadow Starmie — 252 153.333 155 186.78 181.60

#0199 Slowking ✧ — 177 180 216 191.00 190.21

Water Gun	1	3.6	3	3.60	3.00
Confusion	4	19.2	14	4.80	3.50
Blizzard		*140*	*-75*	*1.87*	
Fire Blast		*140*	*-80*	*1.75*	
Scald		102	-50	2.04	30%OA↓
Psychic		90	-55	1.64	10%OD↓
Surf		**90**	**-45**	**2.00**	

300 CG 2 Gen II Johto

0/14/14·45.5 (2500)
0/13/15·22.5 (1500)
Slowpoke (460) → **Slowking**

Shadow Slowking — 212.4 150 216 192.80 190.21

#0779 Bruxish ✧ — 208 145 169 174.00 172.10

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Confusion	4	19.2	14	4.80	3.50
Aqua Tail		66	-35	1.89	
Psyshock		84	-40	2.10	
Crunch		*70*	*-45*	*1.56*	*20%OD↓*
Psychic Fangs		48	-35	1.37	OD↓

100 CG 2 Gen VII Alola

0/14/15·49.5 (2497)
0/15/15·23.5 (1496)
No evolution

#0222 Corsola ✧ — 118 156 146 140.00 139.03

Tackle	*1*	*3*	*3*	*3.00*	*3.00*
Bubble	3	9.6	11	3.20	3.67
Bubble Beam		30	-40	0.75	OA↓
Power Gem		102	-50	2.04	
Rock Blast		60	-40	1.50	

100 CG 2 Gen II Johto

15/15/15·50 (1558)
10/15/15·50 (1499)
No evolution

#0369 Relicanth ✧ — 162 203 225 196.67 194.86

Water Gun	1	3.6	3	3.60	3.00
Zen Headbutt	*3*	*8*	*6*	*2.67*	*2.00*
Aqua Tail		66	-35	1.89	
Ancient Power		72	-45	1.60	10%A↑
Hydro Pump		156	-75	2.08	

100 CG 3 Gen III Hoenn

0/11/15·47 (2500)
1/15/15·22.5 (1496)
No evolution

#0564 Tirtouga ✧ — 134 146 144 141.33 141.23

Bite	*1*	*4*	*2*	*4.00*	*2.00*
Water Gun	1	3.6	3	3.60	3.00
Ancient Power		72	-45	1.60	10%A↑
Body Slam		*55*	*-35*	*1.57*	
Surf		90	-45	2.00	

15/15/15·50 (1683)
0/14/15·49.5 (1500)
100 CG 3 Gen V Unova
Tirtouga → Carracosta (462)

Shadow Tirtouga — 160.8 121.667 144 142.16 141.23

#0565 Carracosta ✧ — 192 197 179 189.33 189.18

Rock Throw	2	9.6	5	4.80	2.50
Water Gun	1	3.6	3	3.60	3.00
Ancient Power		72	-45	1.60	10%A↑
Body Slam		*55*	*-35*	*1.57*	
Surf		90	-45	2.00	
Liquidation		84	-45	1.87	30%OD↓

1/14/15·42 (2500)
1/14/15·21.5 (1498)
300 CG 3 Gen V Unova
Tirtouga (462) → **Carracosta**

Shadow Carracosta — 230.4 164.167 179 191.19 189.18

#0395 Empoleon ✧ — 210 186 197 197.67 197.42

Metal Claw	2	6	7	3.00	3.50
Steel Wing	2	8.4	5	4.20	2.50
Waterfall	3	14.4	8	4.80	2.67
Metal Sound	2	6	8	3.00	4.00
Flash Cannon		132	-70	1.89	
Drill Peck		*70*	*-40*	*1.75*	
Blizzard		*140*	*-75*	*1.87*	
Hydro Pump		156	-75	2.08	
Hydro Cannon		**96**	**-40**	**2.40**	

1/15/14·34.5 (2500)
0/13/15·19.5 (1500)
500 CG 1 Gen IV Sinnoh
Piplup (441) → Prinplup (441) → **Empoleon**

Shadow Empoleon — 252 155 197 201.33 197.42

C Users of attacks

It is often useful to build a team around attacks, rather than Pokémon. This appendix lists the Pokémon which can learn and use a given attack. Pokémon in italics will *not* have STAB with the attack. Pokémon in boldface require an Elite TM (or special circumstances) to acquire the move. Attack cards display Nx1 stats in the middle of the title, and 3x3 stats on the right. Stats are not infrequently tweaked between seasons.

Fast attacks

Fast attacks are sorted by type, then duration, then by the product of PPT and EPT.

Bug Bite	0.5s P5 E6	T1 P4 E3

Caterpie, Metapod, **Butterfree**, Weedle, Kakuna, **Beedrill**, Paras, **Parasect**, Venonat, **Venomoth**, Pinsir, Ledyba, Ledian, Spinarak, Pineco, Forretress, Wurmple, Silcoon, Cascoon, Surskit, Nincada, Shedinja, Kricketot, Burmy, Plant Wormadam, Sandy Wormadam, Trash Wormadam, Mothim, Combee, Vespiquen, Yanmega, *Heatran*, Sewaddle, Swadloon, Leavanny, Venipede, Whirlipede, Scolipede, Escavalier, Durant, Larvesta, Volcarona, Scatterbug, Grubbin, Charjabug, Vikavolt, Dewpider, Araquanid, Pheromosa, Sizzlipede, Centiskorch, Frosmoth, Tarountula, Spidops, Nymble, Lokix

Fury Cutter	0.5s P4 E8	T1 P3 E4

Nidoking, Parasect, *Farfetch'd*, *Galarian Farfetch'd*, Scyther, Pinsir, ***Kabutops***, *Gligar*, Scizor, *Sceptile*, Ninjask, *Zangoose*, Armaldo, *Metang*, *Metagross*, Kricketune, Vespiquen, *Gliscor*, *Dewott*, *Samurott*, *Hisuian Samurott*, Crustle, Karrablast, Galvantula, *Pawniard*, Genesect, *Honedge*, *Doublade*, *Aegislash*, *Barbaracle*, *Fomantis*, *Lurantis*, Golisopod, *Sirfetch'd*, Kleavor

Infestation	1s P9 E13	T3 P6 E12

Beedrill, Venomoth, *Muk*, *Koffing*, *Weezing*, *Tangela*, *Mew*, Ariados, *Jumpluff*, Beautifly, Masquerain, *Swalot*, *Lileep*, *Cradily*, Skorupi, *Drapion*, *Tangrowth*, *Garbodor*, Shelmet, Accelgor, Dewpider, Araquanid

Struggle Bug	2s P15 E15	T3 P9 E8

Butterfree, Parasect, *Mew*, Ledian, Forretress, Shuckle, Heracross, Beautifly, Dustox, **Shedinja**, Volbeat, Illumise, *Trapinch*, Anorith, Armaldo, Kricketot, Kricketune, Sewaddle, Swadloon, Spewpa, Vivillon, Cutiefly, Ribombee, Wimpod, Snom, Tarountula, Nymble

Bite	0.5s P6 E4	T1 P4 E2

Wartortle, *Blastoise*, *Raticate*, Alolan Raticate, *Arbok*, *Nidoran♀*, *Nidorina*, *Nidoqueen*, *Zubat*, *Golbat*, *Meowth*, Alolan Meowth, *Growlithe*, *Hisuian Growlithe*, ***Arcanine***, Alolan Grimer, Alolan Muk, *Gyarados*, *Aerodactyl*, *Feraligatr*, *Crobat*, *Dunsparce*, *Snubbull*, *Granbull*, *Larvitar*, *Pupitar*, Tyranitar, Mightyena, *Loudred*, *Exploud*, *Mawile*, Carvanha, Sharpedo, *Huntail*, *Bagon*, *Salamence*, *Grotle*, *Torterra*, *Luxio*, Stunky, Skuntank, *Hippopotas*, *Hippowdon*, Drapion, *Carnivine*, *Patrat*, *Watchog*, *Simisage*, *Simisear*, *Simipour*, Sandile, Krokorok, *Tirtouga*, *Druddigon*, Zweilous, Hydreigon, *Incarnate Form Tornadus*, *Therian Form Thundurus*, *Furfrou*, *Bergmite*, *Avalugg*, *Hisuian Avalugg*, *Noibat*, *Noivern*, *Zygarde 10%*, *Zygarde 50%*, *Zygarde Complete*, *Torracat*, *Yungoos*, *Gumshoos*, *Mareanie*, *Toxapex*, *Bruxish*, *Skwovet*, *Greedent*, *Yamper*, *Boltund*, Impidimp, Morgrem, Grimmsnarl, Morpeko, Zarude, *Regidrago*, *Fuecoco*, *Crocalor*, *Skeledirge*, *Fidough*, *Dachsbun*, *Greavard*, *Houndstone*

Feint Attack	1s P11 E10	T2 P6 E6

Ninetales, *Alolan Ninetales*, *Jigglypuff*, *Wigglytuff*, *Persian*, Alolan Persian, *Dodrio*, *Hoothoot*, *Igglybuff*, *Xatu*, Umbreon, Murkrow, Sneasel, Houndour, Nuzleaf, Shiftry, *Skitty*, *Delcatty*, Sableye, *Shuppet*, *Dusclops*, *Bronzong*, Spiritomb, Weavile, Darkrai, Scraggy, Zorua, *Sawsbuck*, *Foongus*, *Amoonguss*, Vullaby, Greninja

Sucker Punch	0.5s P5 E6	T2 P8 E7

Dugtrio, ***Gastly***, *Gengar*, Galarian Moltres, *Furret*, Mightyena, *Spinda*, *Cacnea*, Cacturne, *Kecleon*, *Mismagius*, Spiritomb, Purrloin, *Joltik*, *Furfrou*, *Meowstic*, *Trevenant*, Yveltal, *Lycanroc Midday*, *Lycanroc Dusk*, *Marshadow*, Nickit, Thievul, *Sinistea*, *Polteageist*, Impidimp, Morgrem, Grimmsnarl, Single Strike Style Urshifu, Lokix, *Bellibolt*, Bombirdier

Snarl	1s P11 E13	T3 P5 E13

Arcanine, *Hisuian Arcanine*, Alolan Muk, *Mew*, Umbreon, *Granbull*, Houndoom, *Suicune*, Poochyena, Galarian Linoone, Shiftry, *Manectric*, Carvanha, Crawdaunt, Absol, *Luxray*, Honchkrow, Weavile, Darkrai, Hisuian Samurott, Liepard, Krookodile, Scrafty, *Hisuian Zorua*, Zoroark, *Hisuian Zoroark*, Bisharp, Mandibuzz, Pangoro, Yveltal, Incineroar, Guzzlord, Nickit, Thievul, *Zacian*, *Zamazenta*, Kingambit

Dragon Breath	0.5s P6 E4	T1 P3 E4

Charizard, *Seadra*, *Gyarados*, Dratini, Dragonair, Dragonite, Kingdra, Vibrava, Altaria, Shelgon, Latias, Latios, Dialga, Origin Forme Dialga, Palkia, Origin Forme Palkia, Altered Forme Giratina, Deino, Zweilous, Hydreigon, Reshiram, Zekrom, Kyurem, White Kyurem, Goodra, Drampa, Flapple, Regidrago, Frigibax, Arctibax, Baxcalibur

Dragon Tail	1s P14 E8	T3 P9 E12

Arbok, Alolan Exeggutor, ***Gyarados***, Dragonite, *Mew*, *Steelix*, *Lugia*, *Aggron*, Flygon, *Milotic*, Salamence, *Groudon*, Rayquaza, Garchomp, Palkia, Origin Forme Palkia, Origin Forme Giratina, Fraxure, Haxorus, Druddigon, Black Kyurem, Dragalge, Tyrunt, Tyrantrum, Zygarde 10%, Zygarde 50%, Zygarde Complete, Jangmo-o, Hakamo-o, Kommo-o, Guzzlord, Duraludon, Drakloak, Dragapult, Eternatus

Spark	0.5s P4 E6	T2 P5 E7

Raichu, Alolan Raichu, Magnemite, Magneton, Voltorb, Electrode, Chinchou, Lanturn, *Nosepass*, Electrike, Plusle, Minun, Shinx, Luxio, Luxray, Pachirisu, Magnezone, *Probopass*, Blitzle, Zebstrika, Tynamo, Eelektrik, Eelektross, *Grubbin*, Charjabug, Vikavolt, Togedemaru, Xurkitree, Yamper, Boltund, Toxtricity, Pawmi, Pawmo, Pawmot

Thunder Shock	0.5s P4 E7	T2 P4 E9

Pikachu, Raichu, Alolan Raichu, Magnemite, Magneton, Hisuian Electrode, Electabuzz, Jolteon, **Zapdos**, Pichu, Mareep, Elekid, Raikou, Electivire, Rotom, Heat Rotom, Wash Rotom, Frost Rotom, Mow Rotom, Emolga, *Klang*, *Klinklang*, Stunfisk, Incarnate Form Thundurus, Helioptile, Dedenne, Togedemaru, Xurkitree, *Meltan*, *Melmetal*, Morpeko, Regieleki, Pawmi, Pawmo, Pawmot, Tadbulb, Bellibolt

Thunder Fang	1s P10 E13	T2 P8 E6

Arcanine, *Steelix*, *Mightyena*, Manectric, *Hippowdon*

Charge Beam	1s P7 E14	T3 P5 E11

Clefable, *Abra*, Magneton, Hisuian Voltorb, *Porygon*, Zapdos, *Mew*, Lanturn, Flaaffy, Ampharos, *Porygon2*, *Celebi*, *Ralts*, *Kirlia*, *Gardevoir*, Manectric, *Grumpig*, *Jirachi*, *Deoxys*, *Deoxys Speed*, Magnezone, *Porygon-Z*, *Munna*, *Musharna*, Joltik, *Klink*, *Klang*, *Klinklang*, Zekrom, *Spritzee*, *Aromatisse*, Morpeko, Pawmi, Pawmo, Pawmot

Volt Switch	2s P13 E20	T4 P14 E16

Raichu, Alolan Raichu, Alolan Geodude, Alolan Graveler, Alolan Golem, Magnemite, Magneton, Electrode, Jolteon, *Mew*, Ampharos, *Forretress*, Raikou, Pachirisu, Magnezone, Galvantula, *Klink*, **Eelektross**, Therian Form Thundurus, Heliolisk, **Charjabug**, **Vikavolt**, Tapu Koko, Regieleki

Fairy Wind	1s P9 E13	T2 P4 E9

Clefable, Galarian Rapidash, Galarian Weezing, Togetic, *Jumpluff*, Mawile, Whimsicott, Florges, Slurpuff, Cutiefly, Ribombee, Incarnate Form Enamorus, Tinkatink, Tinkatuff, Tinkaton

Geomancy	2s P20 E14	T3 P4 E13

Xerneas

Charm	2s P20 E11	T3 P13 E8

Raichu, Clefable, Alolan Ninetales, Wigglytuff, *Wobbuffet*, Granbull, *Donphan*, Gardevoir, *Delcatty*, *Latias*, Togekiss, *Gallade*, *Liepard*, Cottonee, Whimsicott, *Petilil*, *Lilligant*, *Hisuian Lilligant*, *Minccino*, *Cinccino*, *Gothitelle*, *Cubchoo*, *Beartic*, Spritzee, Aromatisse, Slurpuff, *Tyrantrum*, Sylveon, *Brionne*, Primarina, Ribombee, *Bounsweet*, *Steenee*, *Tsareena*, *Hatenna*, *Hattrem*, Hatterene, *Sprigatito*, *Floragato*, *Meowscarada*, Fidough, Dachsbun

Low Kick	0.5s P5 E5	T2 P4 E5

Primeape, **Machop**, Machoke, *Galarian Ponyta*, *Rapidash*, *Galarian Rapidash*, Hitmonlee, *Kangaskhan*, *Electabuzz*, *Elekid*, *Lopunny*, *Electivire*, Gallade, Emboar, *Watchog*, *Blitzle*, Timburr, Gurdurr, Throh, Sawk, Mienfoo, Mienshao, Keldeo, *Aria Forme Meloetta*, *Quilladin*, Chesnaught, Pancham, Pangoro, Hawlucha, Bewear, Pheromosa, *Grimmsnarl*, Pawmot, Annihilape

Karate Chop	1s P10 E13	T2 P5 E9

Mankey, **Primeape**, Machop, Machoke, **Machamp**, *Magmar*, *Magby*, *Magmortar*, Pangoro

Counter	1s P13 E9	T2 P8 E6

Primeape, **Poliwrath**, ***Alakazam***, Machamp, Hitmonchan, Galarian Zapdos, *Ledian*, *Sudowoodo*, *Wobbuffet*, Heracross, *Ursaring*, *Donphan*, Hitmontop, Blaziken, Breloom, *Vigoroth*, Hariyama, Medicham, *Wynaut*, *Deoxys Defense*, *Bonsly*, Riolu, Lucario, Toxicroak, Conkeldurr, Scrafty, *Escavalier*, *Haxorus*, *Lycanroc Midnight*, *Lycanroc Dusk*, Passimian, Buzzwole, Marshadow, *Obstagoon*, Sirfetch'd, Falinks, Kubfu, Single Strike Style Urshifu, Rapid Strike Style Urshifu, *Spidops*, *Lokix*, Annihilape

Rock Smash	2s P17 E12	T3 P9 E7

Hisuian Arcanine, Poliwrath, Machop, Galarian Farfetch'd, *Cubone*, *Marowak*, *Alolan Marowak*, Hitmonlee, **Hitmonchan**, *Rhyhorn*, *Rhydon*, *Pinsir*, *Kabutops*, *Mew*, *Azumarill*, Hisuian Sneasel, *Phanpy*, Tyrogue, Hitmontop, *Larvitar*, *Pupitar*, *Zigzagoon*, *Loudred*, Makuhita, Meditite, *Gulpin*, *Swalot*, *Camerupt*, *Corphish*, *Spheal*, *Regirock*, *Regice*, *Registeel*, Monferno, Infernape, Scraggy, *Skiddo*, *Gogoat*, *Pikipek*, *Trumbeak*, *Toucannon*, Crabrawler, Crabominable, *Mudbray*, *Mudsdale*, Passimian, *Tapu Bulu*, *Runerigus*, Falinks, Kubfu, Single Strike Style Urshifu, Rapid Strike Style Urshifu, *Ursaluna*, Sneasler, *Tinkatink*, *Tinkatuff*, *Tinkaton*

Double Kick	1s P10 E13	T3 P8 E12

Nidoking, Hitmonlee, Paldean Combat Tauros, Paldean Blaze Tauros, Paldean Aqua Tauros, *Girafarig*, *Lopunny*, Cobalion, Terrakion, Virizion, *Incineroar*, *Dubwool*

Force Palm	1s P10 E16	T3 P13 E10

Breloom, Hariyama, **Lucario**, Mienshao

Ember	1s P10 E10	T2 P4 E9

Charmander, Charmeleon, **Charizard**, Vulpix, **Ninetales**, Growlithe, Hisuian Growlithe, Ponyta, **Rapidash**, Magmar, Flareon, Cyndaquil, Quilava, Typhlosion, Hisuian Typhlosion, Slugma, Magcargo, Houndour, Magby, Torchic, Combusken, Numel, Camerupt, Torkoal, Castform (Sunny), *Bagon*, *Shelgon*, Chimchar, Monferno, Tepig, Pignite, Emboar, Litwick, Lampent, Larvesta, Fennekin, Braixen, Fletchinder, Litleo, Pyroar, Litten, Torracat, Salandit, Turtonator, Sizzlipede, Centiskorch, Charcadet, Armarouge, Ceruledge

Fire Fang	1s P13 E9	T2 P8 E6

Charmeleon, Arcanine, Hisuian Arcanine, Houndoom, Entei, *Mightyena*, *Mawile*, *Salamence*, *Hippowdon*, Darumaka, Darmanitan, Reshiram, Litleo, Pyroar, Incineroar, *Zacian*

Fire Spin	1s P13 E9	T3 P11 E10

Charizard, Ninetales, Rapidash, Alolan Marowak, Flareon, Moltres, Entei, Blaziken, Torkoal, Infernape, Magmortar, Heatran, Pansear, Simisear, Chandelure, Heatmor, Volcarona, Delphox, Talonflame, Turtonator, *Solgaleo*, Scorbunny, Raboot, Cinderace

Incinerate	2s P32 E22	T5 P20 E20

Rapidash, Typhlosion, Magcargo, Ho-Oh, Camerupt, Darmanitan, Chandelure, **Talonflame**, Litleo, Pyroar, Volcanion, Salazzle, Turtonator, Blacephalon, Fuecoco, Crocalor, Skeledirge, Charcadet, Armarouge, Ceruledge

Wing Attack	1s P10 E11	T2 P5 E7

Charizard, Pidgeotto, **Pidgeot**, Golbat, Moltres, Galarian Moltres, Noctowl, Yanma, Gligar, Mantine, Swellow, Pelipper, Staravia, Staraptor, Yanmega, Gliscor, Archen, Archeops, Ducklett, Rufflet, Noibat, *Quaxly*, *Quaxwell*, *Quaquaval*, Bombirdier

Peck	1s P10 E10	T2 P6 E8

Spearow, Fearow, *Nidoran♂*, Doduo, Dodrio, *Goldeen*, *Seaking*, Hoothoot, *Togepi*, Natu, Xatu, Murkrow, *Combusken*, Taillow, Swablu, Altaria, Honchkrow, Chatot, Togekiss, *Karrablast*, Rufflet, Fletchling, Fletchinder, Talonflame, *Inkay*, *Malamar*, Dartrix, Pikipek, Trumbeak, Toucannon, *Poipole*, Rookidee, Corvisquire

Air Slash	1s P12 E8	T3 P9 E9

Charizard, Pidgeot, Farfetch'd, Scyther, Crobat, Xatu, Skarmory, Masquerain, Tropius, Rayquaza, Mothim, Vespiquen, Togekiss, Pidove, Tranquill, Unfezant, Woobat, Swoobat, Sigilyph, Swanna, Braviary, Hisuian Braviary, Vullaby, Mandibuzz, Incarnate Form Tornadus, Noivern, Oricorio (Baile), Oricorio (Pom-Pom), Oricorio (Pa'u), Oricorio (Sensu), *Lunala*, Celesteela, *Kartana*, *Naganadel*, Rookidee, Corvisquire, Corviknight, *Crowned Sword Zacian*, *Kleavor*

Gust	2s P25 E20	T4 P16 E12

Pidgeot, **Staraptor**, Therian Form Tornadus, Vivillon, Yveltal

Lick	0.5s P5 E6	T1 P3 E3

Seel, ***Muk***, Gastly, **Haunter**, **Gengar**, *Lickitung*, *Snorlax*, *Teddiursa*, *Galarian Linoone*, *Kecleon*, *Munchlax*, *Lickilicky*, *Herdier*, *Stoutland*, *Heatmor*, *Obstagoon*, *Varoom*, *Revavroom*, Greavard, Houndstone

Shadow Claw	0.5s P6 E4	T2 P6 E8

Alolan Sandslash, Haunter, Gengar, *Mew*, *Typhlosion*, *Feraligatr*, *Ursaring*, *Linoone*, Shedinja, Sableye, *Zangoose*, Banette, *Purugly*, Altered Forme Giratina, Origin Forme Giratina, ***Leavanny***, Cofagrigus, *Zoroark*, *Black Kyurem*, Trevenant, *Bewear*, *Golisopod*, Dhelmise, Lunala, *Necrozma*, *Necrozma Dusk Mane*, Necrozma Dawn Wings, *Perrserker*, Runerigus, *Sneasler*

Hex	1s P8 E13	T3 P7 E13

Gengar, Alolan Marowak, Hisuian Typhlosion, *Galarian Slowking*, Misdreavus, *Castform*, Banette, Duskull, Dusclops, *Snorunt*, Drifloon, Drifblim, Mismagius, Dusknoir, Froslass, Frillish, Jellicent, Chandelure, Gourgeist, Gourgeist Small, Gourgeist Large, Gourgeist Super, Polteageist, Cursola, Skeledirge, Gholdengo

Astonish	1s P7 E13	T3 P12 E10

Gastly, Haunter, *Aipom*, Misdreavus, *Dunsparce*, Galarian Corsola, *Whismur*, *Exploud*, *Mawile*, *Swablu*, Shuppet, Duskull, *Chimecho*, *Ambipom*, Drifloon, Drifblim, *Chingling*, Dusknoir, Rotom, *Heat Rotom*, *Wash Rotom*, *Frost Rotom*, *Mow Rotom*, Yamask, Galarian Yamask, Cofagrigus, *Vanillite*, *Vanillish*, *Vanilluxe*, *Foongus*, *Amoonguss*, *Elgyem*, *Beheeyem*, Litwick, Lampent, Golett, Golurk, *Therian Form Tornadus*, *Incarnate Form Thundurus*, *Klefki*, Phantump, Pumpkaboo, Pumpkaboo Small, Pumpkaboo Large, Pumpkaboo Super, Hoopa Confined, *Hoopa Unbound*, Decidueye, *Morelull*, *Shiinotic*, Sandygast, Palossand, Dhelmise, *Tapu Lele*, Blacephalon, *Applin*, *Appletun*, Sinistea, Polteageist, Cursola, Runerigus, Dreepy, Drakloak, Dragapult, *Incarnate Form Enamorus*, Gimmighoul, Gholdengo

Razor Leaf	1s P13 E7	T2 P9 E4

Ivysaur, Venusaur, Oddish, Gloom, Vileplume, **Weepinbell**, Victreebel, Bayleef, Meganium, Bellossom, Sunkern, Sunflora, Lotad, Lombre, Ludicolo, Nuzleaf, Shiftry, Roselia, Tropius, Turtwig, Grotle, Torterra, Budew, Roserade, Cherrim (Sunny Form), Cherrim (Overcast Form), Abomasnow, Leafeon, Leavanny, Cottonee, Whimsicott, *Florges*, Pumpkaboo, Pumpkaboo Small, Pumpkaboo Large, Pumpkaboo Super, Gourgeist, Gourgeist Small, Gourgeist Large, Gourgeist Super, Rowlet, Dartrix, Decidueye, Fomantis, Lurantis, Bounsweet, Steenee, Tsareena, Kartana, Grookey, Thwackey, Rillaboom, Gossifleur, Eldegoss, Smoliv, Dolliv, Arboliva

Vine Whip	0.5s P6 E5	T2 P5 E8

Bulbasaur, Ivysaur, Venusaur, Bellsprout, Tangela, Chikorita, Meganium, Carnivine, Tangrowth, Snivy, Servine, Serperior, Pansage, Simisage, Chespin, Quilladin, Chesnaught, *Flabébé*, *Floette*, *Florges*, Gogoat, *Comfey*, Zarude

Leafage	0.5s P6 E4	T2 P6 E8

Snover, Abomasnow, Rowlet, Dartrix, Decidueye, Fomantis, Lurantis, Sprigatito, Floragato, Meowscarada

Bullet Seed	1s P7 E13	T3 P5 E13

Weepinbell, Exeggcute, Exeggutor, Alolan Exeggutor, Bellossom, Hoppip, Skiploom, Jumpluff, Sunflora, *Mantine*, Treecko, Grovyle, Sceptile, Seedot, **Shiftry**, Shroomish, Breloom, Lileep, Cradily, **Roserade**, Cherubi, Cherrim (Sunny Form), Cherrim (Overcast Form), **Leafeon**, Maractus, Ferrothorn, *Toucannon*, Tapu Bulu, *Skwovet*, *Greedent*, Gossifleur, Eldegoss, Flapple, Appletun, *Tandemaus*, *Maushold*

Magical Leaf	2s P17 E17	T3 P10 E10

Victreebel, *Mr. Mime*, Chikorita, Bayleef, Meganium, Bellossom, **Celebi**, *Kirlia*, *Gardevoir*, Roselia, Roserade, *Mismagius*, Sky Shaymin, Lilligant, Hisuian Lilligant, Rowlet, Dartrix, Decidueye, Hisuian Decidueye, Tsareena, Dolliv, Arboliva

Sand Attack	0.5s P4 E7	T1 P2 E4

Sandshrew, Sandslash, Alolan Diglett, Alolan Dugtrio, *Zigzagoon*, *Linoone*, Trapinch, Vibrava, Flygon, *Cacnea*, *Cacturne*, *Starly*, *Staravia*, *Staraptor*, Hippopotas, Hippowdon, Gliscor, *Lillipup*, *Herdier*, *Stoutland*, *Furfrou*, Sandygast, Palossand, *Rookidee*, *Corvisquire*, *Corviknight*

Mud Shot	0.5s P4 E6	T2 P4 E8

Sandshrew, Sandslash, Diglett, Dugtrio, *Poliwag*, *Poliwhirl*, *Poliwrath*, Graveler, Golem, *Krabby*, ***Kingler***, *Goldeen*, *Omanyte*, *Omastar*, *Kabuto*, *Kabutops*, *Politoed*, Wooper, Paldean Wooper, Quagsire, *Remoraid*, *Octillery*, Marshtomp, Swampert, *Swalot*, Trapinch, Vibrava, Flygon, Barboach, Whiscash, Groudon, Gible, Gabite, Garchomp, *Croagunk*, *Toxicroak*, Excadrill, *Tympole*, Palpitoad, Seismitoad, Stunfisk, Galarian Stunfisk, *Bouffalant*, Incarnate Form Landorus, Therian Form Landorus, Diggersby, Sandygast, Palossand, *Greedent*, *Tandemaus*, *Maushold*, Toedscool, Toedscruel, Clodsire

Mud Slap	2s P19 E13	T3 P12 E10

Nidoqueen, Diglett, Alolan Diglett, Dugtrio, Alolan Dugtrio, Graveler, Golem, *Grimer*, Cubone, Marowak, Rhyhorn, Rhydon, *Kangaskhan*, Donphan, Claydol, Torterra, *Shellos*, Gastrodon, Rhyperior, Mamoswine, *Boldore*, *Gigalith*, Drilbur, Excadrill, Sandile, Krokorok, Krookodile, Golett, Golurk, *Bunnelby*, *Binacle*, *Barbaracle*, *Heliolisk*, *Vikavolt*, Mudbray, Mudsdale, *Shroodle*, *Grafaiai*, Toedscool, Toedscruel, *Wiglett*, *Wugtrio*

Frost Breath	1s P11 E9	T2 P7 E5

Dewgong, Cloyster, Jynx, Lapras, Articuno, *Mew*, **Smoochum**, Glalie, Walrein, Regice, Glaceon, Vanillish, Vanilluxe, Cryogonal, Amaura, Aurorus

Powder Snow	1s P6 E15	T2 P5 E8

Alolan Sandshrew, Alolan Sandslash, Alolan Vulpix, Alolan Ninetales, Swinub, Piloswine, Smoochum, Castform (Snowy), Snorunt, Sealeo, **Walrein**, Snover, Abomasnow, Mamoswine, Froslass, Vanillite, Cubchoo, Beartic, Amaura, Aurorus, Hisuian Avalugg, Snom, Frosmoth, Cetoddle, Cetitan

Ice Fang	2s P12 E20	T2 P8 E6

Feraligatr, *Suicune*, *Mightyena*, *Mawile*, *Hippowdon*, *Drapion*, *Stoutland*, Galarian Darumaka, Galarian Darmanitan, White Kyurem, Avalugg, *Zamazenta*, *Crowned Shield Zamazenta*, Frigibax, Arctibax, Baxcalibur

Ice Shard	1s P10 E10	T3 P9 E10

Seel, **Dewgong**, *Shellder*, Cloyster, **Lapras**, Articuno, Sneasel, Piloswine, Glalie, Snover, Weavile, Glaceon, Cryogonal, Mr. Rime, Cetoddle, Cetitan

Transform	2s P0 E0	T1 P0 E0

Ditto

Lock On	0.5s P2 E10	T1 P1 E5

Octillery, Porygon2, *Regirock*, *Regice*, *Registeel*, Porygon-Z, *Regieleki*

Cut	0.5s P5 E5	T1 P3 E2

Farfetch'd, *Mew*, *Sunkern*, *Dwebble*

Scratch	0.5s P6 E4	T1 P4 E2

Charmander, ***Charmeleon***, *Sandshrew*, *Paras*, *Diglett*, Meowth, *Alolan Meowth*, *Galarian Meowth*, Persian, *Alolan Persian*, *Mankey*, *Kabuto*, *Totodile*, *Croconaw*, Sentret, Aipom, Teddiursa, *Torchic*, Vigoroth, *Nincada*, *Anorith*, *Chimchar*, Ambipom, Glameow, Purugly, *Stunky*, *Purrloin*, *Pansage*, *Pansear*, *Panpour*, *Drilbur*, *Zorua*, Hisuian Zorua, Hisuian Zoroark, *Axew*, *Pawniard*, *Fennekin*, *Braixen*, *Delphox*, *Espurr*, *Binacle*, *Litten*, *Grookey*, *Thwackey*, *Rillaboom*

Tackle	0.5s P5 E5	T1 P3 E3

Bulbasaur, *Squirtle*, *Caterpie*, *Metapod*, Pidgey, Rattata, Alolan Rattata, *Geodude*, *Ponyta*, *Shellder*, *Onix*, *Voltorb*, *Hisuian Voltorb*, ***Electrode***, *Hisuian Electrode*, *Koffing*, *Weezing*, *Galarian Weezing*, *Staryu*, ***Starmie***, Tauros, *Paldean Combat Tauros*, *Paldean Blaze Tauros*, *Paldean Aqua Tauros*, Eevee, Porygon, *Chikorita*, *Bayleef*, *Cyndaquil*, *Quilava*, *Ledyba*, *Mareep*, *Flaaffy*, *Marill*, *Hoppip*, *Skiploom*, Girafarig, *Pineco*, *Snubbull*, *Swinub*, *Corsola*, *Galarian Corsola*, *Phanpy*, *Donphan*, Stantler, *Tyrogue*, Miltank, *Mudkip*, *Poochyena*, Zigzagoon, Galarian Zigzagoon, Linoone, *Wurmple*, *Silcoon*, *Shroomish*, *Makuhita*, Skitty, *Aron*, *Volbeat*, *Illumise*, *Numel*, *Feebas*, Castform, *Castform (Sunny)*, *Castform (Rainy)*, *Castform (Snowy)*, *Turtwig*, Starly, Bidoof, *Shinx*, *Shieldon*, *Burmy*, *Cherubi*, *Bronzor*, Munchlax, *Hippopotas*, *Mantyke*, *Snivy*, *Tepig*, *Pignite*, *Oshawott*, Patrat, Lillipup, *Roggenrola*, *Basculin*, *Darumaka*, *Galarian Darumaka*, *Darmanitan*, *Galarian Darmanitan*, Deerling, *Ferroseed*, *Tynamo*, *Deino*, *Scatterbug*, Litleo, *Flabébé*, *Floette*, *Florges*, *Pancham*, *Honedge*, *Swirlix*, *Slurpuff*, *Inkay*, *Tyrunt*, *Dedenne*, *Carbink*, *Goomy*, *Sliggoo*, *Klefki*, *Phantump*, *Bergmite*, *Hisuian Avalugg*, *Xerneas*, *Diancie*, *Rowlet*, Yungoos, *Rockruff*, Stufful, Bewear, *Jangmo-o*, *Hakamo-o*, *Scorbunny*, *Raboot*, *Cinderace*, Skwovet, Greedent, Wooloo, Dubwool, Wyrdeer, Ursaluna, Lechonk, Male Oinkologne, Female Oinkologne, Smoliv, Dolliv, Arboliva, *Cetoddle*, *Cetitan*

Pound	0.5s P6 E5	T2 P4 E4

Clefairy, ***Clefable***, Jigglypuff, Wigglytuff, *Drowzee*, Chansey, ***Jynx***, *Mew*, *Cleffa*, Igglybuff, *Smoochum*, Blissey, *Treecko*, Whismur, *Gulpin*, *Piplup*, Buneary, Lopunny, *Mime Jr.*, Happiny, *Finneon*, Audino, *Timburr*, *Trubbish*, Minccino, Cinccino, *Gothita*, *Gothorita*, *Mienfoo*, *Froakie*, *Frogadier*, *Popplio*, *Oricorio (Baile)*, *Oricorio (Pom-Pom)*, *Oricorio (Pa'u)*, *Oricorio (Sensu)*, *Nihilego*, *Sobble*, *Drizzile*, *Inteleon*

Quick Attack	1s P10 E13	T2 P5 E8

Pidgey, Rattata, Alolan Rattata, Raticate, Alolan Raticate, Spearow, *Pikachu*, *Vulpix*, *Zubat*, Doduo, Eevee, Sentret, Furret, *Natu*, *Yanma*, *Grovyle*, *Seedot*, Taillow, *Wingull*, *Electrike*, *Plusle*, *Minun*, Starly, Staravia, Staraptor, *Buizel*, Buneary, Glameow, *Riolu*, *Leafeon*, *Victini*, Pidove, *Zebstrika*, *Archen*, *Emolga*, *Virizion*, Aria Forme Meloetta, Bunnelby, Diggersby, Fletchling, Helioptile, Heliolisk, *Sylveon*, *Tapu Koko*, *Nickit*, *Thievul*, *Dreepy*, *Zacian*, *Zamazenta*, *Kleavor*

Present	2s P6 E23	T3 P3 E12

Pikachu, *Delibird*

Take Down	1s P7 E8	T3 P5 E8

Galarian Zigzagoon, *Beldum*, Bidoof, Bibarel, *Cranidos*, *Gible*, *Gabite*, Lillipup, Herdier, Stoutland, *Trubbish*, *Garbodor*, Deerling, Sawsbuck, *Chespin*, Pyroar, Furfrou, *Volcanion*, Gumshoos, Stufful, *Passimian*, *Stakataka*, Wooloo, Dubwool, Lechonk, Male Oinkologne, Female Oinkologne, Tandemaus, Maushold, *Tatsugiri*

Yawn	2s P0 E13	T4 P0 E12

Snorlax, Slakoth, Slaking, Oranguru, Komala

Poison Sting	0.5s P4 E6	T2 P4 E9

Weedle, Kakuna, Beedrill, Ekans, Arbok, Nidoran♀, Nidorina, Nidoqueen, Nidoran♂, Nidorino, Nidoking, Tentacool, Tentacruel, Spinarak, Ariados, Qwilfish, Hisuian Qwilfish, *Cascoon*, *Cacnea*, Roserade, *Vespiquen*, Skorupi, Drapion, Croagunk, Toxicroak, Venipede, Whirlipede, Scolipede, Mareanie, Overqwil, Clodsire

Acid	1s P11 E10	T2 P6 E8

Ekans, Arbok, Oddish, Gloom, Vileplume, Bellsprout, Weepinbell, Victreebel, Tentacruel, *Bellossom*, Galarian Slowking, *Lileep*, *Cradily*, *Eelektrik*, *Eelektross*, *Shelmet*, *Accelgor*, Skrelp, Dragalge, Nihilego, Toxel, Toxtricity

Poison Jab	1s P13 E9	T2 P7 E7

Beedrill, Nidoqueen, Nidorino, Nidoking, Tentacruel, Galarian Slowbro, Grimer, Alolan Grimer, Muk, Alolan Muk, ***Seaking***, *Mew*, Paldean Wooper, Hisuian Qwilfish, Hisuian Sneasel, Roselia, *Cacturne*, Seviper, *Deoxys Attack*, Roserade, Skuntank, Croagunk, Toxicroak, *Gurdurr*, *Conkeldurr*, *Sawk*, Scolipede, *Maractus*, *Mienshao*, *Keldeo*, *Hawlucha*, Toxapex, Salandit, Salazzle, *Kommo-o*, Nihilego, *Buzzwole*, *Marshadow*, Poipole, Naganadel, Toxtricity, Eternatus, Sneasler, Overqwil, Shroodle, Grafaiai, Varoom, Revavroom

Psywave	0.5s P4 E7	T1 P3 E4

Venomoth, Starmie, Mr. Mime, *Lapras*, *Misdreavus*, Grumpig, Lunatone, Solrock, *Mismagius*, Inkay, Malamar

Psycho Cut	0.5s P4 E7	T2 P3 E9

Kadabra, Alakazam, Galarian Ponyta, Galarian Rapidash, Galarian Articuno, Mewtwo, Medicham, *Spinda*, *Absol*, Gallade, Cresselia, *Doublade*, *Aegislash*, Malamar, *Hisuian Decidueye*, Necrozma, Necrozma Dusk Mane, Necrozma Dawn Wings, Hatterene

Zen Headbutt	1s P11 E9	T3 P8 E6

Clefairy, *Clefable*, *Alolan Vulpix*, *Psyduck*, Abra, Hypno, **Exeggutor**, *Lickitung*, *Chansey*, Mr. Mime, Galarian Mr. Mime, *Tauros*, *Paldean Combat Tauros*, *Paldean Blaze Tauros*, *Paldean Aqua Tauros*, *Porygon*, *Snorlax*, *Cleffa*, ***Togepi***, ***Togetic***, Espeon, *Stantler*, *Miltank*, *Blissey*, *Delcatty*, *Wailord*, Spoink, *Relicanth*, Metang, Metagross, Latias, Latios, Deoxys, Deoxys Attack, Deoxys Defense, Deoxys Speed, *Cranidos*, *Rampardos*, Chingling, *Happiny*, *Lickilicky*, *Regigigas*, *Shaymin*, *Sky Shaymin*, Munna, Musharna, *Audino*, *Throh*, Sigilyph, *Yamask*, *Cofagrigus*, Solosis, Duosion, Reuniclus, *Bouffalant*, Hisuian Braviary, *Cobalion*, *Terrakion*, *Virizion*, Delphox, *Skiddo*, *Gogoat*, *Xerneas*, *Zygarde 10%*, *Zygarde 50%*, *Zygarde Complete*, Oranguru, Solgaleo, Mr. Rime, Wyrdeer, *Incarnate Form Enamorus*

Extrasensory	1s P11 E11	T3 P8 E10

Exeggutor, *Noctowl*, *Togetic*, *Suicune*, Lugia, *Ho-Oh*, Grumpig, Baltoy, Claydol, Chimecho, Uxie, Mesprit, Azelf, *Therian Form Landorus*, *Drampa*, Indeedee

Confusion	2s P19 E14	T4 P16 E14

Butterfree, *Venonat*, *Venomoth*, *Golduck*, Kadabra, Alakazam, Slowpoke, Galarian Slowpoke, Slowbro, Galarian Slowbro, Drowzee, Hypno, Exeggcute, Exeggutor, Mr. Mime, Galarian Mr. Mime, Jynx, Galarian Articuno, Mewtwo, Armored Mewtwo, Espeon, Slowking, Galarian Slowking, Girafarig, Celebi, *Dustox*, Ralts, Kirlia, Gardevoir, Meditite, Lunatone, Solrock, Baltoy, Claydol, *Gorebyss*, Jirachi, *Plant Wormadam*, *Sandy Wormadam*, *Trash Wormadam*, Bronzor, Bronzong, Mime Jr., Gallade, Uxie, Mesprit, Azelf, Cresselia, Victini, Woobat, Swoobat, Gothita, Gothorita, Gothitelle, Elgyem, Beheeyem, Espurr, Meowstic, Hoopa Confined, Hoopa Unbound, Oranguru, Bruxish, Tapu Lele, Lunala, Hatenna, Hattrem, Hatterene, Mr. Rime, Wyrdeer

Rock Throw	1s P13 E8	T2 P8 E5

Geodude, Alolan Geodude, Graveler, Alolan Graveler, Golem, Alolan Golem, Onix, **Omastar**, Aerodactyl, Sudowoodo, Shuckle, *Slugma*, Magcargo, Nosepass, Lunatone, Solrock, Regirock, Bonsly, Probopass, Carracosta, *Incarnate Form Landorus*, Tyrantrum, Aurorus, Carbink, Diancie, Rockruff, Lycanroc Midday, Lycanroc Midnight, Lycanroc Dusk, Stakataka, Stonjourner, *Bombirdier*

Rollout	2s P15 E19	T3 P7 E13

Blastoise, **Alolan Golem**, *Weezing*, *Dunsparce*, *Miltank*, *Wailmer*, *Wailord*, *Glalie*, *Bibarel*, *Lickilicky*, *Komala*

Smack Down	1s P13 E7	T3 P12 E8

Tyranitar, Aggron, Rampardos, Bastiodon, Rhyperior, Roggenrola, Boldore, Gigalith, Dwebble, Crustle, Terrakion, *Chesnaught*, *Clauncher*, *Clawitzer*, *Celesteela*

Metal Claw	0.5s P6 E5	T2 P5 E7

Alolan Sandshrew, *Sandslash*, Alolan Sandslash, Alolan Diglett, Alolan Dugtrio, Galarian Meowth, *Kingler*, *Ursaring*, *Ninjask*, Aron, Lairon, Metang, Registeel, *Prinplup*, Empoleon, Dialga, Origin Forme Dialga, Excadrill, Ferroseed, Ferrothorn, Galarian Stunfisk, Bisharp, Durant, Cobalion, Genesect, *Golisopod*, *Necrozma*, Necrozma Dusk Mane, *Necrozma Dawn Wings*, Perrserker, Duraludon, *Zacian*, Crowned Sword Zacian, *Zamazenta*, Crowned Shield Zamazenta, Kingambit

Steel Wing	1s P14 E8	T2 P7 E5

Pidgeotto, *Pidgeot*, *Fearow*, *Dodrio*, ***Scyther***, *Aerodactyl*, *Dragonite*, *Mew*, ***Togetic***, Skarmory, *Ho-Oh*, *Swellow*, Empoleon, *Chatot*, *Tranquill*, *Unfezant*, *Archeops*, *Braviary*, *Kyurem*, *White Kyurem*, *Fletchinder*, *Talonflame*, Corviknight

Metal Sound	0.5s P4 E6	T2 P5 E8

Galarian Meowth, Magnemite, Magneton, Aron, Lairon, Empoleon, Trash Wormadam, Bronzong, Magnezone, Klink, Klang, Klinklang, *Dhelmise*, *Kommo-o*, Perrserker, Varoom, Revavroom, Kingambit

Bullet Punch	1s P10 E11	T2 P8 E7

Machamp, *Hitmonchan*, Scizor, *Hariyama*, Metagross, Lucario, *Pangoro*

Iron Tail	1s P14 E6	T3 P10 E7

Nidoking, *Galarian Slowpoke*, *Dewgong*, *Dratini*, *Dragonair*, *Armored Mewtwo*, Steelix, *Tyranitar*, Lairon, Aggron, *Seviper*, Shieldon, Bastiodon, *Servine*, *Serperior*, *Axew*, *Fraxure*

Water Gun	0.5s P5 E5	T1 P3 E3

Wartortle, Blastoise, Psyduck, Golduck, Slowpoke, Slowbro, **Seel**, Horsea, Seadra, Staryu, Starmie, Lapras, Vaporeon, Omanyte, Omastar, Totodile, Croconaw, **Feraligatr**, Lanturn, Wooper, Quagsire, Slowking, Qwilfish, Remoraid, Octillery, **Kingdra**, Mudkip, Marshtomp, Swampert, Lotad, Wingull, Pelipper, Wailmer, Wailord, Barboach, Whiscash, Castform (Rainy), Spheal, Sealeo, Clamperl, Huntail, Gorebyss, Relicanth, Luvdisc, Bibarel, Buizel, Floatzel, Finneon, Lumineon, Oshawott, Dewott, Panpour, Simipour, Basculin, Tirtouga, Carracosta, Ducklett, Swanna, Barbaracle, Skrelp, *Dragalge*, Clauncher, Clawitzer, *Goomy*, *Sliggoo*, *Goodra*, Volcanion, Popplio, Brionne, Bruxish, Tapu Fini, Sobble, Drizzile, Inteleon, Quaxly, Quaxwell, Quaquaval, *Tadbulb*, *Bellibolt*, Wiglett, Wugtrio, Dondozo, Tatsugiri

Water Shuriken	1s P9 E14	T3 P6 E14

Accelgor, Greninja

Bubble	1s P10 E12	T3 P8 E11
Squirtle, Poliwag, Poliwhirl, Poliwrath, Tentacool, Krabby, Kingler, Horsea, Chinchou, Marill, Azumarill, Politoed, Corsola, Mantine, Lombre, Ludicolo, Surskit, *Azurill*, Corphish, Piplup, Prinplup, Mantyke, Tympole, Palpitoad, Seismitoad, Frillish, Jellicent, Froakie, Frogadier, Greninja, *Crabrawler*, *Crabominable*		

Waterfall	1s P13 E7	T3 P12 E8
Seaking, Gyarados, Kabutops, Feraligatr, Kingdra, Sharpedo, Crawdaunt, Milotic, Walrein, Kyogre, Empoleon, Floatzel, Lumineon, Samurott, Hisuian Samurott, Alomomola, Primarina, Golisopod, Rapid Strike Style Urshifu, Dondozo		

Splash	2s P0 E17	T4 P0 E12
Magikarp, *Wobbuffet*, *Smeargle*, *Azurill*, Wailmer, *Spoink*, Feebas, *Wynaut*, Luvdisc, *Cosmog*, *Cosmoem*		

Hidden Power	2s P15 E15	T3 P9 E8
Starmie, Porygon, Togepi, *Togetic*, Unown, Porygon2, **Suicune**, *Ho-Oh*, Luxray, *Budew*, Shellos, *Gastrodon*, *Togekiss*, Porygon-Z, Regigigas, Shaymin, *Sky Shaymin*, Petilil, Lilligant, Hisuian Lilligant, Solosis, Duosion, Reuniclus, Alomomola, Comfey, *Tapu Fini*		

Charged attacks

Charged attacks are sorted by type, then PPE.

Fell Stinger	2s P45 E33	P20 E35
Beedrill, *Qwilfish*, Vespiquen, *Drapion*, *Togedemaru*, Buzzwole, *Poipole*, *Naganadel* **100% chance of attack +1**		

Lunge	3s P55 E33	P60 E45

Ariados, Masquerain, Galvantula, Buzzwole, Pheromosa, Centiskorch, Tarountula, Spidops
100% chance of opponent attack -1

Silver Wind	4s P65 E33	P60 E45

Venomoth, Ledyba, Ledian, Yanma, Beautifly, Dustox, Masquerain, Illumise, *Finneon*, *Lumineon*, Sewaddle, Swadloon, Leavanny
10% chance of attack +1
10% chance of defense +1

Signal Beam	3s P75 E50	P75 E55

Butterfree, Venonat, *Abra*, ***Voltorb***, ***Porygon***, Spinarak, *Cleffa*, Surskit, Volbeat, Vespiquen, Venipede, Whirlipede, *Sigilyph*, *Vanillite*, *Vanillish*, *Vanilluxe*, Karrablast, Shelmet, Accelgor
20% chance of opponent attack -1
20% chance of opponent defense -1

X-Scissor	2s P45 E33	P65 E40

Beedrill, Paras, Parasect, *Kingler*, Scyther, Pinsir, Scizor, *Hisuian Sneasel*, Kricketune, Vespiquen, *Dewott*, *Hisuian Samurott*, Leavanny, Scolipede, Dwebble, Crustle, Karrablast, *Pawniard*, *Bisharp*, Durant, *Keldeo*, Genesect, *Hawlucha*, Grubbin, Charjabug, Vikavolt, *Lurantis*, Golisopod, *Kartana*, Kleavor, *Sneasler*, Tarountula, Spidops, Nymble, *Kingambit*

Bug Buzz | **4s P95 E50** | **P100 E60**

Butterfree, Venomoth, **Scyther**, Ledian, Beautifly, Dustox, Nincada, Ninjask, Volbeat, Illumise, *Vibrava*, Kricketune, Plant Wormadam, Sandy Wormadam, Trash Wormadam, Mothim, Combee, Vespiquen, Yanmega, Swadloon, Joltik, Galvantula, Shelmet, Accelgor, Larvesta, Volcarona, Vivillon, Cutiefly, Ribombee, Araquanid, Wimpod, Pheromosa, Sizzlipede, Centiskorch, Snom, Frosmoth, Nymble, Lokix
30% chance of opponent defense -1

Megahorn | **2s P105 E100** | **P110 E55**

Nidoking, *Galarian Rapidash*, ***Rhydon***, *Seaking*, Ariados, Heracross, *Stantler*, *Absol*, *Samurott*, Scolipede, *Sawsbuck*, Escavalier, *Bouffalant*, *Xerneas*, *Tapu Bulu*, *Falinks*, *Wyrdeer*, ***Clodsire***

Obstruct | **2s P20 E33** | **P15 E40**

Obstagoon
100% chance of defense +1
100% chance of opponent defense -1

Night Slash | **2s P45 E33** | **P50 E35**

Alolan Sandshrew, ***Sandslash***, *Meowth*, Alolan Meowth, *Galarian Meowth*, ***Persian***, *Primeape*, *Scyther*, *Spinarak*, *Gligar*, *Scizor*, *Slakoth*, *Nincada*, *Zangoose*, Crawdaunt, *Gliscor*, *Oshawott*, Purrloin, *Fraxure*, *Haxorus*, *Cryogonal*, *Druddigon*, Pawniard, Greninja, Pangoro, Inkay, *Kartana*, Nickit, Thievul, Obstagoon, *Sirfetch'd*, Meowscarada, *Annihilape*

◑ Foul Play	2s P70 E50	P60 E40

Meowth, Alolan Meowth, *Persian*, Alolan Persian, *Electrode*, Umbreon, Murkrow, Sneasel, Houndoom, *Seedot*, Nuzleaf, Shiftry, Sableye, *Kecleon*, Weavile, Scraggy, Scrafty, Zorua, *Hisuian Zorua*, Zoroark, *Hisuian Zoroark*, *Amoonguss*, Vullaby, Mandibuzz, Malamar, *Klefki*, *Phantump*, *Trevenant*, *Pumpkaboo*, *Pumpkaboo Small*, *Pumpkaboo Large*, *Pumpkaboo Super*, *Gourgeist*, *Gourgeist Small*, *Gourgeist Large*, *Gourgeist Super*, *Oranguru*, Impidimp, Morgrem, Grimmsnarl, *Perrserker*, Kingambit

◑ Crunch	3s P65 E33	P70 E45

Alolan Rattata, Alolan Raticate, *Hisuian Growlithe*, *Arcanine*, *Hisuian Arcanine*, Alolan Grimer, *Kangaskhan*, *Gyarados*, *Totodile*, *Croconaw*, *Feraligatr*, *Steelix*, *Snubbull*, *Granbull*, *Teddiursa*, Houndour, Houndoom, *Larvitar*, *Pupitar*, Tyranitar, Poochyena, Mightyena, *Exploud*, Carvanha, Sharpedo, *Trapinch*, *Seviper*, *Huntail*, *Bagon*, *Shelgon*, *Salamence*, *Bidoof*, *Luxio*, *Luxray*, Stunky, Skuntank, Drapion, *Carnivine*, *Froslass*, *Watchog*, *Stoutland*, *Pansage*, *Simisage*, *Pansear*, *Simisear*, *Panpour*, *Simipour*, Sandile, Krokorok, Krookodile, *Archen*, *Archeops*, *Eelektrik*, *Eelektross*, Deino, *Incarnate Form Thundurus*, *Reshiram*, *Zekrom*, *Litleo*, *Pancham*, *Tyrantrum*, *Bergmite*, *Avalugg*, *Hisuian Avalugg*, *Zygarde 10%*, *Zygarde 50%*, *Zygarde Complete*, *Litten*, *Torracat*, *Yungoos*, *Gumshoos*, *Grubbin*, *Charjabug*, *Vikavolt*, *Rockruff*, *Lycanroc Midday*, *Lycanroc Midnight*, *Lycanroc Dusk*, *Bruxish*, Guzzlord, *Skwovet*, *Greedent*, *Yamper*, *Boltund*, *Sizzlipede*, *Centiskorch*, *Zamazenta*, *Fuecoco*, *Crocalor*, *Skeledirge*, *Tandemaus*, *Maushold*
20% chance of opponent defense -1

◑ Brutal Swing	2s P65 E33	P55 E35

Galarian Slowbro, *Galarian Weezing*, *Ampharos*, Tyranitar, *Tropius*, **Absol**, *Salamence*, ***Conkeldurr***, *Mienshao*, **Hydreigon**, Incineroar, *Oranguru*, *Passimian*, *Turtonator*, Guzzlord, *Runerigus*

Dark Pulse	3s P80 E50	P80 E50

Arbok, *Alolan Vulpix*, *Meowth*, Alolan Meowth, Alolan Persian, *Muk*, Alolan Muk, *Gastly*, *Haunter*, ***Gengar***, *Koffing*, *Weezing*, *Mew*, Umbreon, Murkrow, *Misdreavus*, Hisuian Qwilfish, Houndour, Cacturne, Absol, *Deoxys Attack*, *Mismagius*, Honchkrow, *Dusknoir*, Darkrai, Hisuian Samurott, Purrloin, Liepard, *Yamask*, *Cofagrigus*, Zorua, *Hisuian Zorua*, *Hisuian Zoroark*, *Elgyem*, *Beheeyem*, Bisharp, Vullaby, Mandibuzz, Zweilous, Hydreigon, *Incarnate Form Tornadus*, *Pyroar*, *Furfrou*, *Clawitzer*, Yveltal, Hoopa Unbound, Incineroar, *Necrozma*, *Necrozma Dusk Mane*, *Necrozma Dawn Wings*, *Sinistea*, *Polteageist*, Impidimp, Morgrem, Grimmsnarl, Zarude, Overqwil, Lokix, Kingambit

Payback	2s P95 E100	P110 E60

Persian, Alolan Persian, ***Machamp***, Galarian Moltres, *Cacnea*, Cacturne, Absol, *Bronzor*, *Bronzong*, Liepard, *Crabrawler*, *Crabominable*, *Bewear*, *Komala*, *Rookidee*, *Corvisquire*, *Corviknight*, *Wooloo*, *Dubwool*, Single Strike Style Urshifu, Bombirdier

Darkest Lariat	2s P80 E50	P120 E60

Incineroar

Breaking Swipe	1s P45 E33	P50 E50

Onix, *Rhydon*, *Steelix*, *Sceptile*, **Rayquaza**, Garchomp, *Rhyperior*, **Haxorus**, *Heliolisk*, Dragapult, Regidrago
100% chance of opponent attack -1

Twister	3s P50 E33	P45 E45

Pidgey, *Pidgeotto*, ***Spearow***, ***Fearow***, *Gyarados*, Dratini, Bagon, Shelgon, Gible, Gabite, *Skrelp*

Dragon Claw	2s P45 E33	P80 E50

Charizard, Dragonite, *Mew*, *Sceptile*, Flygon, Latios, Altered Forme Giratina, *Archen*, *Archeops*, *Eelektross*, Axew, Fraxure, Haxorus, Druddigon, Kyurem, Tyrunt, Turtonator, Jangmo-o, Hakamo-o, Kommo-o, Guzzlord, Naganadel, Duraludon, Frigibax, Arctibax, Baxcalibur

Dragon Pulse	4s P90 E50	P90 E55

Alolan Exeggutor, *Horsea*, *Seadra*, ***Gyarados***, ***Lapras***, Dragonair, **Dragonite**, ***Ampharos***, Altaria, Shelgon, Origin Forme Giratina, Axew, Deino, Zweilous, Hydreigon, White Kyurem, Goomy, Sliggoo, Noibat, *Salandit*, *Salazzle*, Turtonator, Drampa, Jangmo-o, Hakamo-o, Naganadel, Flapple, Appletun, Drakloak, Dragapult, Eternatus, Regidrago

Dynamax Cannon	2s P215 E100	P80 E45

Eternatus
Dynamax Cannon has an Adventure Effect

Outrage	4s P110 E50	P110 E60

Kangaskhan, *Gyarados*, *Snorlax*, Dragonite, Kingdra, **Salamence**, Latias, Rayquaza, *Rampardos*, Garchomp, *Abomasnow*, *Krookodile*, Zekrom, *Incarnate Form Landorus*, Black Kyurem, Dragalge, Tyrantrum, Zygarde 10%, Zygarde 50%, Zygarde Complete, Drampa, *Necrozma*, *Necrozma Dusk Mane*, *Necrozma Dawn Wings*, Flapple, Appletun, *Morpeko*, Drakloak, Dragapult, Regidrago, *Dondozo*, Tatsugiri, Frigibax, Arctibax, Baxcalibur

Spacial Rend	2s P160 E100	P95 E50

Origin Forme Palkia
Spacial Rend has an Adventure Effect

Dragon Energy	4s P155 E50	P100 E45
Regidrago		

Draco Meteor	4s P150 E100	P150 E65
Alolan Exeggutor, **Dragonite**, Salamence, Dialga, Origin Forme Dialga, Palkia, Origin Forme Palkia, Reshiram, Kyurem, Goodra, Noivern **100% chance of attack -2**		

Roar of Time	2s P160 E100	P150 E65
Origin Forme Dialga **Roar of Time has an Adventure Effect**		

Clanging Scales	4s P120 E100	P120 E45
Kommo-o **100% chance of defense -1**		

Wildbolt Storm	2s P150 E100	P60 E45
Therian Form Thundurus **100% chance of opponent attack -1**		

Discharge	2s P65 E33	P55 E40
Pikachu, Magnemite, Magneton, Voltorb, Electrode, Jolteon, ***Porygon***, Mareep, Flaaffy, Elekid, Electrike, Plusle, Minun, Shinx, Blitzle, Zebstrika, Emolga, Joltik, Galvantula, *Klink*, Eelektrik, Stunfisk, Dedenne, Charjabug, Vikavolt, Xurkitree, Toxtricity, Pawmi, Pawmo, Pawmot, Tadbulb, Bellibolt		

Parabolic Charge	3s P70 E50	P70 E50
Helioptile, Heliolisk, Dedenne, Tadbulb, Bellibolt **66% chance of defense +1**		

Thunder Punch	2s P50 E33	P60 E40

Raichu, Alolan Raichu, *Muk*, *Hypno*, *Hitmonchan*, Electabuzz, *Dragonite*, *Typhlosion*, Pichu, Ampharos, Elekid, Pachirisu, *Rio-lu*, *Lucario*, Electivire, *Scraggy*, *Scrafty*, *Heatmor*, Incarnate Form Thundurus, *Chesnaught*, ***Goodra***, *Marshadow*, *Ursaluna*, Pawmo, Pawmot

Thunderbolt	2s P80 E50	P90 E55

Pikachu, *Nidorina*, Alolan Geodude, Alolan Graveler, Magnemite, Voltorb, Hisuian Voltorb, Electrode, *Weezing*, Electabuzz, Jolteon, Zapdos, *Mewtwo*, *Mew*, Chinchou, Lanturn, Pichu, Mareep, Flaaffy, *Girafarig*, **Elekid**, *Miltank*, Raikou, *Zigzagoon*, *Nosepass*, Electrike, Plusle, Minun, *Volbeat*, *Deoxys*, *Deoxys Defense*, *Deoxys Speed*, ***Bidoof***, Shinx, Luxio, Pachirisu, *Glameow*, ***Magmortar***, *Probopass*, Rotom, Heat Rotom, Wash Rotom, Frost Rotom, Mow Rotom, *Lillipup*, *Herdier*, Zebstrika, *Minccino*, *Cinccino*, Emolga, *Klang*, Eelektrik, Eelektross, Therian Form Thundurus, *Meowstic*, *Spritzee*, *Aromatisse*, Helioptile, Heliolisk, *Amaura*, *Aurorus*, Tapu Koko, *Meltan*, *Melmetal*, Pawmi, Pawmo, Pawmot

Thunder	4s P100 E100	P100 E60

Pikachu, **Raichu**, *Starmie*, Electabuzz, Jolteon, Zapdos, *Mew*, Lanturn, Ampharos, Raikou, *Linoone*, *Aggron*, Manectric, *Castform (Rainy)*, *Kecleon*, *Banette*, *Absol*, ***Regice***, *Latias*, *Kyogre*, Pachirisu, *Purugly*, Electivire, Rotom, Heat Rotom, Wash Rotom, Frost Rotom, Mow Rotom, *Uxie*, *Dialga*, *Origin Forme Dialga*, *Regigigas*, *Solosis*, *Duosion*, *Reuniclus*, *Ferrothorn*, Incarnate Form Thundurus, Therian Form Thundurus, *Xerneas*, Tapu Koko, Xurkitree, Yamper, Boltund, Regieleki

Volt Tackle	4s P90 E33	P90 E50

Pikachu
100% chance of defense -1

Zap Cannon	4s P140 E100	P150 E80

Magneton, **Jolteon**, *Porygon*, Zapdos, Ampharos, *Porygon2*, *Regirock*, ***Registeel***, *Deoxys Attack*, Magnezone, *Porygon-Z*, *Probopass*, *Klink*, *Klang*, *Klinklang*, Regieleki, Tadbulb, Bellibolt
33% chance of opponent attack -1

Fusion Bolt	2s P140 E100	P90 E45

Zekrom, *Black Kyurem*

Aura Wheel	2s P100 E45	P100 E45

Morpeko
100% chance of attack +1

Wild Charge	2s P90 E50	P100 E45

Pikachu, Raichu, Alolan Raichu, *Arcanine*, *Hisuian Arcanine*, Alolan Golem, ***Rapidash***, ***Galarian Rapidash***, Hisuian Electrode, *Mew*, *Hisuian Typhlosion*, *Igglybuff*, *Stantler*, ***Blissey***, Raikou, *Skitty*, *Delcatty*, Manectric, Luxio, Luxray, Magnezone, Electivire, *Stoutland*, Blitzle, *Deerling*, *Sawsbuck*, Zekrom, Togedemaru, *Wooloo*, *Dubwool*, Toxtricity, *Zacian*, *Wyrdeer*, Pawmi, Pawmo, Pawmot
100% chance of defense -2

Draining Kiss	2s P60 E50	P60 E55

Clefable, *Jynx*, Togetic, Kirlia, *Gorebyss*, *Luvdisc*, Spritzee, Aromatisse, Swirlix, Slurpuff, Sylveon, Klefki, Ribombee, *Bounsweet*, *Steenee*, *Tsareena*, Comfey, Tapu Lele

Play Rough	3s P90 E50	P90 E60

Jigglypuff, Wigglytuff, *Persian*, *Alolan Persian*, *Galarian Ponyta*, Galarian Rapidash, Galarian Weezing, Azumarill, Granbull, *Teddiursa*, *Ursaring*, *Donphan*, *Mightyena*, *Slaking*, *Delcatty*, Mawile, *Glameow*, *Purugly*, *Herdier*, *Stoutland*, *Purrloin*, *Liepard*, *Cubchoo*, *Beartic*, Slurpuff, Dedenne, Klefki, *Komala*, *Nickit*, *Thievul*, Impidimp, Morgrem, Grimmsnarl, *Perrserker*, Zacian, Crowned Sword Zacian, *Sprigatito*, *Floragato*, *Meowscarada*, *Tandemaus*, *Maushold*, Fidough, Dachsbun, Tinkatink, Tinkatuff, Tinkaton

Disarming Voice	4s P70 E33	P70 E45

Clefairy, Jigglypuff, Wigglytuff, *Pichu*, Ralts, Kirlia, *Whismur*, *Loudred*, *Exploud*, *Skitty*, *Delcatty*, *Swablu*, *Audino*, Florges, *Brionne*, Primarina, *Fuecoco*, *Crocalor*, *Skeledirge*

Nature's Madness	2s P90 E55	P80 E50

Tapu Koko, **Tapu Lele**, **Tapu Bulu**, **Tapu Fini**
100% chance of opponent defense -1

Dazzling Gleam	4s P100 E50	P90 E55

Clefable, Alolan Ninetales, Jigglypuff, Wigglytuff, *Kadabra*, ***Alakazam***, *Chansey*, *Mew*, Togepi, Togetic, *Bellossom*, *Hoppip*, *Skiploom*, *Jumpluff*, Snubbull, *Blissey*, *Celebi*, Gardevoir, *Sableye*, *Illumise*, *Roselia*, *Altaria*, *Banette*, *Jirachi*, *Roserade*, *Cherubi*, *Cherrim (Sunny Form)*, *Cherrim (Overcast Form)*, *Mismagius*, Togekiss, *Munna*, *Musharna*, *Audino*, *Hisuian Braviary*, Flabébé, Floette, Sylveon, Cutiefly, Ribombee, Morelull, Tapu Koko, Tapu Bulu, *Xurkitree*, *Hatenna*, *Hattrem*, Hatterene, Incarnate Form Enamorus, *Gholdengo*

Moonblast	4s P130 E100	P110 E60

Clefairy, Clefable, *Oddish*, *Gloom*, *Vileplume*, ***Altaria***, *Lunatone*, *Cresselia*, Whimsicott, Florges, Aromatisse, Sylveon, Carbink, Xerneas, Diancie, Primarina, Shiinotic, Tapu Lele, Tapu Fini, *Lunala*, *Zamazenta*, *Crowned Shield Zamazenta*
10% chance of opponent attack -1

Drain Punch	2s P50 E33	P20 E40

Slowbro, *Galarian Slowbro*, *Gengar*, *Quagsire*, *Sableye*, Toxicroak, Mienfoo, Mienshao, *Incineroar*, **Bewear**, Passimian
100% chance of defense +1

Power-Up Punch	2s P50 E33	P20 E35

Poliwrath, Hitmonchan, *Kangaskhan*, *Mawile*, Medicham, Lucario, Scrafty, *Heatmor*, Hawlucha, Crabrawler, Crabominable, Buzzwole, *Toxel*, *Toxtricity*, *Grimmsnarl*
100% chance of attack +1

Brick Break	2s P40 E33	P40 E40

Raichu, Mankey, Machop, Machoke, Galarian Farfetch'd, **Hitmonlee**, **Hitmonchan**, ***Kangaskhan***, *Sentret*, *Furret*, *Snubbull*, Tyrogue, *Elekid*, *Magby*, *Slakoth*, *Vigoroth*, *Cacnea*, Riolu, Croagunk, *Magmortar*, Timburr, Gurdurr, Throh, Sawk, *Krookodile*, Scraggy, Mienfoo, Mienshao, *Golett*, *Incarnate Form Thundurus*, *Skiddo*, *Gogoat*, Crabrawler, Crabominable, Stufful, Passimian, *Jangmo-o*, Hakamo-o, Kommo-o, Falinks, Kubfu, Single Strike Style Urshifu, Rapid Strike Style Urshifu, **Pawmot**
100% chance of opponent defense -1

Low Sweep	2s P40 E33	P40 E40

Mankey, Primeape, Machop, Hitmonlee, *Mew*, *Aipom*, Tyrogue, Makuhita, Meditite, Monferno, *Ambipom*, Riolu, Croagunk, Timburr, Gurdurr, Throh, Sawk, Mienfoo, Pancham, Annihilape

Submission 2s P55 E50 P60 E50

Poliwrath, Machoke, **Machamp**, ***Pinsir***

Cross Chop 2s P50 E50 P55 E35

Psyduck, *Golduck*, Mankey, **Primeape**, Machop, **Machoke**, Machamp, *Teddiursa*, Makuhita, Riolu, *Binacle*, *Barbaracle*, *Obstagoon*

Sacred Sword 1s P50 E33 P60 E35

Cobalion, **Terrakion**, **Virizion**, Keldeo

Upper Hand 2s P50 E33 P70 E40

Heracross, Makuhita, Hariyama, Scraggy, Scrafty, Kommo-o
30% chance of opponent defense -1

Aura Sphere 2s P100 E50 P80 E40

Raikou, *Celebi*, *Latias*, *Latios*, *Jirachi*, Lucario, ***Togekiss***, Hisuian Decidueye

Dynamic Punch 2s P85 E50 P90 E45

Poliwrath, Machoke, Machamp, *Armored Mewtwo*, *Ledian*, Breloom, Hariyama, Medicham, *Grumpig*, *Cacturne*, Toxicroak, *Dusknoir*, Conkeldurr, *Golurk*, Kubfu, Single Strike Style Urshifu, Rapid Strike Style Urshifu

Focus Blast 4s P140 E100 P150 E75

Alakazam, *Galarian Slowbro*, *Gengar*, *Hypno*, *Jynx*, *Mewtwo*, *Mew*, *Ampharos*, Blaziken, *Regirock*, *Regice*, *Registeel*, *Lopunny*, *Weavile*, *Regigigas*, *Darkrai*, *Victini*, Emboar, Conkeldurr, Throh, Sawk, *Darmanitan*, *Accelgor*, Mienfoo, *Bisharp*, *Therian Form Tornadus*, *Therian Form Thundurus*, *Incarnate Form Landorus*, *White Kyurem*, *Dragalge*, *Yveltal*, *Tapu Lele*, Pheromosa, *Cinderace*, *Kingambit*, *Gholdengo*

High Jump Kick 2s P90 E100 P110 E55

Mienfoo, ***Tsareena***
10% chance of defense -4

Superpower 3s P85 E50 P85 E40

Pinsir, ***Flareon***, *Snorlax*, *Dragonite*, Hariyama, ***Bidoof***, *Rhyperior*, *Gigalith*, *Galarian Darmanitan*, *Therian Form Landorus*, Chesnaught, *Malamar*, *Lurantis*, Stufful, Bewear, Passimian, Buzzwole, *Melmetal*, Falinks
100% chance of attack -1
100% chance of defense -1

Close Combat 2s P105 E100 P100 E45

Primeape, Machamp, Hitmonlee, Hitmonchan, *Pinsir*, Paldean Combat Tauros, Galarian Zapdos, *Granbull*, Heracross, Hisuian Sneasel, *Ursaring*, Hitmontop, Hariyama, *Zangoose*, Infernape, *Staraptor*, Lucario, Gallade, *Braviary*, Cobalion, Terrakion, Virizion, Keldeo, *Aria Forme Meloetta*, Pangoro, *Xerneas*, Passimian, Kommo-o, Pheromosa, Marshadow, *Perrserker*, Sirfetch'd, *Zacian*, *Crowned Sword Zacian*, Zamazenta, Crowned Shield Zamazenta, Kubfu, Single Strike Style Urshifu, Rapid Strike Style Urshifu, Sneasler, Quaquaval, Pawmot, Annihilape
100% chance of defense -2

Flying Press 2s P115 E50 P90 E40

Hawlucha

🔥Heat Wave	3s P95 E100	P95 E75

Ninetales, Rapidash, **Flareon**, Moltres, Magcargo, Numel, *Staravia*, *Staraptor*, *Chatot*, Emboar, *Pidove*, *Tranquill*, *Unfezant*, Litwick, Lampent, *Braviary*, *Therian Form Tornadus*, *Fletchling*, Fletchinder, *Noibat*, *Noivern*, Sizzlipede, Centiskorch, Charcadet, Armarouge, Ceruledge

🔥Flame Burst	2s P70 E50	P70 E55

Charmander, Charmeleon, Slugma, Magby, *Manectric*, Pansear, Litwick, Lampent

🔥Flame Charge	4s P70 E33	P65 E50

Charmander, Vulpix, Ponyta, Rapidash, Paldean Blaze Tauros, *Mew*, Cyndaquil, Quilava, Slugma, Entei, Torchic, Combusken, Chimchar, Tepig, Pignite, Emboar, Pansear, *Blitzle*, *Zebstrika*, Darumaka, Litwick, Chandelure, Larvesta, Fennekin, Braixen, Delphox, Fletchinder, Talonflame, Litleo, Pyroar, Litten, Torracat, Incineroar, Scorbunny, Raboot, Cinderace, Charcadet, Armarouge, Ceruledge
100% chance of attack +1

🔥Mystical Fire	2s P60 E33	P60 E45

Drifblim, Litwick, Delphox, Blacephalon
100% chance of opponent attack -1

🔥Fire Punch	2s P50 E33	P60 E40

Charmeleon, *Alakazam*, *Hypno*, *Hitmonchan*, Magmar, Hisuian Typhlosion, Magby, *Dusclops*, ***Groudon***, *Buneary*, *Lopunny*, Magmortar, Darumaka, *Aria Forme Meloetta*, *Diggersby*, *Marshadow*, *Ursaluna*

🔥Blaze Kick	1s P40 E33	P60 E40

Hitmonlee, Blaziken, *Riolu*, *Lucario*, *Mienshao*, Incineroar

🔥Torch Song	4s P100 E50	P70 E45
Skeledirge **100% chance of attack +1**		

🔥Magma Storm	2s P75 E33	P65 E40
Heatran		

🔥Flamethrower	2s P65 E50	P90 E55
Charmander, Charmeleon, **Charizard**, Vulpix, **Ninetales**, Growlithe, Hisuian Growlithe, Arcanine, Hisuian Arcanine, Magmar, Flareon, *Mewtwo*, Cyndaquil, Quilava, Houndour, Houndoom, **Magby**, Entei, Torchic, Combusken, *Whismur*, *Loudred*, *Altaria*, *Kecleon*, *Bagon*, *Shelgon*, Chimchar, Monferno, Infernape, *Rampardos*, *Bastiodon*, *Stunky*, *Skuntank*, *Gabite*, ***Electivire***, *Togekiss*, Heatran, Tepig, Pignite, Simisear, *Zoroark*, Heatmor, Fennekin, Braixen, Delphox, Litleo, *Slurpuff*, Litten, Torracat, Salandit, Turtonator, *Kommo-o*, *Solgaleo*, Scorbunny, Raboot, Cinderace, *Eternatus*, Fuecoco, Crocalor, Skeledirge, Charcadet, Armarouge, Ceruledge		

🔥Weather Ball (Fire)	2s P60 E33	P60 E35
Vulpix, Ninetales, Castform (Sunny), ***Roserade***, *Cherrim (Sunny Form)*		

🔥Fire Blast	4s P140 E100	P140 E80
Charizard, **Ninetales**, Arcanine, **Ponyta**, Rapidash, Alolan Marowak, Magmar, Flareon, Moltres, Typhlosion, *Slowking*, Houndoom, Entei, *Tyranitar*, Ho-Oh, *Exploud*, Castform (Sunny), *Salamence*, *Groudon*, *Garchomp*, Magmortar, *Azelf*, *Palkia*, *Origin Forme Palkia*, Heatran, Simisear, Delphox, Talonflame, *Gourgeist*, *Gourgeist Small*, *Gourgeist Large*, *Gourgeist Super*, Incineroar, Salazzle		

Flame Wheel	2s P55 E50	P80 E45
Growlithe, Ponyta, Alolan Marowak, Torkoal, Chimchar, Monferno, Larvesta		

Fusion Flare	2s P140 E100	P90 E45
Reshiram, *White Kyurem*		

Sacred Fire	2s P120 E100	P130 E65
Ho-Oh **50% chance of opponent attack -1**		

Blast Burn	4s P120 E50	P110 E50
Charizard, Typhlosion, Blaziken, Infernape, Emboar, Delphox, Incineroar, Skeledirge		

Overheat	4s P160 E100	P130 E55
Charizard, Ninetales, *Galarian Weezing*, Flareon, Moltres, *Mew*, Typhlosion, Hisuian Typhlosion, Magcargo, Entei, Blaziken, *Manectric*, Camerupt, Torkoal, Heat Rotom, Victini, Darmanitan, *Galarian Darmanitan*, Chandelure, Volcarona, Reshiram, Pyroar, Volcanion, Turtonator, Blacephalon, *Revavroom* **100% chance of attack -2**		

V-Create	3s P105 E33	P95 E40
Victini **100% chance of defense -3**		

Feather Dance	3s P35 E50	P35 E50
Pidgeot **100% chance of opponent attack -2**		

Air Cutter	2s P55 E50	P45 E35

Charizard, Pidgey, Pidgeotto, **Pidgeot**, Zubat, Golbat, Farfetch'd, **Dodrio**, Crobat, Beautifly, Wingull, Masquerain, Pidove, Woobat, Sigilyph, Noibat, Oricorio (Baile), Oricorio (Pom-Pom), Oricorio (Pa'u), Oricorio (Sensu)
30% chance of attack +1

Aerial Ace	2s P55 E33	P60 E45

Beedrill, Pidgey, Pidgeotto, Pidgeot, Spearow, Fearow, *Alolan Sandslash*, Farfetch'd, Doduo, Dodrio, Scyther, Hoothoot, Ledyba, Ledian, Togetic, Xatu, Jumpluff, *Aipom*, Yanma, Gligar, *Hisuian Sneasel*, Delibird, Mantine, *Treecko*, *Grovyle*, *Sceptile*, Taillow, Swellow, *Nincada*, Ninjask, *Shedinja*, Swablu, *Kecleon*, Tropius, Rayquaza, Starly, Staravia, *Kricketune*, Mothim, *Ambipom*, *Glameow*, *Purugly*, Mantyke, Togekiss, Yanmega, Gliscor, *Serperior*, Pidove, Tranquill, Woobat, Swoobat, *Maractus*, *Zorua*, Ducklett, Emolga, *Karrablast*, *Escavalier*, Rufflet, Mandibuzz, *Froakie*, *Frogadier*, *Greninja*, Fletchling, Fletchinder, Vivillon, Hawlucha, *Hisuian Decidueye*, Pikipek, Oricorio (Baile), Oricorio (Pom-Pom), Oricorio (Pa'u), Oricorio (Sensu), *Golisopod*, *Kartana*, *Ursaluna*, *Sneasler*, *Quaxly*, *Quaxwell*, *Quaquaval*, Bombirdier

Bleakwind Storm	2s P150 E100	P60 E45

Therian Form Tornadus
100% chance of opponent attack -1

Sky Attack	2s P80 E50	P75 E50

Spearow, Fearow, **Moltres**, Hoothoot, Noctowl, Skarmory, Lugia, Swellow, Altaria, Honchkrow, Chatot, Tranquill, Unfezant, Pikipek, Trumbeak, Rookidee, Corvisquire, Corviknight

Hurricane	2s P105 E100	P110 E65

Pidgeot, **Articuno**, Dragonite, *Shiftry*, Pelipper, *Castform*, **Rayquaza**, *Whimsicott*, Swanna, *Volcarona*, Incarnate Form Tornadus, Therian Form Tornadus, Talonflame, Vivillon, Noivern, Yveltal, Oricorio (Baile), Oricorio (Pom-Pom), Oricorio (Pa'u), Oricorio (Sensu), *Frosmoth*

Oblivion Wing	2s P85 E50	P85 E50

Yveltal

Drill Peck	2s P70 E33	P70 E40

Spearow, Fearow, Doduo, Dodrio, Zapdos, Natu, Murkrow, *Piplup*, *Empoleon*, Pikipek, Trumbeak, Toucannon

Fly	2s P90 E50	P80 E45

Fearow, Galarian Articuno, Galarian Zapdos, Galarian Moltres, Delibird, Lugia, Salamence, Starly, Staravia, Staraptor, Swoobat, Swanna, Rufflet, Braviary, Hisuian Braviary, Fletchling, Fletchinder, Talonflame, *Vikavolt*, *Drampa*, *Flapple*, Incarnate Form Enamorus, Bombirdier

Acrobatics	2s P100 E100	P110 E55

Jumpluff, Emolga, *Naganadel*
12.5% chance of attack +2

Dragon Ascent	4s P140 E50	P150 E70

Rayquaza
100% chance of defense -1

Aeroblast	4s P200 E100	P170 E75

Lugia

Brave Bird	2s P130 E100	P130 E55

Pidgeot, *Galarian Farfetch'd*, Doduo, Dodrio, Galarian Articuno, Galarian Zapdos, Galarian Moltres, Skarmory, Ho-Oh, *Blaziken*, Swellow, Starly, Staravia, Staraptor, Honchkrow, Ducklett, Rufflet, Braviary, Hisuian Braviary, Vullaby, Talonflame, Dartrix, *Decidueye*, *Tapu Koko*, *Sirfetch'd*
100% chance of defense -3

Ominous Wind	2s P55 E33	P45 E45

Golbat, **Gastly**, *Xatu*, Misdreavus, *Masquerain*, Shuppet, Duskull, Drifloon, Drifblim, Spiritomb, Dusknoir, Rotom, *Mow Rotom*, Origin Forme Giratina, Yamask, Frillish, *Hisuian Braviary*
10% chance of attack +1
10% chance of defense +1

Shadow Sneak	3s P50 E33	P50 E45

Ariados, Misdreavus, *Ralts*, *Kirlia*, Shedinja, Sableye, *Kecleon*, Shuppet, Duskull, Spiritomb, Altered Forme Giratina, Pumpkaboo, Pumpkaboo Small, Pumpkaboo Large, Pumpkaboo Super, Decidueye

Spirit Shackle	2s P70 E33	P50 E40

Decidueye
33% chance of opponent defense -1

Shadow Force	-2s P140 E100	P120 E90

Altered Forme Giratina, Origin Forme Giratina

Rage Fist	3s P100 E50	P50 E35

Primeape, **Annihilape**
100% chance of attack +1

Shadow Punch	2s P35 E33	P55 E35

Haunter, **Gengar**, Dusclops, Dusknoir, Golett, Golurk, Gourgeist, Gourgeist Small, Gourgeist Large, Gourgeist Super

Night Shade	2s P60 E50	P80 E45

Gastly, Hisuian Typhlosion, *Hoothoot*, *Noctowl*, *Natu*, Galarian Corsola, Shuppet, Duskull, *Chatot*, Galarian Yamask, *Zorua*, Hisuian Zorua, *Zoroark*, Hisuian Zoroark, *Solosis*, *Duosion*, Frillish, Golett, *Hisuian Decidueye*, Cursola
12.5% chance of attack +2

Shadow Bone	3s P85 E50	P80 E45

Alolan Marowak
20% chance of opponent defense -1

Shadow Ball	3s P100 E50	P100 E55

Alolan Rattata, *Golbat*, *Abra*, *Kadabra*, *Alakazam*, Haunter, Gengar, *Hypno*, Alolan Marowak, *Weezing*, *Mr. Mime*, ***Mewtwo***, Hisuian Typhlosion, *Noctowl*, *Crobat*, *Igglybuff*, ***Espeon***, *Galarian Slowking*, *Hisuian Qwilfish*, *Raikou*, *Gardevoir*, *Ninjask*, *Spoink*, *Grumpig*, *Claydol*, Banette, *Chimecho*, *Snorunt*, *Glalie*, ***Bidoof***, Drifloon, Drifblim, Mismagius, *Chingling*, Spiritomb, *Lucario*, *Toxicroak*, *Lickilicky*, **Dusknoir**, Froslass, Origin Forme Giratina, *Darkrai*, Yamask, Cofagrigus, Hisuian Zorua, Hisuian Zoroark, *Reuniclus*, Jellicent, Chandelure, *Mandibuzz*, Aegislash, Phantump, Trevenant, Hoopa Confined, *Hoopa Unbound*, Sandygast, Palossand, Dhelmise, Lunala, Blacephalon, *Inteleon*, Sinistea, Polteageist, Cursola, Runerigus, *Indeedee*, Drakloak, Dragapult, *Overqwil*, Skeledirge, Ceruledge, Greavard, Houndstone, Annihilape, Gimmighoul, Gholdengo

Poltergeist	4s P140 E100	P150 E75

Dusclops, Dusknoir, **Chandelure**, Golurk, Gourgeist, Gourgeist Small, Gourgeist Large, Gourgeist Super

Moongeist Beam	3s P230 E100	P135 E65

Necrozma Dawn Wings
Moongeist Beam has an Adventure Effect

Flower Trick	2s P75 E33	P30 E35

Meowscarada
100% chance of attack +1

Leaf Tornado	3s P45 E33	P45 E40

Victreebel, Shiftry, Servine, Serperior
50% chance of opponent attack -2

Seed Bomb	2s P55 E33	P55 E40

Bulbasaur, Oddish, Paras, Weepinbell, Exeggcute, Exeggutor, Alolan Exeggutor, Hoppip, Sunkern, Celebi, Shroomish, Breloom, Cacnea, Turtwig, Cherubi, Snivy, Pansage, Sewaddle, Cottonee, Whimsicott, Petilil, *Trubbish*, *Garbodor*, Deerling, Chespin, Skiddo, Gogoat, Phantump, Trevenant, Gourgeist, Gourgeist Small, Gourgeist Large, Gourgeist Super, Rowlet, Dartrix, Morelull, Shiinotic, Flapple, Appletun, *Morpeko*, Smoliv, Dolliv, Arboliva, Toedscool, Toedscruel

Trailblaze	2s P65 E50	P65 E45

Raichu, *Alolan Raichu*, *Alolan Meowth*, *Galarian Meowth*, *Alolan Persian*, *Dodrio*, *Scyther*, *Tauros*, *Paldean Combat Tauros*, *Paldean Blaze Tauros*, *Paldean Aqua Tauros*, *Furret*, *Ariados*, *Mareep*, *Flaaffy*, *Ampharos*, *Sudowoodo*, *Girafarig*, *Scizor*, *Teddiursa*, *Ursaring*, *Phanpy*, *Donphan*, Cacnea, Cacturne, *Stunky*, *Skuntank*, Deerling, Sawsbuck, *Florges*, Hisuian Decidueye, *Rockruff*, *Lycanroc Midday*, *Lycanroc Midnight*, *Lycanroc Dusk*, Fomantis, Lurantis, *Oranguru*, *Skwovet*, *Greedent*, *Perrserker*, *Kleavor*, *Ursaluna*, *Lechonk*, *Male Oinkologne*, *Female Oinkologne*, *Nymble*, *Lokix*, Smoliv, Dolliv, Arboliva
100% chance of attack +1

Energy Ball	4s P90 E50	P90 E55

Hisuian Voltorb, Hisuian Electrode, *Mew*, Chikorita, Bayleef, Skiploom, Jumpluff, Sunkern, Treecko, Lotad, Ludicolo, Seedot, Shroomish, *Castform*, *Chimecho*, Turtwig, Grotle, Budew, Plant Wormadam, Carnivine, Snover, Abomasnow, Leafeon, Shaymin, Sky Shaymin, Snivy, Pansage, Sewaddle, Swadloon, Cottonee, Petilil, Deerling, Foongus, *Galvantula*, *Lampent*, *Chandelure*, ***Accelgor***, Quilladin, Chesnaught, *Vivillon*, *Espurr*, *Meowstic*, *Swirlix*, *Slurpuff*, Rowlet, Dartrix, Decidueye, Hisuian Decidueye, Fomantis, Bounsweet, Steenee, Tsareena, Grookey, Thwackey, Rillaboom, Gossifleur, Eldegoss, Appletun, Zarude, Sprigatito, Floragato, Meowscarada, Smoliv, Dolliv, Arboliva
10% chance of opponent defense -1

Petal Blizzard	2s P110 E100	P110 E65

Venusaur, Gloom, Vileplume, Meganium, Bellossom, Sunflora, Roselia, Cherubi, Lilligant, Hisuian Lilligant, Maractus, *Flabébé*, *Floette*, *Florges*, *Comfey*

Seed Flare	2s P115 E100	P130 E75

Shaymin, Sky Shaymin
40% chance of opponent defense -2

Grass Knot	2s P90 E50	P90 E50

Alolan Raichu, Tangela, *Mew*, Chikorita, Bayleef, *Sentret*, *Cleffa*, Hoppip, Skiploom, Sunkern, Treecko, Grovyle, *Zigzagoon*, *Linoone*, Lombre, Seedot, Nuzleaf, Shroomish, **Breloom**, *Plusle*, *Minun*, Cacnea, Cacturne, Lileep, Cradily, *Bidoof*, Budew, Roserade, ***Cresselia***, Shaymin, Sky Shaymin, Servine, Serperior, *Patrat*, *Watchog*, Simisage, Cottonee, Whimsicott, Foongus, Amoonguss, *Mienshao*, *Incarnate Form Tornadus*, *Furfrou*, *Barbaracle*, *Heliolisk*, Pumpkaboo, Pumpkaboo Small, Pumpkaboo Large, Pumpkaboo Super, Fomantis, Steenee, Tsareena, *Comfey*, Tapu Bulu, Grookey, Thwackey, Rillaboom, Gossifleur, Eldegoss, *Incarnate Form Enamorus*, Sprigatito, Floragato, Meowscarada, *Tarountula*, *Spidops*

Power Whip	2s P90 E50	P90 E50

Bulbasaur, Ivysaur, Bellsprout, Weepinbell, *Lickitung*, **Tangela**, Carnivine, Tangrowth, Ferrothorn, *Goodra*, Dhelmise, *Xurkitree*, *Hatterene*, Zarude

Solar Beam	5s P180 E100	P150 E80

Ivysaur, Venusaur, *Ninetales*, Vileplume, Parasect, Victreebel, Exeggutor, Alolan Exeggutor, Tangela, *Porygon*, *Mew*, Meganium, *Typhlosion*, Jumpluff, Sunflora, *Porygon2*, *Ho-Oh*, Ludicolo, *Camerupt*, *Torkoal*, *Solrock*, *Castform (Sunny)*, *Latios*, *Groudon*, Grotle, Torterra, *Infernape*, Roserade, Cherrim (Sunny Form), Cherrim (Overcast Form), *Lickilicky*, Tangrowth, Leafeon, *Porygon-Z*, Shaymin, Sky Shaymin, Simisage, *Gigalith*, Lilligant, Hisuian Lilligant, Maractus, Sawsbuck, *Cryogonal*, *Volcarona*, Chesnaught, *Pyroar*, Tapu Bulu, *Solgaleo*

Leaf Blade	2s P70 E33	P70 E35

Victreebel, *Farfetch'd*, *Galarian Farfetch'd*, Bellossom, Grovyle, Sceptile, Nuzleaf, Shiftry, Tropius, Leafeon, *Gallade*, Leavanny, Virizion, Gogoat, Fomantis, Lurantis, Kartana, *Sirfetch'd*

Frenzy Plant	2s P100 E50	P100 E45

Venusaur, **Meganium**, **Sceptile**, **Torterra**, **Serperior**, **Chesnaught**, **Decidueye**, **Meowscarada**

Leaf Storm	2s P130 E100	P130 E55

Sunflora, Celebi, Ludicolo, Roserade, Leavanny, Lurantis
100% chance of attack -2

Sand Tomb	4s P60 E33	P25 E40

Sandshrew, Nidoking, Onix, *Pineco*, *Forretress*, Trapinch, Vibrava, Flygon, Torterra, Garchomp, Gliscor, Krookodile, Sandygast, Palossand, Runerigus
100% chance of opponent defense -1

Bulldoze	4s P80 E50	P45 E45

Sandslash, *Alolan Sandslash*, ***Arcanine***, Cubone, Rhyhorn, *Mew*, Piloswine, Phanpy, *Vigoroth*, Numel, Vibrava, *Cradily*, *Cranidos*, Sandy Wormadam, *Bronzong*, *Munchlax*, Mamoswine, *Roggenrola*, *Boldore*, Sandile, Krokorok, Therian Form Landorus, *Bunnelby*, *Helioptile*, *Heliolisk*, Zygarde 10%, Zygarde 50%, Zygarde Complete, Mudbray, Mudsdale, *Komala*, *Celesteela*, *Stakataka*, *Tinkaton*
50% chance of opponent defense -1

Sandsear Storm	2s P150 E100	P60 E45

Therian Form Landorus
100% chance of opponent attack -1

Dig	4s P100 E50	P70 E50

Rattata, *Raticate*, Sandshrew, *Nidorina*, *Nidorino*, Diglett, Alolan Diglett, *Galarian Meowth*, Geodude, Graveler, Cubone, Marowak, *Eevee*, *Quilava*, *Sentret*, *Furret*, Wooper, Paldean Wooper, *Dunsparce*, Gligar, Pupitar, *Mudkip*, *Poochyena*, *Zigzagoon*, *Galarian Zigzagoon*, *Linoone*, *Galarian Linoone*, *Shedinja*, *Skitty*, *Spinda*, Trapinch, *Zangoose*, Baltoy, Gible, Gabite, Hippopotas, *Patrat*, *Lillipup*, *Herdier*, Drilbur, Sandile, *Bunnelby*, Diggersby, *Binacle*, *Lechonk*, *Male Oinkologne*, *Female Oinkologne*, *Wiglett*, *Wugtrio*, *Greavard*, *Houndstone*

Mud Bomb	2s P60 E33	P60 E40

Diglett, Alolan Diglett, Dugtrio, Alolan Dugtrio, *Poliwag*, *Poliwhirl*, *Grimer*, Wooper, Quagsire, Marshtomp, Barboach, Whiscash, *Shellos*, *Toxicroak*, *Tympole*, Stunfisk

Bone Club	2s P40 E33	P55 E35

Cubone, Marowak, *Alolan Marowak*

Scorching Sands	3s P90 E50	P80 E50

Sandslash, *Ninetales*, *Arcanine*, *Rapidash*, *Magmar*, *Entei*, Trapinch, Vibrava, Flygon, Claydol, Hippowdon, *Magmortar*, Excadrill, Diggersby, Sandygast, Palossand
10% chance of opponent attack -1

Earth Power	4s P100 E50	P90 E55

Nidoqueen, Nidoking, *Aerodactyl*, Camerupt, **Flygon**, Claydol, Gastrodon, **Garchomp**, Hippowdon, *Heatran*, Palpitoad, Seismitoad, Golurk, Incarnate Form Landorus, *Volcanion*, Sandygast, Palossand, *Rillaboom*, *Smoliv*, *Dolliv*, *Arboliva*, Toedscool, Toedscruel
10% chance of opponent defense -1

High Horsepower	2s P105 E100	P100 E60

Galarian Rapidash, Piloswine, Mamoswine, **Ursaluna**

Earthquake	4s P140 E100	P110 E65

Sandslash, Nidoqueen, Nidoking, Dugtrio, Alolan Dugtrio, Golem, Marowak, Rhydon, *Kangaskhan*, *Tauros*, *Paldean Combat Tauros*, *Paldean Blaze Tauros*, *Paldean Aqua Tauros*, *Snorlax*, *Armored Mewtwo*, *Meganium*, *Sudowoodo*, ***Politoed***, Quagsire, *Forretress*, Steelix, *Heracross*, Donphan, ***Ho-Oh***, *Sceptile*, Swampert, *Slaking*, Camerupt, *Torkoal*, Flygon, Claydol, *Walrein*, *Metagross*, ***Regirock***, *Regice*, Groudon, Torterra, Gastrodon, *Bonsly*, Garchomp, Hippowdon, *Lickilicky*, Rhyperior, Gliscor, Excadrill, Krokorok, Krookodile, *Haxorus*, Galarian Stunfisk, *Bouffalant*, *Terrakion*, Therian Form Landorus, *Bunnelby*, Diggersby, *Tyrantrum*, *Avalugg*, Zygarde 10%, Zygarde 50%, Zygarde Complete, Mudbray, Mudsdale, Clodsire

Drill Run	3s P85 E50	P80 E45

Beedrill, *Fearow*, *Alolan Sandslash*, *Rapidash*, *Dewgong*, ***Seaking***, *Dunsparce*, Drilbur, Excadrill, *Karrablast*, *Escavalier*, *Lycanroc Midday*

Precipice Blades	2s P120 E100	P130 E60

Groudon

Aurora Beam	4s P80 E50	P80 E60

Seel, Dewgong, Cloyster, *Seadra*, *Remoraid*, *Octillery*, Spheal, Sealeo, *Cresselia*, Cryogonal, Amaura

Icy Wind	4s P65 E33	P60 E45

Wigglytuff, *Poliwrath*, *Seel*, **Dewgong**, *Shellder*, Cloyster, ***Seaking***, Articuno, Swinub, Delibird, *Spinda*, Snorunt, *Piplup*, *Prinplup*, *Drifloon*, *Drifblim*, Abomasnow, Glaceon, *Hisuian Samurott*, Vanillite, Vanillish, Cubchoo, Bergmite, Avalugg, Hisuian Avalugg, Mr. Rime, Snom, Frosmoth, Frigibax, Arctibax, Baxcalibur
100% chance of opponent attack -1

Triple Axel	2s P60 E33	P60 E45

Galarian Mr. Mime, Articuno, Sneasel, Delibird, *Hitmontop*, *Kirlia*, *Gardevoir*, *Lopunny*, Weavile, Froslass, Cryogonal, *Steenee*, *Tsareena*, Mr. Rime
100% chance of attack +1

Glaciate	2s P160 E100	P60 E40

Kyurem
100% chance of opponent attack -1

Ice Punch	2s P50 E33	P60 E40

Alolan Sandslash, *Primeape*, *Poliwrath*, *Haunter*, *Hypno*, *Hitmonchan*, Galarian Mr. Mime, **Jynx**, *Croconaw*, Sneasel, Delibird, Smoochum, *Meditite*, *Medicham*, *Dusclops*, *Electivire*, Galarian Darumaka, Galarian Darmanitan, Cubchoo, Beartic, *Aria Forme Meloetta*, Crabominable, *Marshadow*, Mr. Rime, *Ursaluna*, *Annihilape*

Icicle Spear	2s P55 E33	P65 E40

Piloswine, **Walrein**, Mamoswine

Ice Beam	4s P95 E50	P90 E55

Wartortle, *Blastoise*, *Nidorino*, Alolan Vulpix, Alolan Ninetales, *Wigglytuff*, *Golduck*, *Slowbro*, *Seaking*, *Starmie*, **Lapras**, Articuno, *Mewtwo*, *Mew*, *Feraligatr*, *Azumarill*, ***Politoed***, *Qwilfish*, *Hisuian Qwilfish*, *Mantine*, Smoochum, *Miltank*, *Suicune*, *Lombre*, *Ludicolo*, *Wingull*, *Azurill*, *Gulpin*, *Swalot*, *Swablu*, *Barboach*, *Claydol*, Castform (Snowy), *Kecleon*, *Clamperl*, *Huntail*, ***Bidoof***, *Finneon*, *Mantyke*, Snover, Glaceon, Galarian Darumaka, *Swanna*, Vanillite, Vanillish, *Frillish*, *Jellicent*, *Clawitzer*, *Tapu Fini*, Frosmoth, *Overqwil*

Weather Ball (Ice)	2s P60 E33	P60 E35

Alolan Vulpix, Alolan Ninetales, Castform (Snowy), Abomasnow, Amaura, Aurorus

Blizzard	3s P130 E100	P140 E75

Alolan Sandshrew, Alolan Sandslash, Alolan Vulpix, Alolan Ninetales, *Tentacruel*, Dewgong, **Cloyster**, ***Seadra***, Lapras, Articuno, *Mew*, *Politoed*, *Slowking*, *Kingdra*, *Ludicolo*, *Pelipper*, *Wailord*, *Whiscash*, *Milotic*, Castform (Snowy), Walrein, Regice, *Kyogre*, *Empoleon*, *Lumineon*, Abomasnow, *Porygon-Z*, Frost Rotom, *Mesprit*, *Samurott*, Vanilluxe, *Alomomola*, Kyurem, White Kyurem, Black Kyurem, Aurorus, Hisuian Avalugg, Baxcalibur

Avalanche	2s P85 E50	P90 E45

Cloyster, Jynx, Sneasel, Piloswine, Snorunt, Glalie, Weavile, Glaceon, Mamoswine, Froslass, Galarian Darmanitan, **Vanilluxe**, Avalugg, Cetoddle, Cetitan, Frigibax, Arctibax, Baxcalibur

Freeze Shock	2s P160 E100	P120 E60

Black Kyurem
30% chance of opponent attack -1
Freeze Shock has an Adventure Effect

Ice Burn	2s P90 E50	P120 E60

White Kyurem
30% chance of opponent defense -1
Ice Burn has an Adventure Effect

Frustration	2s P10 E33	P10 E70

All Shadow Pokémon know Frustration (and only Frustration) when captured. It cannot generally be replaced using a Charged TM, though this is not true during certain events. Purifying the Shadow Pokémon replaces this attack with Return.

Struggle	2s P35 E0	P35 E100

Caterpie, *Metapod*, *Weedle*, *Kakuna*, *Magikarp*, Ditto, *Unown*, Smeargle, *Wurmple*, *Silcoon*, *Cascoon*, *Kricketot*, *Burmy*, *Tynamo*, *Scatterbug*, *Spewpa*, *Cosmog*, *Cosmoem*, *Applin*, *Dreepy*

Vise Grip	2s P35 E33	P40 E40

Krabby, *Kingler*, *Pinsir*, *Mawile*, *Corphish*, *Crawdaunt*, *Klink*, *Klang*, *Grubbin*

Horn Attack	2s P45 E33	P40 E35

Nidoran♂, *Nidorino*, *Rhyhorn*, *Goldeen*, Tauros, *Paldean Aqua Tauros*

Tri Attack	2s P75 E50	P65 E50

Porygon2, **Porygon-Z**
50% chance of opponent attack -1
50% chance of opponent defense -1

Wrap	3s P25 E33	P60 E45

Ekans, *Bellsprout*, *Tentacool*, Lickitung, *Dratini*, *Dragonair*, *Seviper*, *Milotic*, *Chingling*, *Snivy*, *Servine*, *Dhelmise*, *Toedscool*
100% chance of defense +1

Stomp	2s P50 E50	P55 E40

Ponyta, ***Hitmonlee***, Lickitung, *Rhyhorn*, **Kangaskhan**, Stantler, Miltank, *Larvitar*, *Mudkip*, Whismur, Loudred, *Numel*, *Tropius*, *Snover*, Bouffalant, *Tyrunt*, Stufful, Bewear, *Tsareena*, Wooloo, *Stonjourner*, Wyrdeer

Body Slam	2s P50 E33	P55 E35

Rattata, *Nidoran♀*, *Nidoran♂*, *Clefairy*, *Vulpix*, **Jigglypuff**, **Meowth**, *Growlithe*, *Poliwag*, *Galarian Rapidash*, **Lickitung**, **Eevee**, Snorlax, *Dragonair*, *Chikorita*, ***Cleffa***, **Igglybuff**, *Mareep*, *Marill*, *Wooper*, *Paldean Wooper*, *Swinub*, *Phanpy*, *Donphan*, Miltank, Galarian Zigzagoon, Galarian Linoone, Slakoth, Vigoroth, **Slaking**, Azurill, *Aron*, *Lairon*, *Wailmer*, *Spheal*, *Sealeo*, *Clamperl*, *Turtwig*, *Grotle*, *Shellos*, *Gastrodon*, *Gible*, *Hippopotas*, *Hippowdon*, **Lickilicky**, *Tepig*, Audino, *Throh*, *Sawk*, *Tirtouga*, *Carracosta*, *Garbodor*, *Foongus*, *Shelmet*, *Deino*, *Zweilous*, *Chespin*, *Quilladin*, *Pancham*, *Avalugg*, *Mudbray*, *Mudsdale*, *Celesteela*, Skwovet, Greedent, Dubwool, Lechonk, Male Oinkologne, Female Oinkologne, *Fidough*, *Dachsbun*, *Cetoddle*, *Cetitan*

Swift	3s P65 E50	P55 E35

Clefairy, *Clefable*, Jigglypuff, Wigglytuff, *Zubat*, *Galarian Ponyta*, **Doduo**, *Hisuian Voltorb*, *Hisuian Electrode*, *Staryu*, Eevee, *Cyndaquil*, Furret, *Ledyba*, *Cleffa*, Igglybuff, Aipom, Teddiursa, Ursaring, *Kingdra*, Galarian Zigzagoon, Linoone, *Electrike*, *Plusle*, *Minun*, *Deoxys Speed*, *Shinx*, *Buizel*, *Floatzel*, Buneary, *Uxie*, *Mesprit*, *Azelf*, Minccino, Fletchling, Drampa, Ursaluna, Tandemaus, Maushold

Hyper Fang	2s P80 E50	P80 E50
Rattata, Alolan Rattata, Raticate, Alolan Raticate, Bidoof, Bibarel, *Pachirisu*, Patrat, Watchog, Yungoos, Gumshoos		

Last Resort	3s P90 E50	P90 E55
Eevee, ***Vaporeon***, ***Jolteon***, ***Flareon***, ***Espeon***, ***Umbreon***, ***Leafeon***, ***Glaceon***, ***Sylveon***		

Weather Ball (Normal)	2s P60 E33	P60 E35
Castform		

Skull Bash	3s P130 E100	P130 E75
Blastoise, *Raichu*, *Lapras*, Snorlax, *Rhyperior*, Bouffalant, *Barbaracle* **100% chance of defense +1**		

Return	0.5s P25 E33	P130 E70
Return replaces the Frustration charged attack whenever a Shadow Pokémon is purified. It cannot be reacquired if replaced via Charged TM.		

Giga Impact	4s P200 E100	P150 E80
Regigigas, *Xerneas*, *Crowned Sword Zacian*, *Crowned Shield Zamazenta*		

Hyper Beam	4s P150 E100	P150 E80

Raticate, Alolan Raticate, Wigglytuff, *Electrode*, Lickitung, *Galarian Weezing*, Chansey, Porygon, *Aerodactyl*, Snorlax, *Dragonite*, ***Mewtwo***, *Mew*, Furret, Ursaring, Porygon2, Blissey, *Celebi*, Slaking, *Wailord*, *Milotic*, *Registeel*, *Deoxys*, Bibarel, *Luxray*, *Cherrim (Sunny Form)*, *Cherrim (Overcast Form)*, Ambipom, Lopunny, Lickilicky, Porygon-Z, Unfezant, Audino, *Lilligant*, *Hisuian Lilligant*, Cinccino, Sawsbuck, *Klinklang*, *Druddigon*, *Incarnate Form Tornadus*, Aria Forme Meloetta, *Genesect*, Diggersby, *Malamar*, *Aurorus*, *Yveltal*, *Zygarde 10%*, *Zygarde 50%*, *Zygarde Complete*, *Melmetal*, Obstagoon, *Duraludon*, *Regieleki*, *Regidrago*

Boomburst	2s P150 E100	P150 E70

Exploud, *Flygon*, ***Noivern***, *Kommo-o*

Techno Blast	2s P120 E100	P120 E55

Genesect

Acid Spray	3s P20 E50	P20 E45

Arbok, Victreebel, Tentacruel, Muk, Alolan Muk, *Quagsire*, Qwilfish, *Octillery*, Swalot, *Scraggy*, *Scrafty*, Garbodor, *Escavalier*, *Ferrothorn*, *Eelektross*, *Accelgor*, Toxtricity, Shroodle, Grafaiai, *Toedscruel*, Varoom, Revavroom, Clodsire
100% chance of opponent defense -2

Poison Fang	2s P30 E33	P45 E40

Ekans, Nidoran♀, Nidorina, Nidoqueen, Zubat, Golbat, Venonat, Venomoth, Crobat, *Poochyena*, *Mightyena*, *Carvanha*, *Sharpedo*, Seviper, Salandit, Salazzle, Shroodle, Grafaiai
100% chance of opponent defense -1

Cross Poison	2s P40 E33	P50 E35

Paras, *Parasect*, Spinarak, Ariados, Crobat, *Anorith*, *Armaldo*, Skorupi, *Joltik*, *Galvantula*
12.5% chance of attack +2

Sludge Bomb	2s P85 E50	P80 E50

Bulbasaur, Ivysaur, Venusaur, Beedrill, Ekans, Nidoran♀, Nidorina, Nidoran♂, Nidorino, **Zubat**, Oddish, Gloom, Vileplume, Bellsprout, Weepinbell, Victreebel, Galarian Slowbro, Grimer, Alolan Grimer, Gastly, Haunter, Gengar, Koffing, Weezing, *Tangela*, Crobat, *Sunflora*, *Quagsire*, Hisuian Qwilfish, Dustox, *Breloom*, Roselia, Swalot, Roserade, Stunky, Skuntank, Skorupi, Drapion, Croagunk, Toxicroak, *Tangrowth*, ***Darkrai***, *Seismitoad*, Venipede, Whirlipede, Scolipede, *Zoroark*, Amoonguss, Skrelp, Dragalge, *Volcanion*, *Shiinotic*, Nihilego, *Guzzlord*, Poipole, Naganadel, Eternatus, Overqwil, Shroodle, Grafaiai, Clodsire

Sludge Wave	3s P105 E100	P110 E65

Arbok, Nidoqueen, Nidoking, Tentacruel, Muk, Alolan Muk, **Gengar**, Paldean Wooper, Galarian Slowking, Qwilfish, *Swampert*, *Tympole*, *Palpitoad*, *Therian Form Thundurus*, *Goomy*, *Sliggoo*, *Goodra*, Mareanie, Toxapex, Salazzle, Poipole

Gunk Shot	3s P130 E100	P130 E75

Ekans, Arbok, Alolan Grimer, Muk, Alolan Muk, *Octillery*, *Galarian Linoone*, Gulpin, Swalot, *Munchlax*, *Liepard*, Trubbish, Garbodor, Dragalge, Mareanie, Toxapex, Nihilego, *Obstagoon*, Varoom, Revavroom

Sludge	2s P50 E33	P70 E40

Venusaur, Grimer, Koffing, Galarian Weezing, *Mudkip*, *Marshtomp*, *Swampert*, Gulpin, Swalot

Mirror Coat	2s P60 E50	P60 E55

Wobbuffet, Girafarig, Spoink, Grumpig, *Lileep*, *Feebas*, Wynaut, *Bergmite*, *Avalugg*, *Dewpider*, *Araquanid*

Psychic Fangs	1s P25 E33	P40 E35

Arcanine, Espeon, Girafarig, *Steelix*, *Manectric*, ***Luxray***, Swoobat, *Lycanroc Midnight*, Bruxish, Solgaleo, *Morpeko*, *Fidough*, *Dachsbun*, *Greavard*, *Houndstone*
100% chance of opponent defense -1

Psybeam	3s P65 E50	P70 E60

Venonat, *Psyduck*, Kadabra, Galarian Ponyta, Drowzee, Starmie, Mr. Mime, Galarian Mr. Mime, ***Porygon***, Espeon, Spoink, Baltoy, *Plant Wormadam*, *Sandy Wormadam*, *Trash Wormadam*, *Mothim*, Mime Jr., Munna, Sigilyph, Gothita, Gothorita, Elgyem, Inkay, Malamar, Hoopa Confined, Mr. Rime, Indeedee

Psychic	4s P95 E50	P75 E55

Butterfree, Alolan Raichu, *Clefable*, *Venomoth*, *Golduck*, **Alakazam**, Galarian Rapidash, Slowpoke, Galarian Slowpoke, Slowbro, Galarian Slowbro, ***Gengar***, Drowzee, Hypno, Exeggcute, Exeggutor, *Chansey*, Starmie, Mr. Mime, Galarian Mr. Mime, Mewtwo, Mew, *Noctowl*, ***Cleffa***, *Igglybuff*, Espeon, ***Umbreon***, Slowking, Girafarig, *Blissey*, Celebi, Kirlia, Gardevoir, Medicham, Grumpig, Lunatone, Solrock, Claydol, *Gorebyss*, Metang, Metagross, Latias, Latios, Jirachi, *Honchkrow*, Bronzong, Mime Jr., *Happiny*, *Magmortar*, Gallade, *Dusknoir*, Victini, Swoobat, *Darmanitan*, *Cofagrigus*, Gothita, Gothorita, Gothitelle, *Alomomola*, Elgyem, Beheeyem, Hisuian Braviary, *Therian Form Tornadus*, Delphox, *Flabébé*, *Floette*, *Florges*, Espurr, Meowstic, *Aromatisse*, *Noivern*, *Yveltal*, Hoopa Confined, Hoopa Unbound, *Primarina*, Oranguru, Lunala, *Sinistea*, *Polteageist*, Hatenna, Hattrem, Hatterene, Mr. Rime, Indeedee, Wyrdeer
10% chance of opponent defense -1

Synchronoise	2s P80 E50	P80 E50

Golduck, **Gardevoir**, **Gallade**

Future Sight	2s P115 E100	P110 E65

Alakazam, Hypno, Galarian Articuno, Armored Mewtwo, Xatu, Espeon, Galarian Slowking, Lugia, Uxie, Mesprit, Azelf, Cresselia, Musharna, Swoobat, Gothorita, Gothitelle, Reuniclus, Oranguru, Tapu Lele, Lunala, Necrozma, Necrozma Dusk Mane, Necrozma Dawn Wings

Psyshock	2s P60 E33	P70 E40

Alolan Raichu, *Ninetales*, *Alolan Ninetales*, Abra, Slowpoke, Galarian Slowpoke, Drowzee, **Hypno**, Jynx, Mew, *Cleffa*, *Togepi*, *Togetic*, Natu, Xatu, Galarian Slowking, Smoochum, Ralts, Meditite, Chimecho, Metang, Chingling, Bronzor, Bronzong, Mime Jr., *Togekiss*, Victini, Munna, Musharna, Woobat, Gothita, Solosis, Duosion, Reuniclus, *Fennekin*, *Braixen*, Delphox, Espurr, *Aromatisse*, ***Sylveon***, Bruxish, Tapu Lele, Hatenna, Hattrem, Hatterene, Armarouge

Luster Purge	2s P100 E100	P120 E60

Latios
50% chance of opponent defense -1

Mist Ball	2s P105 E100	P120 E60

Latias
50% chance of opponent attack -1

Psycho Boost	4s P70 E50	P70 E35

Deoxys, Deoxys Attack, Deoxys Defense, Deoxys Speed
100% chance of attack -2

Psystrike	2s P95 E50	P90 E45

Mewtwo, **Armored Mewtwo**

Rock Blast	2s P50 E33	P50 E40

Graveler, Alolan Graveler, Golem, Alolan Golem, Omanyte, Omastar, Shuckle, *Heracross*, Corsola, *Galarian Corsola*, *Remoraid*, Nosepass, Armaldo, Roggenrola, Dwebble, Crustle, *Trumbeak*, *Toucannon*, *Cursola*

Ancient Power	4s P70 E33	P60 E45

Golem, *Exeggcute*, Omanyte, Omastar, Kabuto, Kabutops, Aerodactyl, *Articuno*, *Galarian Articuno*, *Zapdos*, *Galarian Zapdos*, *Moltres*, *Galarian Moltres*, *Mew*, *Bayleef*, *Togepi*, *Togetic*, *Yanma*, Larvitar, Pupitar, Lileep, Anorith, Relicanth, *Rayquaza*, Cranidos, Shieldon, *Tangrowth*, *Togekiss*, *Yanmega*, ***Mamoswine***, *Altered Forme Giratina*, *Sigilyph*, Tirtouga, Carracosta, Archen, Archeops, *White Kyurem*, Binacle, Tyrunt, Amaura, Aurorus
10% chance of attack +1

Rock Tomb	3s P65 E50	P80 E50

Sandshrew, *Sandslash*, *Diglett*, *Alolan Diglett*, Geodude, Alolan Geodude, **Omanyte**, Kabuto, Sudowoodo, *Pineco*, *Forretress*, Magcargo, *Torchic*, Aron, Lairon, Aggron, *Spinda*, *Claydol*, Cradily, Cranidos, Shieldon, Bonsly, *Spiritomb*, *Hippopotas*, *Pignite*, *Lillipup*, *Drilbur*, *Timburr*, Dwebble, *Galarian Yamask*, *Druddigon*, *Rufflet*, Tyrunt, Tyrantrum, *Yungoos*, *Gumshoos*, Rockruff, *Hakamo-o*, *Spidops*, *Bombirdier*
100% chance of opponent attack -1

Rock Slide	2s P75 E50	P75 E45

Sandshrew, Hisuian Growlithe, Hisuian Arcanine, *Machamp*, Geodude, Alolan Geodude, **Graveler**, **Onix**, *Marowak*, **Omastar**, Aerodactyl, *Armored Mewtwo*, *Mew*, Sudowoodo, *Dunsparce*, *Slugma*, *Swinub*, *Phanpy*, *Tyrogue*, *Combusken*, *Vigoroth*, Nosepass, Lairon, Lunatone, Solrock, Cradily, *Deoxys Defense*, Rampardos, Bonsly, *Tangrowth*, Probopass, *Emboar*, Boldore, Gigalith, *Excadrill*, *Darmanitan*, Crustle, *Gothitelle*, *Beheeyem*, *Galarian Stunfisk*, *Braviary*, Terrakion, *Incarnate Form Landorus*, *Pangoro*, Carbink, Hisuian Avalugg, Diancie, Nihilego, *Marshadow*, *Melmetal*, Stonjourner, Kleavor

Power Gem	3s P80 E50	P85 E50

Persian, *Staryu*, *Starmie*, *Flaaffy*, *Ampharos*, Corsola, *Galarian Corsola*, *Sableye*, *Vespiquen*, Carbink, Diancie, Nihilego, *Gholdengo*

Weather Ball (Rock)	2s P60 E33	P60 E35

Castform, *Hippowdon*

Stone Edge	2s P105 E100	P100 E55

Nidoqueen, *Dugtrio*, ***Machamp***, Graveler, Alolan Graveler, Golem, Alolan Golem, Onix, *Hitmonlee*, Rhydon, Kabutops, *Mew*, Sudowoodo, *Quagsire*, Shuckle, Magcargo, *Piloswine*, *Hitmontop*, Tyranitar, ***Blaziken***, Aggron, *Flygon*, Cradily, Regirock, *Torterra*, Bastiodon, *Hippowdon*, Rhyperior, *Mamoswine*, *Heatran*, Roggenrola, Boldore, *Gurdurr*, *Conkeldurr*, *Mienshao*, *Durant*, *Cobalion*, *Virizion*, *Reshiram*, *Therian Form Landorus*, *Black Kyurem*, Barbaracle, Tyrantrum, Rockruff, Lycanroc Midday, Lycanroc Midnight, Lycanroc Dusk, Stakataka, Stonjourner, Kleavor, *Clodsire*

Meteor Beam	2s P140 E100	P120 E60

Sudowoodo, Aggron, **Gigalith**, Tyrantrum, Aurorus
100% chance of attack +1

Rock Wrecker	4s P110 E50	P110 E50
Rhyperior, Crustle		

Mirror Shot	2s P50 E33	P35 E35
Forretress, Magnezone, Ferrothorn, Klinklang **30% chance of opponent attack -1**		

Heavy Slam	2s P70 E50	P70 E50
Machamp, *Onix*, *Snorlax*, Forretress, Steelix, *Donphan*, *Makuhita*, *Hariyama*, Lairon, Aggron, *Wailmer*, Shieldon, Bronzor, Bronzong, *Munchlax*, *Gigalith*, *Mudsdale*, *Dhelmise*, Celesteela, Tinkaton, *Cetoddle*, *Cetitan*		

Iron Head	2s P60 E50	P70 E50
Alolan Dugtrio, ***Onix***, *Tauros*, *Paldean Combat Tauros*, *Paldean Blaze Tauros*, *Paldean Aqua Tauros*, *Aerodactyl*, Scizor, *Entei*, Mawile, Aron, Beldum, Trash Wormadam, Dialga, Origin Forme Dialga, Heatran, Excadrill, Ferroseed, Pawniard, Bisharp, Durant, Cobalion, *Black Kyurem*, *Pangoro*, Honedge, Doublade, *Lycanroc Dusk*, Solgaleo, Celesteela, *Necrozma*, Necrozma Dusk Mane, *Necrozma Dawn Wings*, **Corviknight**, Perrserker, *Zacian*, *Zamazenta*, Kingambit		

Magnet Bomb	3s P75 E33	P70 E45
Magnemite, Magneton, Probopass, Genesect		

Double Iron Bash	2s P70 E33	P55 E35
Melmetal		

Flash Cannon	2s P100 E100	P110 E70

Blastoise, Magneton, *Horsea*, *Mew*, Skarmory, Metagross, Registeel, Empoleon, Bastiodon, Bronzong, Lucario, Magnezone, *Vanilluxe*, Ferroseed, Ferrothorn, Klinklang, Galarian Stunfisk, *Hydreigon*, *Zekrom*, Aegislash, Klefki, *Toucannon*, *Turtonator*, Stakataka, Meltan, Melmetal, Duraludon, Tinkatink, Tinkatuff, Tinkaton

Gyro Ball	4s P85 E50	P80 E50

Alolan Sandshrew, Alolan Sandslash, *Jigglypuff*, Galarian Meowth, *Voltorb*, *Mew*, *Pineco*, *Shuckle*, *Hitmontop*, *Miltank*, *Baltoy*, *Claydol*, *Glalie*, Metang, Bronzor, *Venipede*, *Whirlipede*, *Scolipede*, Ferroseed, *Chespin*, *Quilladin*, *Chesnaught*, Honedge, Doublade, Aegislash, Togedemaru, Varoom, Revavroom

Behemoth Bash	2s P125 E50	P80 E45

Crowned Shield Zamazenta
Behemoth Bash has an Adventure Effect

Behemoth Blade	4s P200 E100	P100 E55

Crowned Sword Zacian
Behemoth Blade has an Adventure Effect

Doom Desire	2s P65 E33	P80 E40

Jirachi

Meteor Mash	2s P100 E50	P100 E50

Clefable, **Metagross**

Sunsteel Strike	3s P230 E100	P135 E65

Necrozma Dusk Mane
Sunsteel Strike has an Adventure Effect

Bubble Beam	2s P45 E33	P25 E40

Golduck, Poliwag, Poliwhirl, Tentacool, Shellder, Krabby, Horsea, Staryu, Omanyte, Chinchou, Marill, Corsola, Mantine, Suicune, Lotad, Lombre, Surskit, *Masquerain*, *Azurill*, Corphish, Crawdaunt, Piplup, Prinplup, Ducklett, Swanna, Jellicent, Dewpider, Araquanid
100% chance of opponent attack -1

Muddy Water	2s P45 E33	P35 E35

Swampert, Seismitoad, Basculin, *Stunfisk*, *Galarian Stunfisk*, *Goomy*, *Sliggoo*, *Goodra*, Tatsugiri
30% chance of opponent attack -1

Octazooka	2s P55 E50	P50 E50

Octillery, Kingdra
50% chance of opponent attack -2

Razor Shell	2s P55 E33	P35 E35

Shellder, Cloyster, Krabby, Kingler, Corphish, Crawdaunt, Samurott, Hisuian Samurott, ***Escavalier***, Barbaracle, Golisopod
50% chance of opponent defense -1

Brine	2s P65 E50	P60 E50

Omanyte, Mareanie, Toxapex, *Cursola*

Chilling Water	4s P65 E33	P60 E45

Flabébé
100% chance of opponent attack -1

Aqua Step	4s P55 E4294967256	P55 E40

Quaquaval
100% chance of attack +1

Liquidation	3s P70 E33	P70 E45

Golduck, Dewgong, Cloyster, Vaporeon, *Armaldo*, Floatzel, Samurott, Carracosta, *Eelektross*, *Beartic*, Golisopod, Quaxly, Quaxwell, Quaquaval, Wiglett, Wugtrio, Dondozo
30% chance of opponent defense -1

Aqua Tail	2s P50 E33	P55 E35

Squirtle, Psyduck, Seel, Goldeen, **Gyarados**, Vaporeon, *Dratini*, *Dragonair*, Marill, **Quagsire**, Qwilfish, *Hisuian Qwilfish*, Barboach, Huntail, Relicanth, *Skorupi*, *Drapion*, Palkia, Origin Forme Palkia, Oshawott, Dewott, Basculin, *Minccino*, *Cinccino*, *Axew*, *Fraxure*, Skrelp, *Dragalge*, *Goodra*, Popplio, Bruxish, *Overqwil*

Water Pulse	3s P65 E50	P80 E50

Squirtle, Poliwhirl, Tentacool, Slowpoke, Slowbro, Dewgong, Shellder, Krabby, Kingler, Goldeen, Seaking, Vaporeon, Kabutops, Totodile, Croconaw, Chinchou, Remoraid, Octillery, Mantine, Suicune, Wingull, Wailmer, Whiscash, *Armaldo*, Spheal, Sealeo, Walrein, Clamperl, Gorebyss, Luvdisc, Buizel, Shellos, Gastrodon, Finneon, Lumineon, Mantyke, ***Glaceon***, Oshawott, Dewott, Panpour, Tympole, Palpitoad, *Cryogonal*, Froakie, Frogadier, Skrelp, Clauncher, Clawitzer, *Sliggoo*, Popplio, Brionne, Dewpider, Araquanid, Sobble, Drizzile, Inteleon, *Clodsire*

Surf	2s P60 E50	P75 E45

Pikachu, *Raichu*, *Alolan Raichu*, *Galarian Slowpoke*, **Slowbro**, ***Galarian Slowbro***, *Rhydon*, Starmie, Lapras, *Mew*, Lanturn, Politoed, **Slowking**, ***Galarian Slowking***, Marshtomp, Swampert, Wailord, Milotic, Sealeo, Kyogre, Bibarel, *Rhyperior*, Panpour, Simipour, Tirtouga, Carracosta, Jellicent, *Haxorus*, *Beartic*, Froakie, Frogadier, Greninja, *Furfrou*, Tapu Fini, Sobble, Drizzile, Inteleon, Wiglett, Wugtrio, Dondozo, Tatsugiri

Crabhammer	2s P85 E50	P85 E50

Kingler, Crawdaunt, Clauncher, Clawitzer, *Crabrawler*, *Crabominable*
12.5% chance of attack +2

Scald	4s P75 E50	P85 E50

Poliwhirl, Poliwrath, Tentacruel, Slowbro, *Galarian Slowbro*, **Vaporeon**, Politoed, Slowking, *Galarian Slowking*, Qwilfish, Suicune, Lotad, Lombre, Ludicolo, Wailmer, Wailord, Barboach, Whiscash, Corphish, Crawdaunt
30% chance of opponent attack -1

Weather Ball (Water)	2s P55 E33	P60 E35

Politoed, Pelipper, Castform (Rainy)

Hydro Pump	4s P135 E100	P130 E75

Wartortle, Blastoise, Golduck, Poliwrath, Tentacruel, Cloyster, Seadra, Starmie, Gyarados, Lapras, Vaporeon, Omastar, Feraligatr, Lanturn, Azumarill, Politoed, Kingdra, Suicune, *Lugia*, Ludicolo, Pelipper, Sharpedo, Castform (Rainy), Relicanth, *Salamence*, Kyogre, Prinplup, Empoleon, Floatzel, Wash Rotom, Palkia, Origin Forme Palkia, Samurott, Simipour, Alomomola, Keldeo, Greninja, *Dragalge*, Volcanion, Primarina, Tapu Fini, Dondozo, Tatsugiri

Aqua Jet	2s P45 E33	P70 E40

Squirtle, Wartortle, **Seel**, **Dewgong**, Paldean Aqua Tauros, Kabuto, Totodile, Surskit, Carvanha, Corphish, *Anorith*, Luvdisc, Buizel, Floatzel, Basculin, Keldeo, Clauncher, Popplio, Brionne, Golisopod, Rapid Strike Style Urshifu, Quaxly, Quaxwell, Quaquaval

Sparkling Aria	3s P85 E33	P80 E45

Lapras, Primarina

Hydro Cannon	2s P90 E50	P80 E40
Blastoise, Feraligatr, Swampert, Empoleon, Samurott, Greninja, Primarina, Quaquaval		

Origin Pulse	2s P120 E100	P130 E60
Kyogre		

the author

nick black a/k/a **dank** holds numerous degrees from Georgia Tech, and has worked at Nvidia, Google, Intel, and Microsoft, besides founding several companies. He lives in Atlanta, and is a Debian Developer.

Check out his 2024 novel, *midnight's simulacra*. He has also written an esoteric and specialized textbook, unlikely to be of interest to you: *Hacking the Planet with Notcurses: A Guide to TUIs and Character Graphics.*

His spirit Pokémon include Carnivine, Greninja (ideally Shiny), Metagross, and Hydreigon, but especially the sky orca Kyogre. His PGO handle is americanpion.

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