## **How things are Calculated:**

o Stats:

■ General: 
$$\left(baseStats \times 2 + \frac{levelOfExpertise}{4} + 50\right) \times \frac{level}{100} + 5 + sum(statBooster)$$

■ HP: 
$$\left(baseStats \times 2 + \frac{level0fExpertise}{4} + 50\right) \times \frac{level}{100} + level + 10 + sum(statBooster)$$

Stats:

General: 
$$\left(baseStats \times 2 + \frac{levelOfExpertise}{4} + 50\right) \times \frac{level}{100} + 5 + sum(statBooster)$$

HP:  $\left(baseStats \times 2 + \frac{levelOfExpertise}{4} + 50\right) \times \frac{level}{100} + level + 10 + sum(statBooster)$ 

Attack damage:  $\left(\frac{power \times attackStats \times (1 + 0.5 \times abs(statsER))^{\frac{statsER + 0.5}{abs(statsER + 0.5)}}}{defenseStats \times (1 + 0.5 \times abs(statsER))^{\frac{statsER + 0.5}{abs(statsER + 0.5)}}} \times typeFamiliarity \times typeEffectiveness \times \frac{randint(700,800)}{1000} + attackIncrement\right) \times \%multiplier \times multiplier \times (1 - \%blocked)$ 

• Chance of missing:

ance of missing:

If accuracyER > 0: 
$$1 - accuracy - \frac{(1 - accuracy) \times (2 - \frac{1}{accuracyER})}{2}$$

Else:  $1 - \frac{accuracy}{1.2 - accuracyER}$ 

All types:

fighting	fire	dragon	flying	wind
elder		dimension		
spirit		psychic		
light		dark		
electricity		ghost		
machine		bug		
rock	sand	ice	water	grass

Туре	Against other types		Other types against		
Турс	Very effective	Not effective	Not effective	Very effective	
light	dark,psychic,dimension	light,grass,elder,spirit	light, dark, psychic	grass, dimension	
electricity	water,dark,flying	electricity,rock,sand,grass	electricity, water, dark, flying	rock, ghost, psychic	
machine	ice,dimension,fighting	sand,ghost	grass, wind	bug, dimension, fighting	
rock	electricity,fire	bug,wind,flying	electricity, dark, elder	ice, wind	
sand	fire	sand,wind,flying	electricity, machine, sand, ghost, flying	water, grass, wind	
ice	rock,grass,flying,dragon,fire	ice,water,fighting,elder	ice, grass, bug, flying	machine, dragon, fire, fighting, spirit	
water	sand,fire,elder	electricity,water,grass,dimens ion	ice, water, bug, dimension	electricity, grass, spirit	
grass	light,sand,water	machine,ice,grass,dimension,f ire	light, electricity, water, grass, dimension, wind, fighting	ice, bug, flying, fire, spirit	
bug	machine,grass,bug,elder	ice,water	rock, dragon	bug, flying, fire, elder	
ghost	electricity,ghost,spirit	sand,dark,psychic	machine, dark, spirit	ghost, psychic, elder	
dark	dark,psychic,elder	light,electricity,rock,ghost	dark, psychic, fighting, elder	light, electricity, dark	
psychic	electricity,ghost,fighting	light,dark,psychic	ghost, psychic, fighting	light, dark, elder	
dimension	light,machine,dimension	water,grass,fire,spirit	water, grass, fire, spirit	light, machine, dimension	
wind	rock,sand	machine,grass,wind,fire	rock, sand, wind	fire	
flying	grass,bug,fighting	electricity,sand,ice,dragon	rock, sand, dragon	electricity, ice	
dragon	ice,dragon,fighting,spirit	bug,flying,fire	flying, fire, spirit	ice, dragon, fighting, elder	
fire	ice,grass,bug,wind	dimension,dragon,elder	grass, dimension, wind, dragon	rock, sand, ice, water, spirit	
fighting	machine,ice,dragon,spirit	grass,dark,psychic	ice, elder, spirit	machine, psychic, flying, dragon	
elder	bug,ghost,psychic,dragon	rock,dark,fighting	light, ice, fire	water, bug, dark, spirit	
spirit	ice,water,grass,fire,elder	ghost,dimension,dragon,fighti ng,spirit	light, dimension, spirit	ghost, dragon, fighting	
god					