

# Alternate Pokemon Starter Types

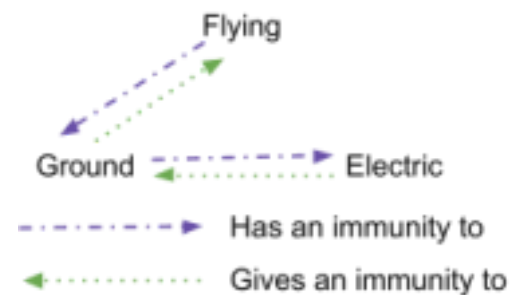
## The tl:dr Version

With the release of Ultra Sun and Ultra Moon in Gen VII, Poipole, the poison pin pokemon was introduced. Poipole has a pokedex entry revealing that it is actually a starter pokemon in the dimension from which it originates: "This Ultra Beast is well enough liked to be chosen as a first partner in its own world." (Pokemon Ultra Sun). Even GameFreak wonders about different starter types.

Are there any possible trios of pokemon that could work just as well as Water, Grass, and Fire? I wrote a [code](#) to find out!

## Requirements

1. Pokemon must obey some type of dual-relationship with the other pokemon in the trio. For example, they are super effective one way and not very effective the other way, just like the traditional trio. Or they are neutral one way and neutral the other way. Doesn't matter as long as all the pokemon in the trio follow the rule. (There are 6 possible relationships: super effective-super effective, super effective-neutral, super effective- not very effective, neutral-neutral, neutral-not very effective, not very effective-not very effective).
2. Pokemon must share the same self-relationship. Just as Water, Grass, and Fire all resist themselves, all pokemon within the trio should share some self-relationship, whether it's super effective, neutral, or not very effective.
3. Pokemon should have the same number of immunities or have a direct relationship between the number of immunities had vs immunities given. Water, Grass, and Fire all have 0 immunities and have 0 types immune to them. We want something similar for our trio.
4. No two pokemon within a trio may share a type.
5. We are excluding Water, Grass, and Fire from our possible types. They had a good 20 year run, but now we want something new.



## Analysis

By adjusting the effectiveness strictness, the self-relation requirement, and the immunity balances, we get a varying number of viable trios. With the least strict requirements, we get a whooping 36,000 trios. With the most strict requirements, we get 7.

From these 7, only one trio doesn't fall into the *Mixed Immunity* category: *Electric, Fighting/Ice, Poison/Rock*. Each pokemon in the trio can only deal neutral damage to the others, each has 0 immunities but gives one immunity (giving them all an *immunity difference value* of -1), and are each capable of resisting one of their own types (*Fighting/Ice* can also deal super effective damage against itself and *Poison/Rock* can deal neutral damage against itself, but this doesn't exclude them from the self-resist category).

Other viable trios and important aspects about them are presented in the table below.

**Multitype Trio Table**

Trio	Trio Relation	Self Relation	Immunities Possessed	Immunities Given	Notes
<b>Electric, Fighting/Ice, Poison/Rock</b>	Neu - Neu	Not Very Effective	0	1	The only trio to obey all requirements and all have the same number of immunities.
Dragon/Fairy, Ghost/Psychic, Ground/Rock	Neu - Neu	Super Effective & Not Very Effective	Mixed (1,2,1)	Matched (1,2,1)	Each pokemon has two self-relationships: they can all deal super effective and resist/are immune to one of their own types.
Ice(/Rock), Electric/Fairy, Ghost/Psychic	Neu - Neu	Not Very Effective	Mixed (0,1,2)	Matched (0,1,2)	Ice and Ice/Rock work equally well. Rock could be gained upon evolution.
Ice, Bug/Ground, Normal/Rock	SE - Neu	Not Very Effective	Mixed (0,1,1)	Matched (0,1,1)	Similar to the next trio, but perhaps more balanced.
Ice, Bug/Ground, Dragon/Steel	SE - Neu	Not Very Effective	Mixed (0,1,1)	Matched (0,1,1)	Similar to the previous trio. Dragon/Steel may be too good of a defensive typing
Electric, Fighting/Ice, Normal/Poison	Neu - Neu	Not Very Effective	Mixed (0,1,1)	One More (1,1,2)	Each pokemon gives one more immunity than it has, offering a different type of balance.
<b>Honorable Mentions</b> These trios do not obey the "Immunities Possessed - Immunities Given" rule					
Dark/Ground, Electric/Ghost, Fighting/Flying	SE - NVE	Not very effective	Mixed (2,2,1)	Mixed (1,2,1)	The only viable trio with an Immunity Triangle. Each pokemon is immune to the next.

Dragon/Fairy, Flying/Ground, Ghost/Normal	Neu- Neu	Immune	Mixed (1,2,3)	Mixed (1,1,2)	The only viable trio where each pokemon is immune to one of its own types. G/N is also the only possible typing that is fully immune to itself.
<b>Monotype Trios</b> All trios here fail one of the requirements					
Fighting, Flying, Rock	SE-NVE	Neutral	Mixed (0,1,0)	Mixed (1,0,0)	The only monotype trio to not deal Neu-Neu damage. Doesn't obey the immunity balance requirements.
Electric, Ice, Psychic (or Poison)	Neu-Neu	Not Very Effective	0	Mixed (1,0,1)	Pokemon in these trios share the same number of immunities. Don't obey immunity balance requirements because they give different numbers of immunities.
Fairy, Flying, Normal	Neu-Neu	Neutral	1	Mixed (0,0,1)	
Fairy, Ground, Normal	Neu-Neu	Neutral	1	Mixed (0,1,1)	
Bug, Ice, Normal	Neu-Neu	Mixed	Mixed (0,0,1)	Matched (0,0,1)	The only monotype trio to obey the immunity requirements.
Fairy, Flying, Ghost	Neu-Neu	Mixed	Mixed (1,1,2)	One Less (0,0,1)	They do not share a self-relationship though.