

Binary Ionic Compounds (BIC's)

* Last time we talked about ionic compounds, which are made up of a metal & non-metal that transfer electrons & attract one another by charge.

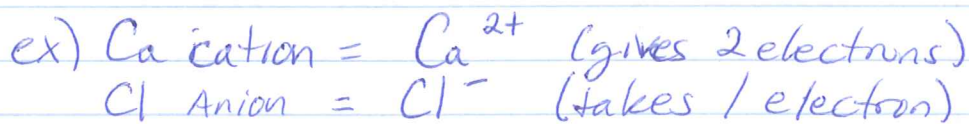
Metals tend to lose electrons, and gain a \oplus charge - and are known as Cations

Non-metals tend to gain electrons & gain a \ominus charge - and we know as Anions

A combination of a monatomic (one atom) Cation and a monatomic Anion = binary ionic compound

- bi = two, and a binary compound is made up of 2 atoms

* In order to determine the result of an Anion & Cation, you must first determine what the charge of the monatomic ions are - or the valence # & charge



* Since they don't equal zero when added, we know it is not a 1:1 ratio.

Instead, the Cation wants to lose 2, & anion wants to gain 1, so it takes 2x the anion, or a 1:2 ratio.

(2)



Binary Ionic Compound Nomenclature

When naming a compound that contains 1 Cation & 1 Anion, like NaBr, you need to follow the following steps:

- Determine the name of the metal (Cation)
- Determine the name of the non-metal (Anion)
- keep metal name the same, change ending of non-metal to -ide



Name = Potassium Fluoride

Am 2 (+)

Am 16



Am 1 (+)

Am 15

