

Naming Chemical Compounds

Formulas of Ionic compounds--- metal and nonmetal

- Identify the charge of the metal
- Identify the charge of a nonmetal
- The charges are connected to the group numbers
- Cross over the number value of the charge.

Group 1. **+1**

Group 2. **+2**

Group 13. **+3**

Group 15. **-3**

Group 16. **-2**

Group 17. **-1**

Example:

Writing the name of the ionic compound

- Write the name of the metal first
- Write the name of the nonmetal second
- The ending of the nonmetal changes to IDE

Chloride

Fluoride

Bromide

Iodide

Oxide

Sulfide

Nitride

Phosphide

Carbide

Example:

Ionic Compounds with metals that have more than one charge --- transition metals

- The charge is indicated by Roman numerals in parentheses
- I, II, III, IV, V
- Follow the same rules as before
- Cross over the charges

Example:

Ionic Compounds with polyatomic ions

- two nonmetals bonded together that behave like an ion
- each polyatomic ion has its own specific charge
- treat the polyatomic ion as you would any normal ion
- identify the charge and crossover

Example:

Formulas of Molecular compounds ---2 nonmetals

- The subscript in the formula is connected to the prefix of the element in the name

Mono=1

Di=2

Tri=3

Tetra=4

Penta=5

Hexa=6

Examples