

Naming Inorganic Compounds

What type of compound is it?

Ionic
(metal-nonmetal)

- 1) Name metal ion
- 2) If not in groups IA, IIA, or Al:
show charge with roman numeral
- 3) Name anion

Covalent
(nonmetal-nonmetal)

- 1) Elements to the left in periodic table first
- 2) If in same group lower element first
- 3) Use prefix to show number of each atom
 - a) *mono-* often omitted
 - b) other prefixes sometimes omitted
 - c) final *a* or *o* omitted before some vowels

Greek Prefixes

<i>mono-</i>	1
<i>di-</i>	2
<i>tri-</i>	3
<i>tetra-</i>	4
<i>penta-</i>	5
<i>hexa-</i>	6
<i>hepta-</i>	7
<i>octa-</i>	8
<i>nona-</i>	9
<i>deca-</i>	10

Acid
(Aqueous, hydrogen plus anion)

Binary
(anion ends in *-ide*)

- 1) Prefix with *hydro-*
- 2) *-ide* goes to *-ic*
- 3) add the word *acid*

Oxo
(anion has oxygen)

- 1) No *hydro-* prefix
- 2) *-ate* goes to *-ic*;
-ite goes to *-ous*
- 3) add the word *acid*