

# Rules for Naming Covalent Compounds

- (1) Arrange elements Left to Right in the same order as in the periodic table CO<sub>2</sub>
- (2) If elements of the same group have joined to form a compound, place the bottom element on the left and top element on the right
- (3) If it is a compound of Noble Gas, then Noble Gas will be the Left Element
- (4) Convert the name of the right element to an ide ending

Examples

Oxygen – oxide; nitrogen – nitride; sulfur – sulfide; selenium – selenide, chlorine – chloride;  
bromine – bromide, iodine – iodide, etc.

- (5) Use Greek prefixes for writing subscripts in the formula; however, do not use mono for the left element. The Greek prefixes are:  
1- mono; 2 – di; 3 – tri; 4 – tetra; 5 – penta; 6 – hexa; 7 – hepta; 8 – octa; 9 – nona;  
10 – deca; 11 – undeca; 12 – dodeca

- (6) Follow vowel rules when you combine a or o ending vowel with o beginning second element

(6a) when o ending combines with a o beginning – you drop one “O”

Example

mono ..... oxide will become monoxide

(6b) when a ending combines with a o beginning – you drop one “a”; this is because the phonetics of “o”

swallows the phonetics of “a”

Example

Penta ..... oxide will become pentoxide; deca ..... oxide will become decoxide

Similarly: tetroxide; hexoxide; heptoxide; octoxide; nonoxide; undecoxide; dodecoxide

Note: dioxide & trioxide – you cannot drop the i

- (7) Examples of applying all rules

CO Carbon monoxide; XeF<sub>6</sub> Xenon hexafluoride

SO<sub>3</sub> Sulfur trioxide