

Writing Formulas and Names for Covalent Compounds

REMEMBER: Covalent compounds are made up of only nonmetals.

1. Writing Chemical Names

- a. Use the table below to determine the proper prefix indicating the number of atoms of the first element.

Prefix	mono-	di-	tri-	tetra-	penta-	hexa-	hepta-	octa-	nona-	deca-
Numeric Meaning	1	2	3	4	5	6	7	8	9	10

- b. Write the name of the first element with the selected prefix.

Eg. N_3O_2 Trinitrogen

****Note-** If the prefix for the first element is "mono-" it is understood to be only one atom and does not have to be included in the name.

- c. Repeat step "a" for the second element.

- d. Write the root of the second element with the correct prefix and add the ending *-ide*.

Eg. N_3O_2 Dioxide

- e. See figure 2 on page 33

Eg. N_3O_2 Trinitrogen dioxide

****Note -** The prefix "mono-" for the second element should ALWAYS be included.

Eg. NO Nitrogen monoxide

2. Writing Chemical Formulas

- a. Under the name of the compound

- using the prefix indicate the number of the atoms.
- using the root names, indicate the elements.

- b. After you decide the above, list them together in the following manner.

- Write the symbol of the first element.
- Write the numeric meaning of the prefix as a subscript.
- Write the symbol of the second element.
- Write the numeric meaning of the prefix for the second element as a subscript.

- c. The prefix "mono-" does not require a subscript. The presence of the element indicates that one atom is present in the compound.

****DON'T FORGET ABOUT DIATOMIC ELEMENTS****

- nonmetals that are gases at room temperature, EXCEPT the noble gases.
- Writing the Chemical Name- Write the name of the element + "gas".
- Writing the Chemical Formula- Write the chemical symbol with a subscript

of "2" after.