

## Covalent Compounds

### Writing the names of covalent compounds

All names have two words:

- The first word is the same as the name of the first element in the formula.
- The second word is the same as the name of the second element with “-ide” at the end.
- **Use prefixes in front of each word to indicate how many of each atom are present in the compound.** *We don't use the prefix mono- in front of the first element if there is only one!*

Prefix	Meaning
Mono	One
Di	Two
Tri	Three
Tetra	Four
Penta	Five
Hexa	Six
Septa	Seven
Octa	Eight
Nona	Nine
Deca	Ten

- **Elements:** Some elements form molecules with other atoms of the same element. There are seven diatomic elements which you must memorize: **Iodine, Bromine, Chlorine, Fluorine, Oxygen, Nitrogen, Hydrogen.** They are written with the 2 as a subscript beside the element symbol. We identify them as the name of the element followed by the word gas. (Oxygen gas)
  - F<sub>2</sub> – fluorine
- **Others** form molecules with more than one atom. Two that we will use are
  - P<sub>4</sub> – phosphorus
  - S<sub>8</sub> - sulfur

Examples:

### **Writing formulas if given the names:**

- write the symbol for the first element in the name
- look at the prefix, write the number it corresponds to next to its symbol as a subscript
- if there isn't a prefix for the first element, then we assume there is only one and you don't have to write a subscript
- write the symbol for the second element in the name
- look at the prefix and write the corresponding number next to the symbol as a subscript
- then put them all together

Example: