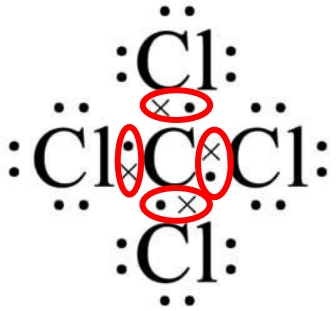
10. Naming Molecular (Covalent) Substances

These substances are named exactly like the ionic substances, EXCEPT you use **prefixes** in front of each of their names to represent the **number** of atoms of that element.

Number:	Prefix:
1	Mono
2	Di
3	Tri
4	Tetra
5	Penta
6	Hexa
7	Hepta
8	Octa
9	Nona
10	Deca



example: CCl_4 = carbon **tetra**chloride
(4 chlorine atoms joined to 1 carbon atom)
= electrons are **shared**

The one exception to this rule: **mono- is never used for the first element!

example: CO_2 =_____ H_2O =_____

N_2O_4 =_____ NH_3 = _____

To write formulas for Covalent Compounds:

1. Write the symbol of the 1st element in the compound name followed by a subscript indicating the # of atoms of the element from the **prefix** in its name.
2. Write the symbol of the 2nd element in the compound name followed by a subscript indicating the **number of atoms** of the element from the prefix in the name.

*In either case if there is no prefix that means there is only **one atom** of that element

example: Carbon tetrachloride= _____ Dinitrogen tetraoxide = _____

Dihydrogen monoxide = _____ Nitrogen trihydride = _____