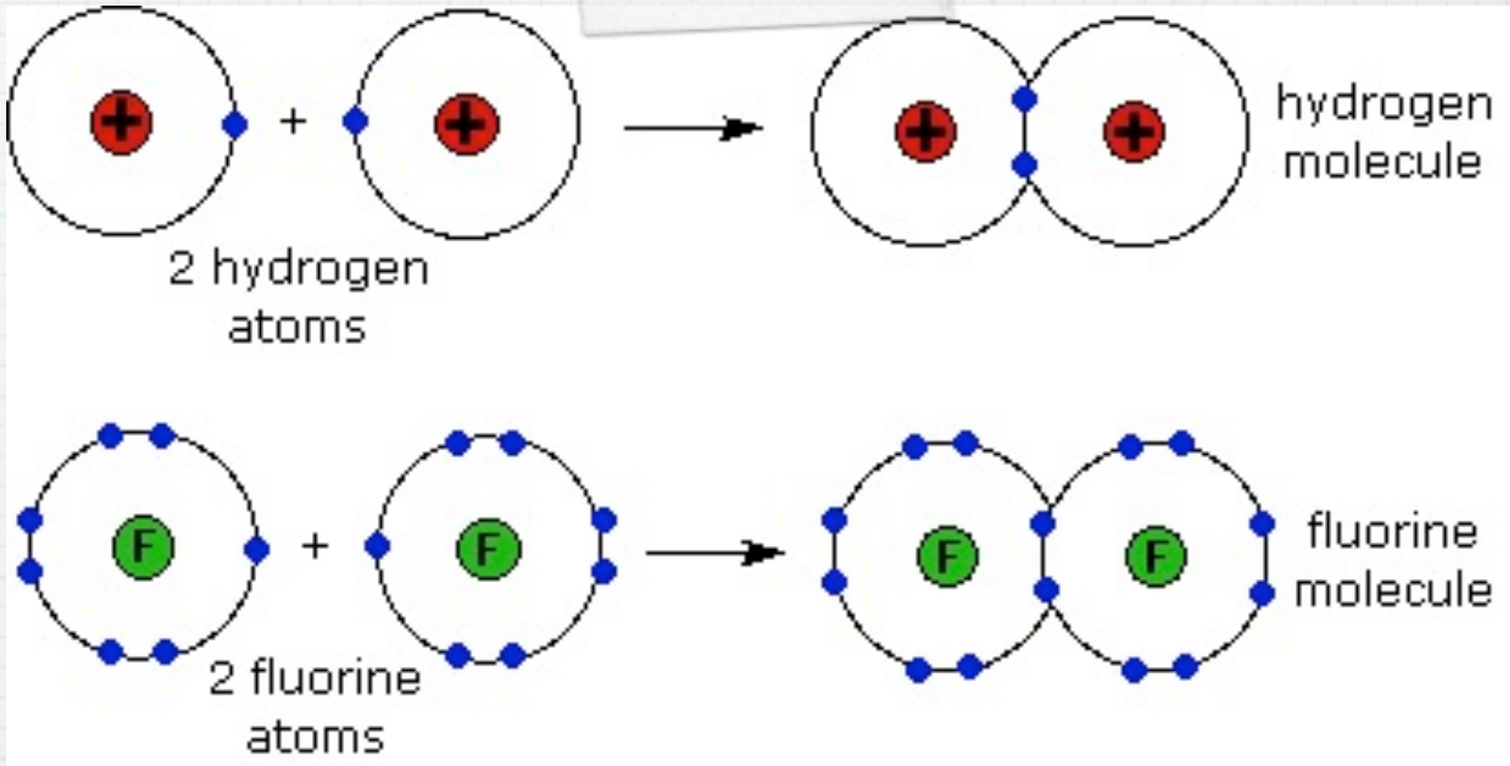
Molecular Compounds

Covalent Compounds

* A pure substance formed from two or more NON-METALS

Covalent Compounds

* Non-metals share electrons to get a full outer shell



* This creates a covalent bond = a bond that results from the sharing of outer electrons between non-metal atoms

Naming

* Can't use charges to figure out how many of each atom.
* Elements in the name are given prefixes corresponding to the subscripts (number of atoms) and the second element is given the suffix "-ide."
* e.g. CO_2 is carbon dioxide

The Prefixes

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

* The 1st element in the name never need a mono-

Examples

* Try the following:
* OF_4
* N_2O
* Cl_2O_7

Examples

* Try the following:
* OF_4
  * Oxygen tetraflouride
* N_2O
  * dinitrogen monoxide
* Cl_2O_7
  * dichlorine heptoxide

Examples

* iodine trichloride
* diphosphorus pentoxide
* sulphur hexaiodide

Examples

* iodine trichloride
  * ICl_3
* diphosphorus pentoxide
  * P_2O_5
* sulphur hexaiodide
  * SI_6

Diatomic Gases

*HOFBrI NCl

* are called simply the name of element + "gas"