10 Common Molecular Compounds

CH3COOH- acetic acid NH3- ammonia

C2H5OH- ethanol H2O2- hydrogen peroxide

C6H12O6- glucose H2S- hydrogen sulfide

CH4- methane O3- ozone

C12H22O11- sucrose H2O- water

Diatomic Elements

Some non-metals, in pure form, make pairs with each other and share electrons (covalent bonds)

These are known as the **“GENS”** (name ends in gen, or the Halogens)

Oxygen gas, O2 Hydrogen gas, H2 Nitrogen gas, N2

And the halogens-

Fluorine, F2 Chlorine, Cl2 Bromine, Br2 Iodine, I2 Astatine, At2

Also, Phosphorous = P4 and Sulfur = S8

Dealing with Hydrogen

As hydrogen can behave like group 1 or group 17 elements, we have some rules for it:

1. Hydrogen compounds are ALL molecular in nature, unless there is an obvious metal present.
2. When Hydrogen is the **first element** in a compound (Ex: HCl), we will ALWAYS name it using IONIC RULES. HCl = hydrogen chloride
3. When Hydrogen is the second element, name the compound as you would with any other compound. PH3 = phosphorous trihydride.