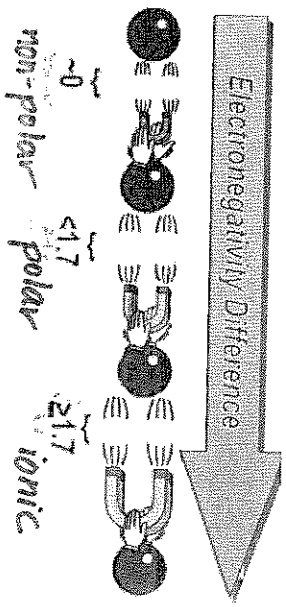


Polar Bonds and Molecules



COVALENT BONDS

Pure Covalent/
Non-polar

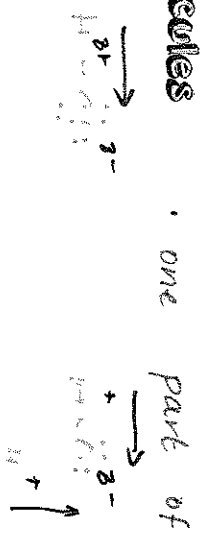
• electrons are shared equally.
 $\Delta EN_{\text{eq}} = 0$ ex: H_2

• bonds formed when electrons are shared.

Polar Covalent

• have an unequal sharing of electrons, caused by an unequal attraction for bonding electrons.
ex: HCl ; O_2 (more electronegative)

Polar Molecules



• arrow pts to most electronegative atom.

1. All polar molecules are not symmetrical.
 2. Bent & trigonal pyramidal molecules are always asymmetrical; polar solutes dissolves in polar solvents. (will dissolve in water as water is polar)
- Properties: "like dissolves like"