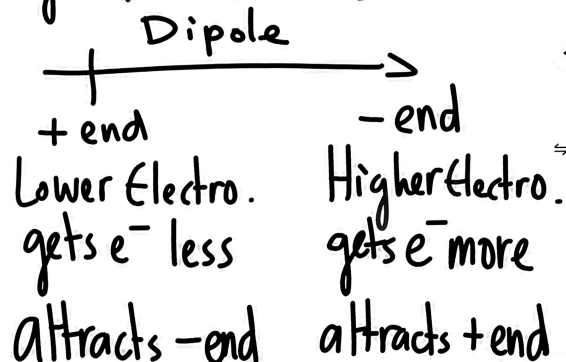
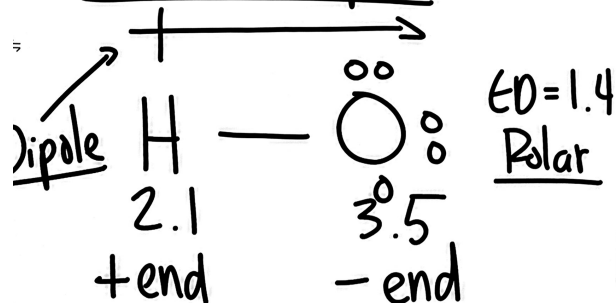


Bond Dipoles

Dipole is an uneven sharing of electrons in bond

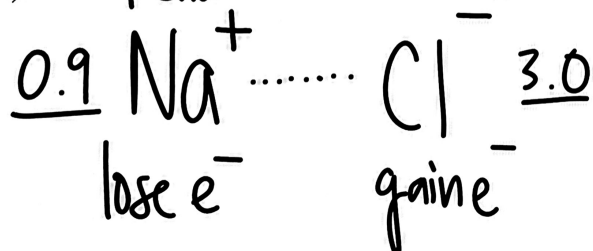
Polar = Dipole



Ionic vs. Polar Covalent

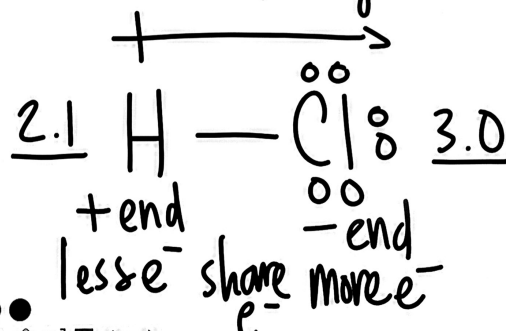
Ionic: Transfer of e^-

Metal / High ED
 + end - end



Polar Covalent

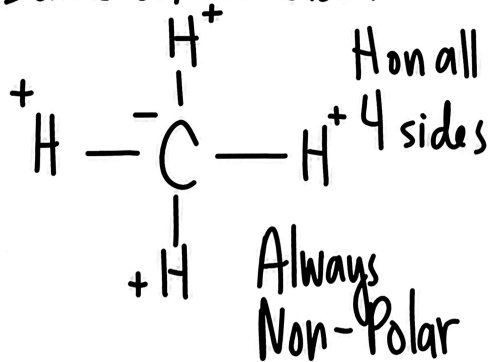
Unequal sharing of e^-
 No Metals / High ED



Symmetry in Molecules

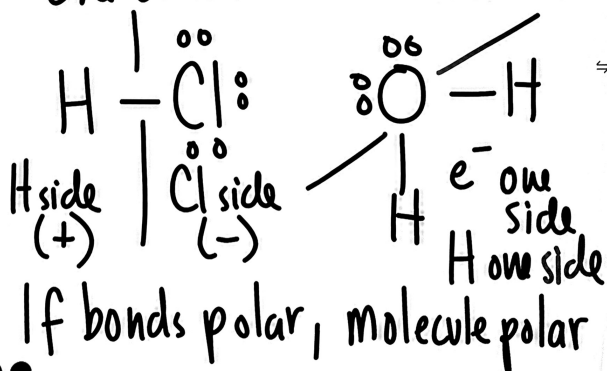
Symmetrical molecule

Same on all sides



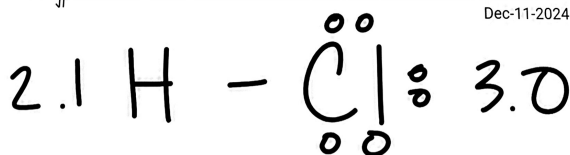
Asymmetric Molecule

One or more sides different



Molecule Polarity

- ① Find bond ED
- ② Non Polar = Non Polar Bond Molecule
- ③ For Polar Bond
 symmetrical molecule : Non Polar Molecule
 asymmetrical molecule : Polar Molecule



$$\text{ED} = 3.0 - 2.1 = 0.9$$

Bond is Polar Covalent Bond

