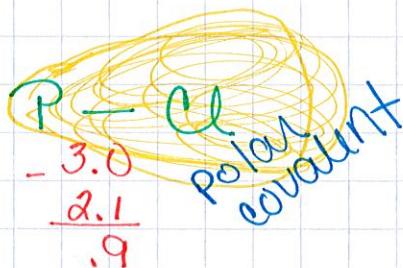
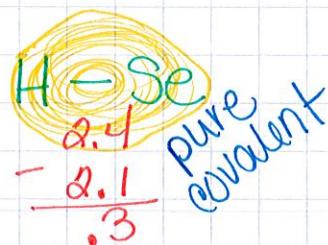
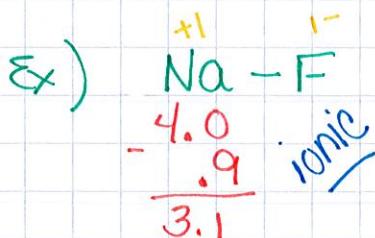
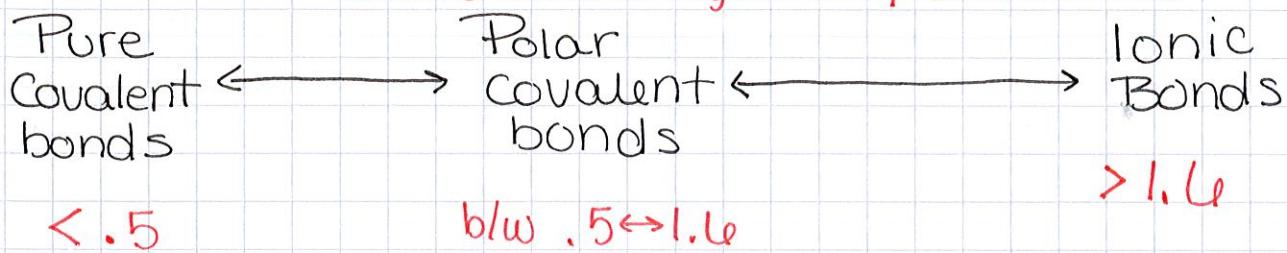


# Polar Covalent vs. Pure Covalent Bonds (POLARITY)

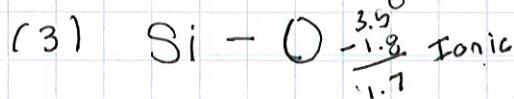
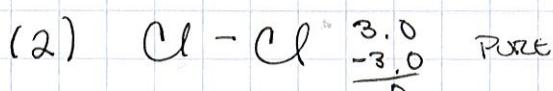
Pure covalent bond - valence  $e^-$  are shared equally b/w the 2 atoms

Polar covalent bond - valence  $e^-$  are shared unequally b/w the 2 atoms

How do you know how polar an atom is?  
Look @ electronegativity differences



Practice - determine polarity



# Intramolecular Bonds (IMFs)

- weak force of attraction b/w molecules
- responsible for
  - boiling & melting points
  - viscosity (how thick a liquid is)
  - vapor pressure

## 3 types of IMFs

### 1. London dispersion forces (LDFs)

- temporary attraction b/w 2 molecules caused by shifting  $e^-$
- weakest IMF.
- every molecule has LDFs

### 2. Dipole-dipole forces

- dipole - a molecule that has lone pairs of  $e^-$  on the center atom

