**Tip of the Day:** Use colors in notes!

- **Intermolecular Forces:** ↑ means more interaction/attraction

**Dipole Moments**

**Review:**

- C\text{H}_8
- CH\text{3}CH\text{2}C(CH\text{3})\text{CH(CH\text{3})CH\text{3}}
- CH\text{3}CH(CH\text{2}OH)
- CF\text{3}C(CH\text{3})CH\text{2}
- C\text{6}H\text{12}
- CH\text{3}CH(NH\text{2})CH\text{3}

**Hydrogen Bonding:** H−[N, O, F]

**London Dispersion:** Large molecules can bridge the gap, e.g., soap.

**Bond-line structures**

Draw out bond line structures for the following molecules: C\text{2}H\text{6}, CH\text{2}CH\text{2}C(CH\text{2}CH\text{3}), CH\text{3}CH(CH\text{2}OH), CF\text{3}C(CH\text{3})CH\text{2}CH\text{3}, CH\text{3}CH(NH\text{2})CH\text{3}

- **Formal Charge:** $\text{Eval} - \text{Eowned} = \text{Eval} - \text{N} \times \text{Bonds} - \text{E} \times \text{Lone Pairs}$
Lost one electron
(+1, cationic)
Lost the electron it was sharing in the 4th bond
Had to share a non-bonding electron

Usual form (neutral)
Carbon usually forms 4 bonds
Nitrogen usually forms 3 bonds
Oxygen usually forms 2 bonds

Gained one electron
(-1, anionic)
Gained an electron it was sharing in the 4th bond
Gained an electron it was sharing in the 3rd bond
Gained an electron it was sharing in the 2nd bond

MAKE UP MOLECULES
w/ THESE
(4 w/ DOUBLE BONDS)