

## Quiz for Video 11 – Intermolecular Forces

- Only polar molecules will experience dipole-dipole forces.
  - True
  - False
- Which type of intermolecular force is felt by ALL matter.
  - London dispersion
  - Dipole-dipole
  - Hydrogen-bonding
  - Ionic bonding
- Which of the following physical properties is NOT affected by intermolecular forces.
  - Color
  - Viscosity
  - Surface Tension
  - Boiling Point
- If molecule A has a stronger net dipole than molecule B, what should we expect about the boiling point of the two molecules? (Assume molar mass is approximately the same).
  - A will have a higher boiling point
  - B will have a higher boiling point
  - A and B will have the same boiling point
  - Both will always be solid
- The presence of which of the following covalent bonds would result in a molecule exhibiting hydrogen bonding?
  - H-Cl
  - H-O
  - H-C
  - H-S
- As we increase the external pressure around a compound, what state is generally favored?
  - gas
  - liquid
  - solid
- Molecules with stronger intermolecular forces will have boiling points that are:
  - At higher Temperatures
  - At lower Temperatures
  - At room Temperature
  - Not enough information
- Identify the strongest intermolecular force present in ammonia ( $\text{NH}_3$ ).
  - London dispersion
  - Dipole-dipole
  - Hydrogen-bonding
  - Ionic bonding
- Identify the strongest intermolecular force present in ethane ( $\text{C}_2\text{H}_6$ ).
  - London dispersion
  - Dipole-dipole
  - Hydrogen-bonding
  - Ionic bonding
- Identify the strongest intermolecular force present in difluoromethane ( $\text{CH}_2\text{F}_2$ ).
  - London dispersion
  - Dipole-dipole
  - Hydrogen-bonding
  - Ionic bonding