**Solutions Chem:**

**Polarity and Intermolecular Forces: Quiz 1b**

/5

Answer the following:

1. Identify the strongest intermolecular force present in pure samples of the following substances:

*London dispersion forces, Dipole-Dipole Forces, Hydrogen Bonding*

* 1. SO2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  2. Cl2 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  3. H2O \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Rank the following compounds from weakest intermolecular forces to strongest. Justify your answers.

H2Se H2S H2Po H2Te

Answers:

1. Identify the strongest intermolecular force present in pure samples of the following substances:

*London dispersion forces, Dipole-Dipole Forces, Hydrogen Bonding*



1. SO2 Dipole-Dipole Forces
2. Cl2 London Dispersion forces
3. H2O Hydrogen Bonding
4. Rank the following compounds from weakest intermolecular forces to strongest. Justify your answers.

H2Se H2S H2Po H2Te



H2Te < H2Po < H2Se < H2S

All molecules are the same shape. Polarity increases with increased electronegativity difference.