**Molecular Model Building Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Procedure:**

For each of the following:

1. Draw the Lewis dot structure (include any resonance structures).
2. State the shape and bond angle.
3. Indicate the polarity of the bonds (use → δ+ δ-).
4. State whether the molecule is polar or non-polar.
5. Draw a 3 dimensional picture of the molecule (be sure to use thick and dashed lines).

f. State the intermolecular forces that the molecule will exhibit (London dispersion, dipole-dipole, Hydrogen bonding). Remember *all* molecules exhibit *London dispersion forces* and polar molecules with *H* bonded to *N, O, F* exhibit *hydrogen bonding* other polar molecules will exhibit dipole-dipole forces.

1. H2O 2. NH3

3. HCN 4. SO2

5. CCl4  6.N2

7. H2S 8. CO2

9. SO­3