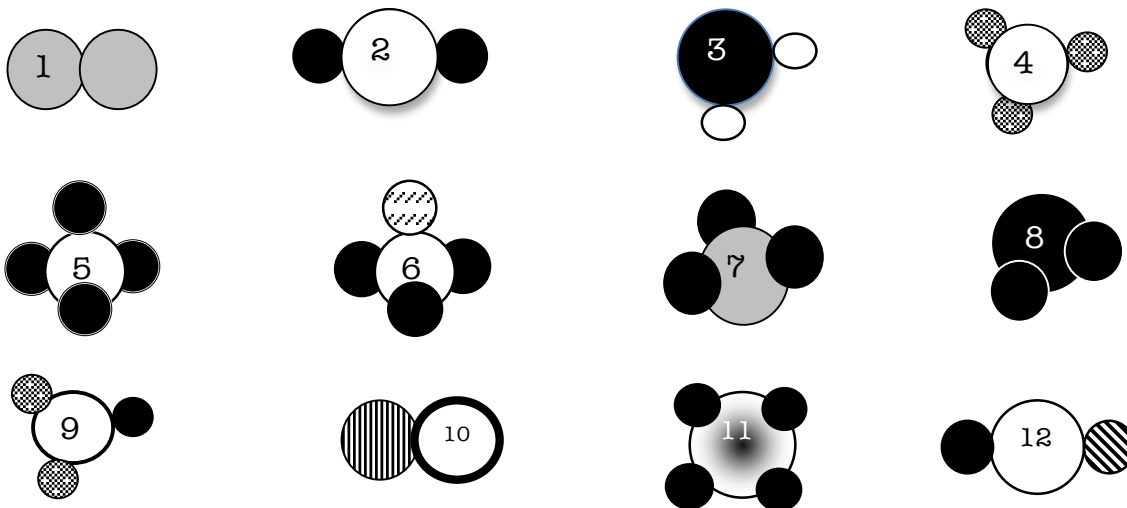


Name: _____ Date: _____ Section: _____

Geometry of Covalent Compounds



Part A: Name these shapes. (Ignore shading for now.)



Part B: Draw Lewis models for the following compounds. Then determine their shape from their models.

- | | |
|-----------------------|-----------------------------------|
| 1. magnesium chloride | 6. hydrogen sulfide |
| 2. magnesium sulfide | 7. lithium sulfide |
| 3. ammonia | 8. methane (CH_4) |
| 4. boron trichloride | 9. chloroform (CHCl_3) |
| 5. beryllium astatide | 10. phosphorus tribromide |

Part C: For all compounds in Parts A-B, determine whether the *molecule* is POLAR or NONPOLAR. For Part A, each different shading represents a different element, and you can assume that the electronegativity difference between all elements is between 0.5-1.67.