**More Bonding Practice**

**1. Use Bohr diagrams to indicate the valence electrons in the following elements:**

a) Sulfur b) Sodium

**2. Use Dot structures to indicate the valence electrons in the following elements:**

a) Phosphorus b) Krypton c) Calcium

**3. Describe the type of chemical bond that would form within the following compounds:**

a) B2F3\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b)MgO \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) Ti\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d) AgNO3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**4. For the following elements, predict the CHARGE it would form when becoming an ion and decide if it is a CATION or an ANION**

a) Potassium\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b) Nitrogen \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c) Bromine\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**5.** **Draw the dot structures for the following compounds and describe the shape of the compounds:**

a) NI3 b) CCl4 c) H2O

**7. Write the formulas or names for the following COVALENT compounds**

a. Carbon dioxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. SiF6 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Dichlorine heptoxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d. P2O5 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e. Dinitrogen pentahydride \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**8. Write the names or formulas for the following IONIC compounds**

a. Potassium hydroxide \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

b. CuO \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

c. Li2SO3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

d. Co2(CO3)3 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

e. Calcium permanganate \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**9. List how many atoms there are of each element.**

a. Li3N b. Mg3(PO4)2 c. (NH4)2CrO4