**Unit 4: CHAPTER 7, 8, AND 9 REVIEW**

**Ionic:**

1. Draw the dot formulas to show the transfer of electrons for the following compounds. Label the charges of each element.

a. Na and O

b. Li and P

2. Write the formula of each compound drawn in #1 above.

a.

b.

3. a. Write the electron configuration of K and Cl. Show the electrons that will be

transferred to make a bond.

K=

Cl=

1. Write the final electron configuration each forms after the transfer of electrons, label the charge of each ion, and state the noble gas each element is representing.

K=

Cl=

**Covalent:**

4. Draw the electron dot structure for the following covalent molecules.

a. Br2

b. NI3

5. What is the VSEPR theory? What would the shape of 4a and 4b be? What would be

the polarity of 4a and 4b based on their shape?

6. Classify each bond as nonpolar, moderately polar, very polar, or ionic?

a. F-O b. Li-O

**All mixed up:**

7. Label each item as ionic, covalent, or an acid. Then name or give the formula for each item below.

a. Copper II Fluoride

b. HBr

c. C3H8

d. Sulfurous Acid

e. Na2O

f. Carbon tetrasulfide

g. CoCl2

8. What are 2 properties of ionic, covalent, and metallic bonds?

a. Ionic:

b. Covalent:

c. Metallic:

\* Metallic bonding lab (alloys) and Glaze Lab