Name: 10/23/08

Assignment #15: Binary Ionic Bonds

1. What are some of the physical properties that arise from ionic bonds?

2. Determine the symbol and oxidation numbers for the following elements:

a. Rubidium
b. Potassium
c. Hydrogen
d. Oxygen
e. Chlorine
f. Neon
g. Iron (III)
h. Boron
i. Mercury
j. Manganese (VI)
k. Manganese (II)
l. Copper (II)
m. Iodine
o. Vanadium (III)
p. Silicon
q. Germanium
r. Selenium
s. Nitrogen
t. Ytterbium (III)
u. Tungsten (II)
v. Mercury (I)

3. Write formulas for the following compounds:

a. Potassium Bromide
b. Sodium Nitride
c. Aluminum Iodide
d. Strontium Oxide
e. Barium Phosphide
f. Aluminum Sulfide
g. Berylium Carbonide
h. Calcium Chloride
i. Lithium Arsenide
j. Copper (II) Chloride
k. Iron (III) Oxide
l. Iron (IV) Oxide
m. Mercury (II) Oxide
n. Vanadium (V) Fluoride
o. Uranium (IV) Bromide

Name: 10/23/08

4. Write the names of the following compounds:

a. NaCl (Salt)

b. K_2O

c. MgS

d. $AlBr_3$

e. Na_3N

f. Fe_2O_4

g. VI_3

h. $CuCl_2$

i. $CuCl_3$

j. UO_2

k. MgS

l. Hg_3N

m. Hg_3N_2

n. Au_2O_3

o. PtS_2

p. InP

5. Write the molar mass of the following compounds, and label them as ionic or covalent:

a. Sodium Chloride

b. Iron (III) Oxide

c. Selenium Sulfide

d. Dinitrogen dichloride