Assignment:\_\_\_\_

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour:\_\_\_\_\_\_\_

**Compounds and Ionic Bonding Review**

**Compounds**

1. What is the difference between a coefficient and a subscript?
2. For the following compounds, figure out how atoms of each element there are AND what the whole atomic tally would be:
   1. Ca3(PO4)2
   2. 3NaF
   3. 2Be(OH)2
3. Determine the formula mass for the following compounds:
   1. NH4I
   2. FePO4
   3. Fe3(PO4)2
4. What is the percent composition of **oxygen** in the following compounds?
   1. H2O
   2. NO2
   3. O2

**Ionic Compounds**

1. What are valence electrons?
2. What is the difference between a cation and an anion?
3. If an ion has to lose electrons while forming an ionic bond to become stable, what kind of charge would it have?
4. If an ion has to gain electrons while forming an ionic bond to become stable, what kind of charge would it have?
5. Using the following ions, create the correct chemical formula:
   1. Co1+ Cl1-
   2. Ca2+ F1-
   3. Sn4+ O2-
   4. Li1+ N3-
   5. Ag1+ N3-
   6. K1+ PO43-
   7. Ca2+ SO42-
   8. Li1+ OH1-
   9. Na1+ MnO41-
6. Using the following formulas, name the following ionic compounds:
   1. NaBr
   2. SnS2
   3. Cu2O
   4. CaCl2
   5. AgNO3
   6. Ag3PO4
   7. Cu(NO2)2
7. Using the following names, create the correct chemical formula:
   1. Calcium bromide
   2. Potassium iodide
   3. Sodium hydride
   4. Tin (III) nitride
   5. Iron (II) phosphate
   6. Iron (III) phosphate