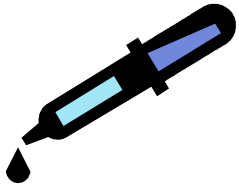

Name:
Period:

Forming Ionic Compounds

Purpose: In this lab, you will be observing, describing the colors and textures, and writing the names of various ionic compounds. You will also determine which compounds will form in a reaction, write the balanced formulas for those compounds, and write their name and description.

Procedure:

1. GOGGLES AND APRONS!!! Observe the solid form of each of the compounds found around the outside of your chart (opposite side of this page). Write the color and any other descriptive information. These solids are for observation only. You are not familiar with their toxicity, amongst other aspects of their chemical behavior…DO NOT TOUCH!!! NO UNAUTHORIZED EXPERIMENTS!!!

2. Using the prepared solutions (liquids only…remember, the solids are only for observation) for the ionic compounds found around the outside of your chart, combine two drops of each solution in the indicated spaces on the reaction plate (piece of overhead transparency).

3. Observe each reaction carefully and describe the compound that forms. (What is it called when a solid forms when two liquids are combined? Use the correct terminology.)

4. For each compound found around the outside of your chart, the ion that will react is in parentheses. Combine the ions that react to determine the chemical formula and name of the compound that forms. (Note: The leftover ions also either react or stay separately dissociated in solution.)

5. Once you have observed each compound, rinse your reaction plate in the sink and pat it dry.

Questions:

1. Summarize the important rules to use when naming ionic compounds.

2. When is it appropriate to use Roman numerals when naming compounds?

3. What does a subscript following an element in a chemical formula mean?

4. What does a subscript following a set of parentheses in a chemical formula mean?

5. How is this (CO) different from this (Co)? What do you have to be careful about when writing the symbols for elements with more than one letter?

6. If an ion has more than one element in it, it is called a(n) _____

7. What do you notice about the properties of the original chemicals that you combined, compared to the chemical that formed in the reaction? Were they mostly the same, or different? Use at least 2 different reactions from the lab to make your point.