

## Chemistry

Name \_\_\_\_\_  
Date \_\_\_\_\_ St# \_\_\_\_\_

### Chapter 10 Lab: Solubility and Precipitates

You have five reagent bottles labeled A through E. They contain aqueous solutions of (in no particular order):

Lead (II) nitrate	Mercury (II) chloride
Potassium iodide	Silver nitrate
Sodium chloride	

You are to identify the contents of each bottle by reacting them together. The products of the reactions will enable you to figure out the reactants.

*Here are some clues. The colors of the precipitates are:*

Lead (II) chloride	white
Lead (II) iodide	deep yellow
Mercury (II) iodide	orange-red
Silver iodide	light yellow
Silver chloride	white-turns violet with exposure to light

This is "small scale" chemistry. Put a single drop of solution A in the five vertical and the five horizontal squares marked "A" on the grid. Repeat this with the four remaining solutions. When mixing the two solutions, hold the dropper bottle an inch or so above the paper. Don't let the tip of the dropper touch the first drop. This will contaminate the dropper. Only work with one bottle at a time to insure that you get the cap back in the proper bottle.

Conclusion:

A. \_\_\_\_\_  
C. \_\_\_\_\_  
E. \_\_\_\_\_

B. \_\_\_\_\_  
D. \_\_\_\_\_

1. Write the Chemical Reactions between Lead (II) Nitrate and potassium Iodide
2. Write the Ionic equation for the above reaction
3. Write the Net Ionic Equation for the above reaction.