

# Lab 6 - Forming and Naming Ionic Compounds (Honors)

## Introduction:

(Write 10 facts from Chapter 9.)

## Materials:

2 well plates

0.2M KOH

0.2M Na<sub>2</sub>SO<sub>3</sub>

0.2M CoCl<sub>2</sub>

0.2M KMnO<sub>4</sub>

0.2M NiCl<sub>2</sub>

0.2M Na<sub>2</sub>CO<sub>3</sub>

0.2M KI

0.2M Pb(NO<sub>3</sub>)<sub>2</sub>

0.2M CuSO<sub>4</sub>

0.2M Fe(NO<sub>3</sub>)<sub>3</sub>

0.2M AgNO<sub>3</sub>

0.2M SrCl<sub>2</sub>

0.2M Na<sub>3</sub>PO<sub>4</sub>

## Procedure:

1. Make sure your well plate is clean.
2. Add the chemicals to the well plate as follows in the data chart below.
3. Record the results in the data chart. You can tape the data chart into your lab notebook. Be sure to write in BLACK INK!

**Data:** (Fill in the chart with BLACK PEN, cut it out, and tape it into the lab notebook.)

	CoCl <sub>2</sub>	Pb(NO <sub>3</sub> ) <sub>2</sub>	CuSO <sub>4</sub>	Fe(NO <sub>3</sub> ) <sub>3</sub>	NiCl <sub>2</sub>	SrCl <sub>2</sub>	AgNO <sub>3</sub>
Na <sub>3</sub> PO <sub>4</sub>							
KOH							
KMnO <sub>4</sub>							
Na <sub>2</sub> CO <sub>3</sub>							

KI						
Na <sub>2</sub> SO <sub>3</sub>						

**Questions:** (Write the questions and answer them.)

1. What is the difference in the name of a compound that starts with a regular metal and one that starts with a transition metal?
2. What is a precipitate?
3. Name the following compound: Fe<sub>2</sub>O<sub>3</sub>.
4. Write the formula for the following compound: aluminum chlorate.
5. Predict whether the each of the following compounds is molecular or ionic:
  - a. B<sub>2</sub>H<sub>6</sub>
  - b. CH<sub>3</sub>OH
  - c. LiNO<sub>3</sub>
  - d. Sc<sub>2</sub>O<sub>3</sub>
  - e. CsBr
  - f. NOCl
  - g. NF<sub>3</sub>
  - h. Ag<sub>2</sub>SO<sub>4</sub>

**Conclusion:**

(Write 3 sentences about any mistakes you made, anything that you learned, how the lab relates to real life, or other reactions that you have seen that are similar to this lab.)

