Experiment 12
Inorganic Compounds and Metathesis Reactions
Beran

Objectives:
• Observe double displacement reactions
• Identify an unknown solid compound based on the double displacement.

Procedure.
Check out a 24 well plate.

Part A
Observe compounds. This part does not have to be done first.

Part B
• Test tubes will work better for this experiment. Use the 24 well plates as your test tube rack so you can follow the well plate # designation.
• All of the reactants are solutions except for CaCO_3 and NH_4Cl. There are about 20 drops per mL.
• Reactions that produce gas can be visualized by bubbles or by odor. Waft when testing for odor.
• Test with litmus paper by wetting a glass stirrer with the solution and touch the litmus with the wet stirrer.
• Match the color of your reactants/universal indicator to the color chart on the universal indicator box.
• Mix the reactants.

Note: 2c
• You are looking for the formation of NH_3 gas
• Place a wet red litmus paper on the mouth of the test tube
• Warm the test tube with hot water from the tap.
• The test is positive if the red litmus changes to blue
Unknown Determination-this part has been added on.

- Your unknown is a solid salt that needs to be dissolved in about a vial full of water. The unknown is one of the compounds reacted in Part B.
- Prepare a strategy to determine the unknown. Without it you will be lost.
- React about 10 drops of your unknown to equal drops of reagent.
- Identify the cation and anion present in the salt unknown.