

## Procedure

Step 1: Obtain unknown, in a 250 ml Beaker add 5 g of unknown chloride XCl.

Step 2: Add water to XCl, fill beaker to 100ml level by adding water, stir solution until XCl is completely dissolved.

Step 3: Add Concentrated Nitric Acid, add 1 ml of concentrated acid to XCl solution.

Step 4: Add 1M AgNO<sub>3</sub>: Obtain a 100ml graduated cylinder and fill with 1M AgNO<sub>3</sub>, add AgNO<sub>3</sub> to XCl solution in 5 to 25 ml increments. A precipitate of AgCl will form and gradually settle. Continue to add AgNO<sub>3</sub> until no more precipitate forms. To verify that the reaction is complete check the chemical properties of the beaker (by double-clicking on it) and confirm that all of the XCl (in solution) has been consumed.

Step 5: Filter and weigh AgCl : Obtain a 250ml Erlenmeyer flask and add a filter, pour the contents of the beaker into the flask. Remove the filter from the Erlenmeyer flask (by again selecting the filter menu or button) and save the solid contents in a watch glass. Weigh the sample and record the result. \*

\*Note that in an actual lab the AgCl filtered precipitate would need to be dried to remove excess water, however in this simulation the filtered precipitate is free of water.