Activity #1: An Investigation Of The Ways Substances Interact

Materials:

Two 250 mL Beakers	About 30 cm^2 of Aluminum Foil	Steel Wool
Two Stirring Rods	An unnamed "Blue Solution"	Lighter
Scoopula	An unnamed "Powder T"	Watch Glasses
Masking Tape	Water	Small Spatula
Tongs	Different Pieces of Metal	

Procedure: (Always Record ANY Evidences)

Part A: Aluminum Foil in the "Blue Solution"

1. Using masking tape, label your name(s) on one of the 250 mL beakers. Each group should pour about 100mL of the blue solution into the 250 ml beaker.
2. Take the piece of aluminum foil, and gently crumple the foil into a very, very loose, ball shape. If the ball is too tight it won't work as well. Drop the ball into the blue solution in the beaker.
3. Let it stand still for roughly 30 mins.

Optional (but highly recommended)

1. Take a small spatula and take a few large pieces of the precipitate and place them on the watch glass. Press another watch glass on top and rub them against each other while squeezing. Note any changes.
2. Use the steel wool and shine up the pieces of metal given. Use a pair of tongs and place them inside the flame of a lit lighter. Note any change in colour of the flame for each metal.
3. Wipe down the spatula with a paper towel and do the same thing with the precipitate on the watch glass. Take a piece of the precipitate and place it into the flame of the lit lighter. Note the colour change.

Part B: Powder "T" in Water

1. Get about 100 mL of water from the tap in the other 250 mL beaker.
2. Put a small scoop full of the "Powder T" and stir for about 5 to 10 minutes.

Statements of Understanding

1. What phenomenon are we investigating?
2. How can you explain the phenomenon using the evidences you collected?
3. What claims are you making from your explanations?
4. What do you think was left over in the beaker in Part A? How can you be sure of your previous answer?
5. Similarly, what additional test can you do to the beaker in Part B to support your claim earlier?