# CHEMISTRY MATTERS gpb.org/chemistry-matters

## **Unit 1G Metric Measurement Lab**

Name:

Date:

### **PROCEDURES**

Follow the instructions for making each of the following measurements and record in the appropriate data table on the "Datasheet."

### I. Length

- 1. Estimate the length of the board, in meters, using only your eyes.
- 2. Use a 1 meter long piece of string to measure the height of the door and the width of your desk.
- 3. Now use a meter stick to make the same measurements as in #2.
- 4. Use the ruler to measure the width and length of this sheet of paper in cm and in mm.

### II. Volume

- 1. Using the graduations on the beaker, measure the volume of liquid in the beaker.
- 2. Use a graduated cylinder to measure the same liquid.
- 3. Fill a 250 mL flask completely full of water. Use a large graduated cylinder to measure the capacity of the flask.

# **III.** Temperature

- 1. Measure the temperature of 100 mL of tap water.
- 2. Measure the temperature of 200 mL of tap water.

### IV. Mass

- 1. Obtain a balance. Follow your teacher's instructions for correctly using the balance.
- 2. Place a coin directly on the balance and find its mass.
- 3. Repeat with a different coin for each lab partner.
- 4. Mass the empty cup.
- 5. Use a graduated cylinder to measure 50 mL of water and add to the cup.
- 6. Mass the cup with the water in it.
- 7. Determine the mass of the water.