

Name: \_\_\_\_\_

## Pre-Lab Activities: Metrics Lab

Complete these activities prior to coming to lab.

### Activities 1: Metric Units for Length

\*Please use information in the metrics conversions section to help you answer these questions

➤ Grams are used to measure \_\_\_\_\_

➤ Liters are used to measure \_\_\_\_\_

➤ Meters are used to measure \_\_\_\_\_

➤ Temperature is measured in \_\_\_\_\_

➤ Place the following terms in order of increasing size (smallest to largest): **meter, micrometer, millimeter, nanometer, kilometer, decimeter.**

➤ Which is longer? (For each pair circle the longer one)

- 10 km or 10 m
- 15 m or 15 mm
- 20  $\mu\text{m}$  or 20 mm
- 50 cm or 50 dm

### Activity 2: Estimation

➤ Practice estimating measurements. Look at the units and numbers for each answer and pick your best approximation (circle one for each).

How long is a guitar?

- 1 km
- 1 m
- 1 mm
- 1 cm

What is the length of a sperm cell?

- 50 m
- 50 cm
- 50 mm
- 50  $\mu\text{m}$

What is the length of your textbook?

- 10 m
- 30 cm
- 10 cm
- 30 mm

How much does a bar of gold weigh?

- 10 kg
- 1 kg
- 10 g
- 1 g

How much does an apple weigh?

- a. 1 kg
- b. 100 g
- c. 10 g
- d. 100 mg

How much water should you drink in a day?


- a. 15 L
- b. 1.5 L
- c. 15 mL
- d. 1.5 mL

How much volume of water is 20 drops of water from a medicine dropper?

- a. 2 L
- b. .5 L
- c. 10 mL
- d. 1 mL

### Activity 3: Measuring and Estimating Volume, Mass, and Temperature

**?** Use a ruler to measure the line below in centimeters (to the closest  $\frac{1}{2}$  centimeter)

\_\_\_\_\_ cm 

**?** Given that there are 10 millimeters in a centimeter, how many millimeters is the line above?

\_\_\_\_\_ cm x 10 = \_\_\_\_\_ mm