Measurement Practice – Volume, Length, Mass

VOLUME

1. List at least two metric units that you used during the measurement activity to represent volume.

2. Determine the metric volume of the cube below. Remember - a cube is composed of six equal squares.

![Cube Diagram]

3. What are the values of the graduations (unmarked lines) in each of the following graduated cylinders?

(A) ![Graduated Cylinder A]

graduations = ______

(B) ![Graduated Cylinder B]

graduations = ______

(C) ![Graduated Cylinder C]

graduations = ______
4. Which of the graduated cylinders from question three would provide you with the most accurate measurement for an object that has a volume of around 2 mL? Explain your answer.

5. What do you call the curved, upper surface of water that commonly appears when using a graduated cylinder? Describe what causes this.

6. What is the volume of the liquid in each of the following graduated cylinders?

(A) Volume = ________  (B) Volume = ________  (C) Volume = ________
7. What do you call the procedure that helps you determine the volume of an irregularly shaped object, while using a graduated cylinder? How do you perform the procedure?

8. Refer to the diagrams below and determine the volume of the rock.

volume of rock = _______________
1. What is the length (in inches) of the lines below?

length = ______

length = ______

length = ______

2. What is the length (in centimeters) of the lines below?

length = ______
3. What is the length (in millimeters) of the lines below?

BE CAREFUL

length = ______

length = ______

length = ______

length = ______
1. In order to get the most accurate measurement, it is always important to do what prior to using your triple beam balance?

2. If the picture below represents the pointer on a triple beam balance, would it be sensible to begin using the balance to obtain a measurement? Explain your answer.

3. Consider the same picture from question two and describe, in detail, how one would get the pointer to move to zero on the center mark.
4. Assuming that the pointers have reached the “zero mark,” what would be the mass of the objects according to the movable masses below?

First measurement:

mass = ______

Second measurement:

mass = ______

Third measurement:

mass = ______