

# Volume Lab

1 pt extra credit printing

Name \_\_\_\_\_

## Part A: Count your drops!

Take a guess - How many drops of water will it take to equal 1 milliliter? \_\_\_\_\_ drops

Follow the directions to find the number of drops in 1 milliliter of water, then answer the questions. You will need a small graduated cylinder (10 ml), a beaker of water, and an eyedropper for this section.

- (1) Fill a small graduated cylinder with 5 ml of water.
- (2) Count the number of drops it takes to raise the water to 6 ml. Record the number in the chart.
- (3) Leave the water in the graduated cylinder and count the number of drops it takes to raise the water to 7 ml. Record the number in the chart.
- (4) Leave the water in the graduated cylinder and count the number of drops it takes to raise the water to 8 ml. Record the number in the chart.
- (5) Calculate your average and round to the nearest tenth.

# of drops to 6 ml	# of drops to 7 ml	# of drops to 8 ml	Average

Based on your average, how close were you to your guess? \_\_\_\_\_

Based on your average, how many drops would it take to make 1 liter? \_\_\_\_\_

## Part B: Water Displacement

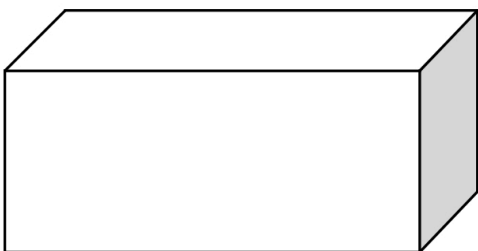
Follow the directions to find the volume of three marbles using water displacement.

- (1) Add 20 ml of water to a 50 ml graduated cylinder. Record this amount in the chart.
- (2) Add three marbles to the cylinder and measure the volume. Record this amount in the chart.
- (3) Find the difference between the two measurements and record in the chart. The difference between the two measurements will be the volume of the three marbles.

Volume of water before adding marbles	Volume of water after adding marbles	Difference in volume	Volume of 3 marbles

## Part C: Volume by Formula

Use the formula to find the volume of the box. Measure to the nearest centimeter (no decimals) before calculating your answer.



Volume = length x width x height

\_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_ =

Final Questions:

1. State the definition of matter: \_\_\_\_\_  
\_\_\_\_\_

2. What is volume: \_\_\_\_\_  
\_\_\_\_\_

3. What are a couple of ways you can measure volume? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

4. What did you learn in this experiment? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

When you have answered the questions and cleaned up your lab area take this to /Mrs Gillum and have them stamp your work: