

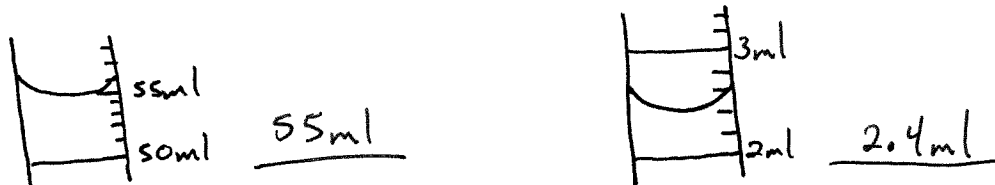
Name: KEY

Test #1: Test Objectives

1. What are some general lab safety rules to follow while working in a lab setting?

- NO EATING OR DRINKING IN THE LAB
- WEAR CLOSE TOE SHOES
- WEAR SAFETY GLASSES, GLOVES + APRONS AS NEEDED.
- PULL BACK LONG HAIR

2. What is the volume of liquid in the graduated cylinders below?



3. Be able to carry out conversion problems given conversion factors and show your work:

1in = 2.54cm      12in = 1ft      100cm = 1m      60s = 1min      60min = 1hr

5in = \_\_\_\_\_ cm       $5 \text{ in} \times \frac{2.54 \text{ cm}}{1 \text{ in}} = \boxed{12.7 \text{ cm}}$

40cm = \_\_\_\_\_ ft       $40 \text{ cm} \times \frac{1 \text{ in}}{2.54 \text{ cm}} \times \frac{1 \text{ ft}}{12 \text{ in}} = \boxed{1.3 \text{ ft}}$

30hr = \_\_\_\_\_ s       $30 \text{ hr} \times \frac{60 \text{ min}}{1 \text{ hr}} \times \frac{60 \text{ s}}{1 \text{ min}} = \boxed{108,000 \text{ s}}$

1000cm = \_\_\_\_\_ m       $1000 \text{ cm} \times \frac{1 \text{ m}}{100 \text{ cm}} = \boxed{10 \text{ m}}$

4. What is the formula for density? Be able to calculate density, remember your units on your answer, and show your work. What is the density of a metal ball with a mass of 15g and a volume of 5ml?

$D = \frac{m}{V}$

$\frac{15 \text{ g}}{5 \text{ ml}} = \boxed{3 \text{ g/ml}}$

5. Know key vocabulary word meanings as they will be used in problems and answers on the test. Examples: matter, physical change, mixture, compound, energy, heterogeneous, mass, weight, etc.

6. How do you calculate volume of regularly shaped objects? What about irregularly shaped objects? What is the volume of a cube measuring 5cm x 5cm x 5cm?

REGULARLY SHAPED OBJECTS - USE A FORMULA.  $L \cdot W \cdot H$   $5 \cdot 5 \cdot 5 = \boxed{125 \text{ cm}^3}$

IRREGULARLY SHAPED OBJECTS - WATER DISPLACEMENT METHOD.

7. What are some examples of kinetic energy, potential energy, chemical energy, electromagnetic energy, etc?

KINETIC - ROLLING BALL

POTENTIAL - A PERSON STANDING STILL

CHEMICAL - FOOD

ELECTROMAGNETIC - LIGHT, X-RAYS, ETC.