

Name: Key
Date: _____ Per. _____

Metric Measurement Exam Review and Study Guide
Test Date _____

Be able to match the definitions of the following words:

- Metric system - a system of measurement
- Weight - a measure of the pull of gravity on an object
- Mass - a measure of the amount of matter
- Volume - the amount of space something occupies
- Distance - the amount of space between two points

Be able to determine what the following tools measure. (distance, mass, or volume)

- Beaker - volume
- Ruler - distance
- Graduated cylinder - volume
- Triple beam balance - mass

Be able to determine what the following prefixes and/or base words measure. (distance, mass, or volume)

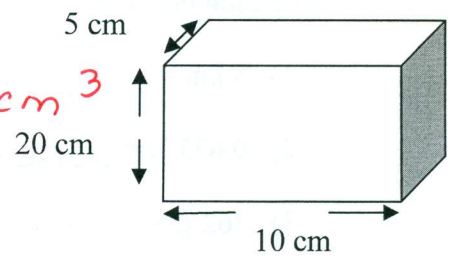
- Meter - distance
- Liter - volume
- Gram - mass
- Milliliter - volume
- Kilogram - mass
- Centimeter - distance
- Kilometer - distance
- Milligram - mass
- Millimeter - distance

What is the equation for calculating the volume of a regular shaped object?

$V = \underline{L} \times \underline{W} \times \underline{H}$

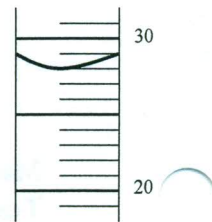
Calculate the volume of the following regularly shaped object.

$5\text{ cm} \times 20\text{ cm} \times 10\text{ cm} = 1000\text{ cm}^3$



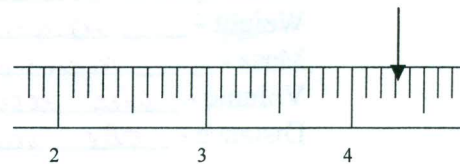
What tool do you use to find the volume of an irregularly shaped object? graduated cylinder

What is the volume of the liquid in this graduated cylinder? 28 mL

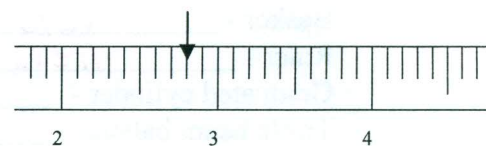


A graduated cylinder has been filled with 100 mL of water. An irregularly shaped object is dropped into the graduated cylinder causing the water level to rise to 130 mL. What is the volume of the irregularly shaped object? 30 mL

The ruler below is marked in cm.
What is the length at the arrow in cm? 4.3 cm



The ruler is marked in cm.
What is the length at the arrow in mm? 28 mm



Be able to read total mass on a triple beam balance.

What is the mass of the 10 marbles in the following situation? 54.1 g

Plastic Cup Mass: 6.7 g

10 Marbles in plastic cup mass: 60.8 g

What base and/or prefix would you use in the following situations?

To measure the length of a classroom, use: meter

To measure the mass of a person, use: kg

To measure the volume of a small rock, use: mL

To measure the length of a street, use: km

Be able to read metric temperature on a thermometer.

Solve each problem:

1) 5 km = 5,000 m

6) 20 cm = 0.2 m

2) 0.675 L = 675 mL

7) 55 km = 55,000 m

3) 762 g = 0.762 kg

8) 4000 mg = 4 g

4) 34 cm = 0.34 m

9) 6 cm = 60 mm

5) 225 mL = 0.225 L

10) 0.12 L = 120 mL