

Science Skills Review

Metric System:

1. 5000 mL = _____ L
2. 1 g = _____ mL
3. 300 mm = _____ cm
4. 1m = _____ km
5. 500g = _____ nanograms
6. _____ mm = 57 cm = _____ μ m
7. What do the following prefixes stand for:
 - a. Kilo
 - b. Centi
 - c. Milli

Dimensional Analysis:

Use the following conversions to help you on the problems. Show all work in the correct dimensional analysis format:

1 m = 3.3ft
 5280 ft = 1 mile
 2.54 cm = 1 in

1. How many seconds are in 3 days?
2. How many inches are in 48 meters?
3. How many feet are in 2 meters?
4. How many centimeters are in 2 feet?

Observations:

1. A student is conducting an experiment and records that the height of the bean plant is 5 cm. What type of observation is this?
2. The bean plant in the dark grows taller; this is an example of what type of observation?

Scientific Notation:

Convert the following into standard notation:

1. 4.109003×10^{-6}
2. 9.00325×10^5

Convert the following into scientific notation:

1. 1,498,000,000
2. .000082901
3. 3,284,000

Vocabulary:

1. What is the difference between mass and volume?

Measuring in the lab:

1. A student measures the initial volume in the graduated cylinder to be 25 ml. The student puts a marble into the graduated cylinder and the final volume reads 29 ml. What is the volume of the marble?
2. What is the volume of a box with dimensions 6 cm x 4 cm x 2 cm?
3. Describe how to read a graduated cylinder.

