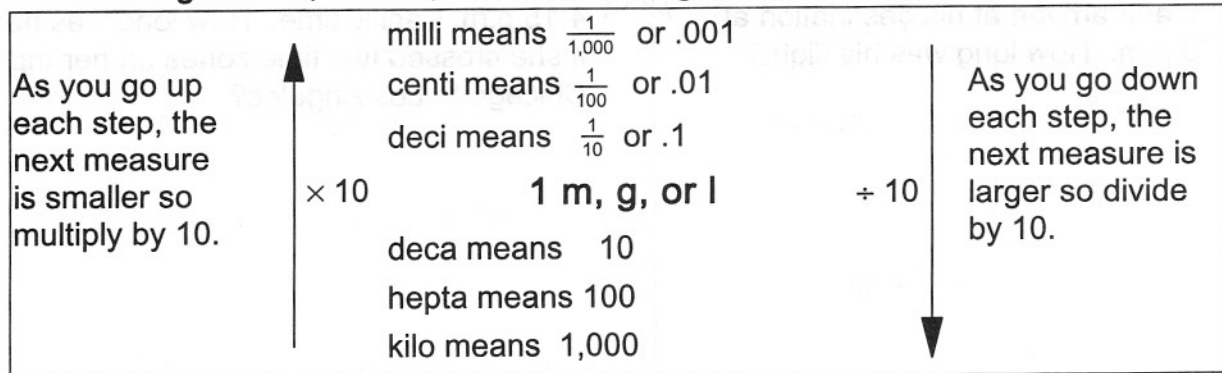


Unit 49 Using the Metric System

1. Understanding metric measurements
 - A. Outside of the United States, the metric system is the standard unit of measure.
 - B. Important metric measures
 1. A **meter (length)** is a little longer than a yard.
 2. A **gram (weight)** is much smaller than an ounce.
 3. A **liter (volume)** is a little larger than a quart.
 - C. Metric measures are based upon the decimal system.

Converting Meters, Grams, and Liters Using a Metric Conversion "Step" Table



- D. Relate these common metric measures to the "Step" table

Length Measures meter (m)	Weight Measures gram (g)	Volume Measures liter (l)
centimeter = .01 m	milligram = .001 g	milliliter = .001 l
kilometer = 1,000 m	kilogram = 1,000 g	kiloliter = 1,000 l

2. Sample problems on changing measures using the step conversion table:

- A. Expressing centimeters in millimeters:

50 centimeters = _____ mm
 Going **up** 1 step means **multiply** by 10.
 50 cm = 500 mm

- B. Expressing milligrams in kilograms:

4,500,000 mg = _____ kg
 Going **down** 6 steps means **dividing** by 1,000,000.
 4,500,000 milligrams = 4.5 kg

- C. Expressing liters in milliliters:

3.75 liters = _____ ml
 Going **up** 3 steps means **multiply** by 1,000.
 3.75 liters = 3,750 ml