

Learning Resource Center - Math Center

METRIC and U.S. MEASUREMENT EQUIVALENCIES

METRIC SYSTEM OF MEASUREMENT:

Basic unit of LENGTH	METER (m)	100cm = 1000
mm = .001 km Basic unit of MASS (weight)	GRAM (g)	
.001 kg = 1000 mg Basic unit of CAPACITY	(liquid measurement) LITER	₹ (L)
1000 ml = .001 kl		

Important Metric System Prefixes: kilo = 1,000 deci = 0.1 tera = 1,000,000,000,000 hector = 100 centi = 0.01 giga = 1,000,000,000 deca = 10 milli = 0.001 mega = 1,000,000

LENGTH WEIGHT VOLUME 1 meter (m) = 100 centimeters (cm) 1 gram (g) = 1000 milligrams (mg) 1 L = 1000 mL 1 cm = 0.01 m 1 kilogram (kg) = 1000 grams 1 mL = 0.001 L 1 m = 1000 millimeters (mm) 1 mg = 0.001 g 1 k = 1000 L 1 mm = 0.001 m 1 g = 0.001 kg 1 cm = 10 mm 1 mm = 0.1 cm 1 kilometer = 1000 m 1 m = 0.001 km 1 megameter = 1,000,000 m 1 hectometer = 100 m 1 dekameter = 10 m 1 decimeter = 1/1000 m 1 mm = 1/1000 m 1 micrometer = 1/1,000,000 m

U.S. CUSTOMARY SYSTEM OF MEASUREMENT:

LENGTH WEIGHT CAPACITY AREA 1 foot = 12 inches 1 lb = 16 oz 1 cup = 8 fl oz 1 ft² = 144 in² 1 yard = 3 feet 1 ton = 2,000 lbs 1 pint = 2 cups 1 yard² = 9 ft² 1 yard = 36 inches 1 quart = 4 c/2 pts 1 acre = 43,560 ft² 1 mile = 5,280 feet 1 gal = 4 quarts 1 mile² = 640 acres

APOTHECARIES' WEIGHTS and MEASURES:

1 dram = 60 grains (gr) 1 fluid dram = 60 minims 1 ounce = 8 drams 1 ounce = 8 fluid drams 1 pound (lb) = 12 ounces 1 pint (pt) = 16 oz 1 ounce = 480 gr 1 quart = 2 pints 1 fluid oz = 480 minims 1 gallon = 4 quarts 1minim = 1 gr

CONVERSION BETWEEN U.S. CUSTOMARY SYSTEM and



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METRIC SYSTEM:

LENGTH WEIGHT CAPACITY 1 inch = 2.54 centimeter 1 oz = 28.35 grams 1 liter (L) = 1.06 quarts 1 meter = 3.28 feet 1 lb = 454 grams 1 gallon = 3.79 L 1 meter= 1.09 yards 1 kg = 2.2 lb 1 mile = 1.61 kilometers

HOUSEHOLD MEASUREMENTS:

1 fluid teaspoonful (t) = 60 drops (gtt) 1 fluid tablespoon (T) = 3 t 1 fluid ounce (oz) = 2 T 1 fluid ounce (oz) = 6 t 1 teacupful = 4 oz 1 ounce = 360 gtt 1 glassful = 8 oz

APPROXIMATE EQUIVALENTS

METRIC APOTHECARIES HOUSEHOLD

1 ml = 15 minims = 15 gtt 4 ml = 1 fluid dram = 60 gtt = 1 t 15 ml = 4 fluid drams = 1 T 30 ml = 1 oz = 2 T 500 ml = 1 pint 1000 ml = 1 quart 65 mg = 1 gr 1000 mg = 15 gr 4 g = 1 dram 30 g = 1 oz