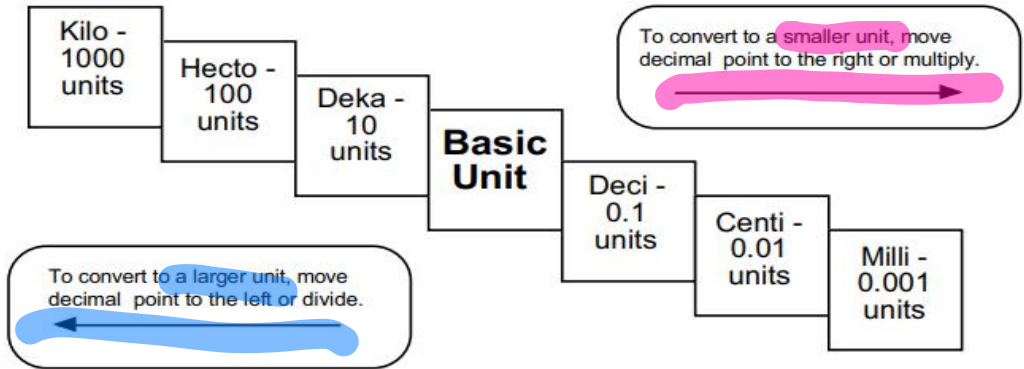


## Metric Mania Conversion Practice



Try these conversions, using the ladder method.

- 1) 2000 mg = 2 g  
*left 3 2000*
- 2) 104 km = 104,000 m  
*3 right 104*
- 3) 480 cm = 4.8 m  
*4800 ← Jackson*
- 4) 5.6 kg = 5600 g
- 5) 8 mm = 0.8 cm
- 6) 5 L = 5000 mL
- 7) 198 g = 0.198 kg
- 8) 75 mL = 0.075 L
- 9) 50 cm = 0.5 m
- 10) 5.6 m = 560 cm
- 11) 16 cm = 160 mm
- 12) 2500 m = 2.5 km
- 13) 65 g = 65000 mg
- 14) 6.3 cm = 63 mm
- 15) 120 mg = 0.12 g

Mass Units	Liquid Volume Units	Length Units
1 ton = 2000 pounds	1 gallon = 4 quarts	1 mile = 5280 feet
1 pound = 16 ounces	1 quart = 2 Pint	1 yard = 3 feet
	1 Pint = 2 cups	1 foot = 12 inches
	1 cup = 8 ounces	

Convert 156 inches to feet (Remember to simplify your final answer)

$$\frac{156 \text{ inches}}{1} \times \left(\frac{1 \text{ foot}}{12 \text{ inches}}\right) = \text{feet} \quad \boxed{13 \text{ ft}} \quad \text{My Answer:}$$

Convert 4 cups to ounces:

$$\frac{4 \text{ cups}}{1} \times \left(\frac{8 \text{ ounces}}{1 \text{ cup}}\right) = \text{ounces} \quad \boxed{32 \text{ oz}} \quad \text{My Answer:}$$

Convert 32 cups to gallons:

$$\frac{32 \text{ cups}}{1} \times \left(\frac{1 \text{ pint}}{2 \text{ cups}}\right) \times \left(\frac{1 \text{ quart}}{2 \text{ pints}}\right) \times \left(\frac{1 \text{ gallon}}{4 \text{ quarts}}\right) = 2 \text{ gallons} \quad \text{My Answer:}$$

Convert 3 miles to yards:

$$\frac{3 \text{ miles}}{1} \times \left(\frac{5280 \text{ feet}}{1 \text{ mile}}\right) \times \left(\frac{1 \text{ yard}}{3 \text{ ft}}\right) = \text{yards} \quad \boxed{5280 \text{ yds}} \quad \text{My Answer:}$$

Let's convert these.

Note:  $1 \text{ kg} = 2.2 \text{ lbs.}$

1 in = 2.54 cm

3 ft = 1 yd

16) 17 days into minutes

$$\frac{17 \text{ days}}{1} \times \frac{24 \text{ hrs}}{1 \text{ day}} \times \frac{60 \text{ mins}}{1 \text{ hr}} = 24,480 \text{ mins}$$

17) 10 inches into centimeters

$$\frac{10 \text{ in}}{1} \times \frac{2.54 \text{ cm}}{1 \text{ in}} = \boxed{25.4 \text{ cm}}$$

18) 165 pounds into kilograms

$$\frac{165 \text{ lbs}}{1} \times \frac{1 \text{ kg}}{2.2 \text{ lbs}} = \boxed{75 \text{ kg}}$$

19) 22,647 inches into miles

$$\frac{22647 \text{ in}}{1} \times \frac{1 \text{ ft}}{12 \text{ in}} \times \frac{1 \text{ miles}}{5280 \text{ ft}} = \boxed{0.36 \text{ miles}}$$

20) 45 yards into feet

$$\frac{45 \text{ yds}}{1} \times \frac{3 \text{ ft}}{1 \text{ yds}} = \boxed{135 \text{ ft}}$$

21) You find 13,905,613 pennies. How many dollars do you have?

$$\frac{13905613 \text{ pennies}}{1} \times \frac{\$1}{100 \text{ pennies}} = \boxed{\$139,056.13}$$

0.9

$$1) \frac{10000 \text{ gals.}}{1} \cdot \frac{1 \text{ m}^3}{264.2 \text{ gal}} = \boxed{37.9 \text{ m}^3}$$

$$2) \frac{330 \text{ mins}}{1 \text{ day}} \cdot \frac{1 \text{ hr}}{60 \text{ mins}} = \boxed{5.5 \text{ hr/day}}$$

$$3) \frac{1 \text{ year}}{1} \cdot \frac{365 \text{ days}}{1 \text{ yr}} \cdot \frac{24 \text{ hr}}{1 \text{ day}} \cdot \frac{60 \text{ min}}{1 \text{ hr}} \cdot \frac{60 \text{ sec}}{1 \text{ min}}$$

31536000 secs