

# Unit Conversion

UVU Math Lab

<u>Distance</u>	<u>Capacity</u>	<u>Weight</u>
1 km = 0.6214 mi 1 km = 1093.66 yd 1 km = 3280.99 ft 1 km = 1000 m	1 l = .2642 gal 1 l = 1.057 qt 1 l = 4.228 pt 1 l = 8.456 c 1 l = 67.648 fl oz	1 kg = .001 ton 1 kg = 2.2 lb 1 kg = 35.27 oz 1 kg = 1000 g
1 m = 1.09 yd 1 m = 3.281 ft 1 m = 39.37 in 1 m = 100 cm	1 gal = 4 qt 1 gal = 8 pt 1 gal = 16 c 1 gal = 128 fl oz 1 gal = 3.78 l	1 g = 0.001 kg 1 g = 0.00001764 ton 1 g = 0.0022 lb 1 g = 0.0353 oz
1 cm = 0.01094 yd 1 cm = 0.03283 ft 1 cm = 0.3937 in 1 cm = 100 mm	1 qt = 0.25 gal 1 qt = 2 pt 1 qt = 4 c 1 qt = 32 fl oz 1 qt = 0.946 l	1 ton = 56.7 kg 1 ton = 56700 g 1 ton = 2000 lb 1 ton = 32000 oz
1 mi = 1760 yd 1 mi = 5280 ft 1 mi = 63360 in 1 mi = 1.609 km	1 pt = 0.125 gal 1 pt = 0.5 qt 1 pt = 2 c 1 pt = 16 fl oz 1 pt = 0.2365 l	1 lb = 0.4536 kg 1 lb = 453.6 g 1 lb = 0.0005 ton 1 lb = 16 oz
1 yd = 0.0005681 mi 1 yd = 3 ft 1 yd = 36 in 1 yd = 0.9144 m	1 c = 0.0625 gal 1 c = 0.25 qt 1 c = 0.5 pt 1 c = 8 fl oz 1 c = 0.1183 l	1 oz = 0.02835 kg 1 oz = 28.35 g 1 oz = 0.00003125 ton 1 oz = 0.0625 lb
1 ft = 0.0001893 mi 1 ft = .333 yd 1 ft = 12 in 1 ft = 0.3048 m	1 fl oz = 0.0078125 gal 1 fl oz = 0.03125 qt 1 fl oz = 0.0625 pt 1 fl oz = 0.125 c 1 fl oz = 0.01478 l	<b><u>Temperature</u></b> $^{\circ}\text{F} = \frac{5}{9} (^{\circ}\text{C}) + 32$ $^{\circ}\text{C} = \frac{9}{5} (^{\circ}\text{F} - 32)$
1 in = 0.000015782 mi 1 in = 0.0278 yd 1 in = 0.083 ft 1 in = 2.54 cm		

Example: How many feet in 5 km?  $(5\text{km}) \left( \frac{1\text{mi}}{1.609\text{km}} \right) \left( \frac{5280\text{ft}}{1\text{mi}} \right) = \frac{5 \cdot 1 \cdot 5280 \cdot \text{km} \cdot \text{mi} \cdot \text{ft}}{1.609 \cdot \text{km} \cdot \text{mi}} = \frac{26400\text{ft}}{1.609} = 16407.7\text{ft}$

More handouts like this are available at: [www.uvu.edu/mathlab/mathresources/](http://www.uvu.edu/mathlab/mathresources/)

# Units of Measure

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<b><u>Distance:</u></b>	<b><u>Area:</u></b>	<b><u>Volume:</u></b>	<b><u>Capacity</u></b>
<b>English:</b> Inches (in.) Feet (ft.) Yards (yd.) Miles (mi.)	<b>English:</b> Square Inches (in. <sup>2</sup> ) Square Feet (ft. <sup>2</sup> ) Square Yards (yd. <sup>2</sup> ) Square Miles (mi. <sup>2</sup> )	<b>English:</b> Cubic Inches (in. <sup>3</sup> ) Cubic Feet (ft. <sup>3</sup> ) Cubic Yards (yd. <sup>3</sup> ) Cubic Miles (mi. <sup>3</sup> )	<b>English:</b> Ounces (oz.) Cups (c.) Pints (pt.) Quarts (qt.) Gallons (gal.)
<b>Metric:</b> Centimeters (cm) Meters (m) Kilometers (km)	<b>Metric:</b> Square Centimeters (cm <sup>2</sup> ) Square Meters (m <sup>2</sup> ) Square Kilometers (km <sup>2</sup> )	<b>Metric:</b> Cubic Centimeters (cm <sup>3</sup> ) Cubic Meters (m <sup>3</sup> ) Cubic Kilometers (km <sup>3</sup> )	<b>Metric:</b> Milliliters (ml) Liters (l)