

Table 1. Base Units of Measurement

Quantity of Measurement	Unit	SI symbol	Non-SI symbol
Length	meter	m	
Mass	kilogram	kg	
Time	second	s	
Temperature	kelvin	K	°C
Amount of substance	mole	mol	
Volume	cubic meter	m ³	liter
Density	grams per cubic centimeter grams per milliliter	g/cm ³ g/mL	

Table 2. Units in the Metric System

Prefix	Symbol	Meaning
Mega	M	10 ⁶
Kilo	k	10 ³
Base Unit (m, L, g, etc.)	---	---
Deci	d	10 ⁻¹
Centi	c	10 ⁻²
Milli	m	10 ⁻³
Micro	μ	10 ⁻⁶
Nano	n	10 ⁻⁹
Pico	p	10 ⁻¹²

Metric Conversions - Using the chart above, make the following conversions:

- 750 cg to grams
- 0.044 km to meters
- 8.9 m to decimeters
- 0.107 g to centigrams
- 15 cm³ to liters
- 7.38 g to kilograms
- 10.2 m to nanometers
- 6.7 s to milliseconds

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