

Units and Conversions

SI Base Units

Mass	kilogram	kg	<u>Common</u>	
Length	meter	m	gram	g
Time	second	s		
Temperature	Kelvin	K	Celsius	°C
Amount of substance	mole	mol		

Common Prefixes

10 ⁶	mega	M	(1 Mg = 10 ⁶ g)	
10 ³	kilo	k	(1 kg = 10 ³ g)	
10 ⁻¹	deci	d	(1 dL = 10 ⁻¹ L)	
10 ⁻²	centi	c	(1 cm = 10 ⁻² m)	(100 cm = 1 m)
10 ⁻³	milli	m	(1 mL = 10 ⁻³ L)	(1000 mL = 1 L)
10 ⁻⁶	micro	μ	(1 μL = 10 ⁻⁶ L)	

Derived Units

Area	m ²		
Volume	m ³	1 L = 1 dm ³	1 mL = 1 cm ³
Density	g•cm ⁻³	g•mL ⁻¹	

English-Metric Conversions

1 in = 2.54 cm (exact)
1 lb = 453.6 g
1 qt = 0.946 L
1 min = 60 s; 1 h = 60 min (exact)

Temperature

°F = 1.8(°C) + 32
°C = (°F - 32)/1.8
K = °C + 273.15 (exact)

Avogadro's Number

6.022 x 10²³ mol⁻¹