

USEFUL CONVERSION FACTORS AND RELATIONSHIPS

<p>Length</p> <p><i>SI unit: meter (m)</i></p> <p>1 km = 0.62137 mi</p> <p>1 mi = 5280 ft = 1.6093 km</p> <p>1 m = 1.0936 yd</p> <p>1 in. = 2.54 cm (exactly)</p> <p>1 cm = 0.39370 in.</p> <p>1 Å = 10⁻¹⁰ m</p>	<p>Energy (derived)</p> <p><i>SI unit: Joule (J)</i></p> <p>1 J = 1 kg·m²/s²</p> <p>1 J = 0.2390 cal = 1 C × 1 V</p> <p>1 cal = 4.184 J</p> <p>1 eV = 1.602 × 10⁻¹⁹ J</p>
<p>Mass</p> <p><i>SI unit: kilogram (kg)</i></p> <p>1 kg = 2.2046 lb</p> <p>1 lb = 453.59 g = 16 oz</p> <p>1 amu = 1.66053873 × 10⁻²⁴ g</p>	<p>Pressure (derived)</p> <p><i>SI unit: Pascal (Pa)</i></p> <p>1 Pa = 1 N/m² = 1 kg/m·s²</p> <p>1 atm = 101,325 Pa = 760 torr = 14.70 lb/in²</p> <p>1 bar = 10⁵ Pa</p> <p>1 torr = 1 mm Hg</p>
<p>Temperature</p> <p><i>SI unit: Kelvin (K)</i></p> <p>0 K = -273.15°C = -459.67°F</p> <p>K = °C + 273.15</p> <p>°C = $\frac{5}{9}$(°F - 32°)</p> <p>°F = $\frac{9}{5}$°C + 32°</p>	<p>Volume (derived)</p> <p><i>SI unit: cubic meter (m³)</i></p> <p>1 L = 10⁻³ m³ = 1 dm³ = 10³ cm³ = 1.0567 qt</p> <p>1 gal = 4 qt = 3.7854 L</p> <p>1 cm³ = 1 mL</p> <p>1 in³ = 16.4 cm³</p>

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