

Orders of Magnitude

10^{12}	10^9	10^6	10^3	10^2	10^1	10^0	10^{-1}	10^{-2}	10^{-3}	10^{-6}	10^{-9}	10^{-12}	10^{-15}
tera	giga	mega	kilo	hecto	deca	No	deci	centi	milli	micro	nano	pico	femto
T	G	M	k	h	da	prefix	d	c	m	μ	n	p	f

Units of Measurement

SI base units are highlighted

<u>Quantity</u>	<u>Unit (Symbol)</u>	<u>Notes</u>
Acceleration	meters per second per second (m/s^2)	also m/s/s or $\text{m}\cdot\text{s}^{-2}$
Activity	becquerel (Bq)	$1/\text{s} = \text{s}^{-1}$
Capacitance	farad (F)	$\text{C/V} = \text{kg}^{-1}\cdot\text{m}^{-2}\cdot\text{s}^4\cdot\text{A}^2$
Current	ampere (A)	
Electric Charge	coulomb (C)	$\text{A}\cdot\text{s}$
Electric Potential	volt (V)	$\text{W/A} = \text{kg}\cdot\text{m}^2\cdot\text{s}^{-3}\cdot\text{A}^{-1}$
Energy	calorie (cal)	metric unit
Energy/Work	joule (J)	$\text{J} = \text{kg}\cdot\text{m}^2\cdot\text{s}^{-2}$
Force	newton (N)	$\text{N} = \text{kg}\cdot\text{m}\cdot\text{s}^{-2}$
Frequency	hertz (Hz)	$\text{waves/s} = 1/\text{s} = \text{s}^{-1}$
Inductance	henry (H)	$\text{kg}\cdot\text{m}^2\cdot\text{s}^{-2}\cdot\text{A}^{-2}$
Length	meter (m)	
Luminous Intensity	candela (cd)	

<u>Quantity</u>	<u>Unit (Symbol)</u>	<u>Notes</u>
Magnetic Field	tesla (T)	$\text{T} = \text{kg}\cdot\text{s}^{-2}\cdot\text{A}^{-1}$
Magnetic Flux	weber (Wb)	$\text{Wb} = \text{kg}\cdot\text{m}^2\cdot\text{s}^{-2}\cdot\text{A}^{-1}$
Mass	gram (g)	Base unit is the kilogram (1000 g)
Momentum	newton second (N·s)	$\text{N}\cdot\text{s} = \text{kg}\cdot\text{m}\cdot\text{s}^{-1}$
Power	watt (W)	$\text{J/s} = \text{kg}\cdot\text{m}^2\cdot\text{s}^{-3}$
Pressure	pascal (Pa)	$\text{Pa} = \text{N/m}^2 = \text{kg}\cdot\text{m}\cdot\text{s}^{-2}$
Quantity	mole (mol)	
Resistance	ohm (Ω)	$\text{V/A} = \text{kg}\cdot\text{m}^2\cdot\text{s}^{-3}\cdot\text{A}^{-2}$
Temperature	degree Celsius ($^{\circ}\text{C}$)	Metric unit based on T_f and T_b for water
Temperature	kelvin (K)	
Time	second (s)	
Velocity	meter per second (m/s)	
Volume	liter (L)	$1 \text{ L} = 1 \text{ dm}^3 = 0.001 \text{ m}^3$