

Constants Sheet

Physical Constants		
Quantity	Symbol	Approximate Value
Charge on an electron	q_e	$-1.6 \times 10^{-19} \text{C}$
Charge on a proton	q_p	$1.6 \times 10^{-19} \text{C}$
Coulomb's constant	k	$9.0 \times 10^9 \text{Nm}^2/\text{C}^2$
Gravitational constant	G	$6.67 \times 10^{-11} \text{Nm}^2/\text{kg}^2$
Mass of an electron	m_e	$9.11 \times 10^{-31} \text{kg}$
Mass of a proton	m_p	$1.67 \times 10^{-27} \text{kg}$
Mass of a neutron	m_n	$1.67 \times 10^{-27} \text{kg}$
Speed of light in a vacuum	c	$3.0 \times 10^8 \text{m/s}$
Acceleration due to gravity at Earth's surface	g	9.8m/s^2

Symbols	
Unit	Symbol
meter	m
kilogram	kg
second	s
ampere	A
hertz	Hz
newton	N
joule	J
watt	W
coulomb	C
volt	V
ohm	Ω
Degree Celsius	$^{\circ}\text{C}$

Prefixes		
Factor	Prefix	Symbol
10^{12}	tera	T
10^9	giga	G
10^6	mega	M
10^3	kilo	k
10^{-2}	centi	c
10^{-3}	milli	m
10^{-6}	micro	μ
10^{-9}	nano	n
10^{-12}	pico	p