Fundamental Physical Constants

Quantity	Symbol	Value
Avogadro's number	$N_{_A}$	$6.02214129(27) \times 10^{23} / \text{mol}$
Boltzmann's constant	$k_{_B}$	$1.3806488(13) \times 10^{-23} \text{ J/K}$
Coulomb constant	$k_e = 1/4\pi\varepsilon_0$	$8.987551787 \cdots \times 10^9 \text{ N} \cdot \text{m}^2 \cdot \text{C}^{-2}$
Elementary charge	e	$1.602176565(35) \times 10^{-19} \text{ C}$
Electron mass	$m_{_{e}}$	$9.10938215(45) \times 10^{-31} \text{ kg}$
Gravitational constant	G	$6.67384(80) \cdots \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{kg}^{-2}$
Neutron mass	$m_{_n}$	$1.674927351(74) \times 10^{-27} \text{ kg}$
Permeability of free space	$\mu_{_0}$	$4\pi \times 10^{-7} \text{ T} \cdot \text{m/A}$
Permittivity of free space	$\varepsilon_0 = 1/\mu_0 c^2$	$8.854187817 \cdots \times 10^{-12} \text{ C}^2 / \text{N} \cdot \text{m}^2$
Planck's constant	h	$6.62606957(29) \times 10^{-34} \text{ J} \cdot \text{s}$
Proton mass	$m_p^{}$	$1.672621777(74) \times 10^{-27} \text{ kg}$
Speed of light	c	$2.99792458 \times 10^{8} \text{ m} \cdot \text{s}^{-1}$

Astronomical Data

Earth	Value
Solar mass	$(1.98855 \pm 0.00025) \times 10^{30} \text{ kg}$
Earth mass	$5.97219 \times 10^{24} \text{kg}$
Earth mean radius	$6.371009 \times 10^6 \text{ m}$
Mean solar day	$8.6400 \times 10^4 \text{ s}$
Earth-Sun Orbit	
Aphelion	$1.52098232 \times 10^{11}$ km
Perihelion	$1.470098290 \times 10^{11}$ km
Eccentricity	0.01671123
Orbital Period	$3.15581495 \times 10^7 \text{ s}$
Moon	
Moon mass	$7.3477 \times 10^{22} \text{kg}$
Moon mean radius	$1.73710 \times 10^6 \text{ m}$
Moon orbital period (sidereal month)	$2.3605847 \times 10^6 \text{ s}$
Moon synodic period	$2.5514429 \times 10^6 \text{ s}$