

Constants

Speed of light in vacuum	$c = 3.00 \times 10^8 \text{ m s}^{-1}$
Permeability of vacuum	$\mu_0 = 4\pi \times 10^{-7} \text{ H m}^{-1}$
Permittivity of vacuum	$\epsilon_0 = 8.85 \times 10^{-12} \text{ F m}^{-1}$
Elementary charge	$e = 1.60 \times 10^{-19} \text{ C}$
Planck constant	$h = 6.63 \times 10^{-34} \text{ J s}$
Avagadro constant	$N_A = 6.02 \times 10^{23} \text{ mol}^{-1}$
Boltzmann constant	$k = 1.38 \times 10^{-23} \text{ J K}^{-1}$
Gas constant	$R = 8.31 \text{ J K}^{-1} \text{ mol}^{-1}$
Unified atomic mass constant	$m_u = 1.66 \times 10^{-27} \text{ kg} = 931 \text{ MeV c}^{-2}$
Electron mass	$m_e = 9.11 \times 10^{-31} \text{ kg}$
Proton mass	$m_p = 1.67 \times 10^{-27} \text{ kg}$
Gravitational constant	$G = 6.67 \times 10^{-11} \text{ N m}^2 \text{ kg}^{-2}$
Acceleration due to gravity	$g = 9.8 \text{ m s}^{-2}$