

Constants

Quest will use the following constant values unless the problem you are working on tells you differently.

$a_0 = 5.29177249 \times 10^{11} \text{ m}$	$\epsilon_0 = 12.5663706144 \times 10^{-7} \text{ N/A}^2$	$R = 8.314510 \text{ J/K mol}$
$c = 2.99792458 \times 10^8 \text{ m/s}$	$m_e = 9.1093897 \times 10^{-31} \text{ kg}$	$R_{\text{earth}} = 6.37 \times 10^6 \text{ m}$
$\epsilon_0 = 8.854187817 \times 10^{-12} \text{ C}^2/\text{Nm}^2$	$m_n = 1.6749286 \times 10^{-27} \text{ kg}$	$R_{\text{earth-moon}} = 3.84 \times 10^8 \text{ m}$
$F = 96485.47 \text{ C/mol}$	$m_p = 1.672623 \times 10^{-27} \text{ kg}$	$R_{\text{earth-sun}} = 1.496 \times 10^{11} \text{ m}$
$k_e = 8987551788.0 \text{ Nm}^2/\text{C}^2$	$M_{\text{earth}} = 5.98 \times 10^{24} \text{ kg}$	$R_H = 1.0973731534 \times 10^7 \text{ 1/m}$
$G = 6.67259 \times 10^{-11} \text{ Nm}^2/\text{kg}^2$	$M_{\text{moon}} = 7.36 \times 10^{22} \text{ kg}$	$R_{\text{moon}} = 1.74 \times 10^6 \text{ m}$
$g = 9.8 \text{ m/s}^2$	$M_{\text{sun}} = 1.991 \times 10^{30} \text{ kg}$	$R_{\text{sun}} = 6.96 \times 10^8 \text{ m}$
$h = 6.626075 \times 10^{-34} \text{ Js}$	$N_A = 6.0221367 \times 10^{23} \text{ 1/mol}$	$u = 1.6605402 \times 10^{-27} \text{ kg}$
$k_B = 1.380658 \times 10^{-23} \text{ J/K}$	$P_{\text{std}} = 1.013 \times 10^5 \text{ Pa}$	$V_m = 22.414 \times 10^3 \text{ m}^3/\text{mol}$
$C = 2.42631058 \times 10^{12} \text{ m}$	$q_e = 1.60217733 \times 10^{-19} \text{ C}$	
