Physical constants

Quantity	Symbol	Value in cgs units	Value in SI units
Gravitational constant	G	6.674×10^{-8} dyn cm^2 g^{-2}	6.674×10^{-11} m^3 kg^{-1} s^{-2}
Boltzmann constant	k	1.380650×10^{-16} erg K^{-1}	1.380650×10^{-23} J K^{-1}
Stefan-Boltzmann constant	σ	5.6704×10^{-5} erg cm^{-2} K^{-4} s^{-1}	5.6704×10^{-8} W m^{-2} K^{-4}
Planck's constant	h	6.626069×10^{-27}erg s	6.626069×10^{-34} J s
Speed of light	c	2.997925×10^{10}cm s^{-1}	2.997925×10^{8} m s^{-1}
Earth mass	$M_\oplus$	5.972×10^{27} g	5.972×10^{24} kg
Earth radius	$R_\oplus$	6.371×10^{8} cm	6.371×10^{6} m
Solar day	Day	86400 s	
Sidereal year	$P_\oplus$	1 yr = 3.155815×10^{7} s	
Astronomical unit	AU	1.496×10^{13} cm	1.496×10^{11} m
Solar mass	$M_\odot$	1.989×10^{33} g	1.989×10^{30} kg
Solar radius	$R_\odot$	6.955×10^{10} cm	6.955×10^{8} m
Solar temperature	$T_\odot$	5770 K	
Solar luminosity	$L_\odot$	3.827×10^{33} erg s^{-1}	3.827×10^{26} J s^{-1}
Solar apparent magnitude	$m_\odot$	-26.72	
Light year	ly	9.4605×10^{17} cm	9.4605×10^{15} m
Parsec	pc	3.086×10^{18} cm	3.086×10^{16} m
Densities	g cm^{-3}	Water ice: 0.94 Water: 1.0000000 Carbonaceous minerals: $\sim$2.5 Silicate materials: $\sim$3.5 Iron sulfide: 4.8 Iron: 7.9	

Object	Orbital semimajor axis [AU]	[cm]	Sidereal revolution period [years]	[days]	Orbital eccentricity	Sidereal rotation period [days]	Radius [km]	Mass [g]	Geometric albedo
Sun						25.4	696000	1.989×10^{33}	
Mercury	0.3871	5.791×10^{12}	0.2408467		0.205630	58.6462	2440.53	3.301×10^{26}	0.106
Venus	0.7233	1.082×10^{13}	0.61519726		0.006772	-243.018	6051.8	4.867×10^{27}	0.65
Earth	1.0000	1.496×10^{13}	1.0000174		0.0167086	0.99726968	6378.1366	5.972×10^{27}	0.367
Moon		3.844×10^{10}		27.321661	0.0549	27.321661	1738.1	7.342×10^{25}	0.136
Mars	1.5237	2.279×10^{13}	1.8808476		0.0934	1.02595676	3396.19	6.417×10^{26}	0.150
Phobos		9.376×10^{8}		0.31891023	0.0151	0.31891023	$13.5 \times 11 \times 9$	1.066×10^{19}	0.071
Deimos		2.346×10^{9}		1.263	0.00033	1.263	$7.5 \times 6.1 \times 5.5$	1.476×10^{18}	0.068
Jupiter	5.2044	7.786×10^{13}	11.862615		0.0489	0.41354	71492	1.898×10^{30}	0.52
Metis		1.280×10^{10}		0.294780	0.0002	0.294780	$30 \times 20 \times 17$		0.061
Adrastea		1.290×10^{10}		0.29826	0.0015	0.29826	$10 \times 8 \times 7$		0.10
Thebe		2.219×10^{10}		0.674536	0.0175	0.674536	$58 \times 49 \times 42$		0.047
Io		4.217×10^{10}		1.769137786	0.0041	1.769137786	1821.6	8.932×10^{25}	0.63
Europa		6.709×10^{10}		3.551181	0.009	3.551181	1560.8	4.780×10^{25}	0.67
Ganymede		1.070×10^{11}		7.15455296	0.0013	7.15455296	2634.1	1.482×10^{26}	0.43
Callisto		1.883×10^{11}		16.6890184	0.0074	16.6890184	2410.3	1.076×10^{26}	0.22
Saturn	9.5826	1.434×10^{14}	29.447498		0.0565	0.44401	60268	5.683×10^{29}	0.47
Titan		1.223×10^{11}		15.945	0.0288	15.945	2574.73	1.345×10^{26}	0.22
Uranus	19.216	2.875×10^{14}	84.016846		0.046381	-0.71833	25559	8.681×10^{28}	0.51
Neptune	30.07	4.50×10^{14}	164.79132		0.008678	0.67125	24764	1.024×10^{29}	0.41
Triton		3.548×10^{10}		5.876854	0.000016	5.876854	1353.4	2.139×10^{25}	0.76