Orbital and physical characteristics of the Solar System (Sun, planets and Pluto)

Orbital characteristics

	Mercury	Venus	Earth	Mars	Jupiter	Saturn	Uranus	Neptune	*Pluto*
Semi-major axis (m)	$5.7909 \cdot 10^{10}$	$1.0821 \cdot 10^{11}$	$1.49598 \cdot 10^{11}$	$2.27939 \cdot 10^{11}$	$7.785472 \cdot 10^{11}$	$1.42698 \cdot 10^{12}$	$2.87099 \cdot 10^{12}$	$4.503444 \cdot 10^{12}$	$5.90638 \cdot 10^{12}$
Semi-major axis (A) ([1])	0.387098	0.723332	1.00000261	1.523679	5.204267	9.58201720	19.229411	30.1036615	39.48169
Orbital eccentricity	0.205630	0.00678	0.01671123	0.093315	0.048775	0.055723219	0.044405586	0.01121427	0.248807
Orbital inclinación ([2])	7.005°	3.39471°	0.0000000°	1.850°	1.305°	2.485240°	0.76986°	1.76795°	17.14175°
Sidereal orbital period	87.9691 d 0.240846 yr	224.70069 d 0.61519696 yr	365.25636 d 1.0000174 yr	686.971 d 1.88082 yr	4331.572 d 11.85919 yr	10759.21 d 29.45711 yr	30799.095 d 84.323326 yr	60190 d 164.79 yr	90613.31 d 248.0857 yr

Physical characteristics

	Sun	Mercury	Venus	Earth	Mars	Jupiter	Saturn	Uranus	Neptune	*Pluto*
Equatorial diameter (km)	1392 000	4878	12 102	12 756	6792	142 984	120 536	51 118	49 528	2374
Diameter / diameter of Earth ([3])	109	0.3826	0.9488498	1.00	0.533	11.209	9.4492	4.0073	3.8830	0.1861
Mass (kg)	$1.989 \cdot 10^{30}$	$3.302 \cdot 10^{23}$	$4.8690 \cdot 10^{24}$	$5.9742 \cdot 10^{24}$	$6.4193 \cdot 10^{23}$	$1.8988 \cdot 10^{27}$	$5.6846 \cdot 10^{26}$	$8.6811 \cdot 10^{25}$	$1.0244 \cdot 10^{26}$	$1.303 \cdot 10^{22}$
Mass / mass of Earth	332 946	0.05527	0.81500	1	0.10745	317.83	95.152	14.531	17.147	0.0021
Mean density (kg/m³)	1410	5427	5204	5515	3933.5	1326	687	1290	1638	2030
Equatorial surface gravity (m/s^2)	273	3.7	8.84	9.780327	3.68	24.72	10.42	7.76	11.1	0.66
Gravity / gravity of Earth ([4])	27.9	0.38	0.904	1	0.376	2.528	1.065	0.793	1.14	0.067
Escape velocity (km/s)	617.5	4.25	10.46	11.186	5.027	59.5	35.5	21.3	23.5	1.229
Sidereal rotation period	27.3 d 655h 12m	58.646 d 1407h 30m	-243.0185 d -5832h 27m	0.99726968 d 23h 56m 41s	1.0259568 d 24h 37m 23s	0.41354 d 9h 55m 30 s	0.44042 d 10 h 34m 12s	0.71833 d 17h 14m 24s	0.6713 d 16h 7m	6.38723 d 153h 17m
Axial tilt	7.25°	2.1°	177.3°	23.4392811°	25.19°	3.13°	26.73°	97.86°	28.32°	119.59°
Satellites	-	0	0	1	2	63	60	27	13	3

([1]) Astronomical unit of distance. 1 A =$1.495\ 978\ 706\ 91 \cdot 10^{11}$ m
([2]) Angle between the plane of the orbit of the planet and the ecliptic (plane containing the mean orbit of the Earth)
([3]) Equatorial diameter
([4]) Equatorial surface gravity
d = day = 86 400 s
yr = Julian year = 365.25 days