

*Table 2.1 Characteristics of the sun.*

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Mass	$1.99 \times 10^{30}$ kilograms
Radius	$6.96 \times 10^8$ meters
Luminosity	$3.9 \times 10^{26}$ Watts
Mean distance from Earth	$1.496 \times 10^{11}$ meters

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*Table 2.2 Characteristics of inner and outer planets.*

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<b>Characteristic</b>	<b>Jovian (outer)</b>	<b>Terrestrial (inner)</b>
density	small	large
mass	large	small
sun distance	large	small
atmosphere	extensive	thin or none
satellites	many	few or none
composition	H, He, CH <sub>4</sub> , NH <sub>3</sub>	Mostly silicates, rocks

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Table 2.3 Physical Data for the Planets.

Planet*	Mass ( $10^{26}$ gm)	Mean Radius (km)	Mean Density (gm cm <sup>-3</sup> )	Average Distance from Sun ( $10^6$ km)	Length of Year (days)	Obliquity (Degrees)	Orbital Eccentricity	Period of Rotation (days)	Albedo
Mercury	3.3	2440	5.42	58	88	~ 0	.206	58.7	.1
Venus	48.7	6052	5.25	108	224.7	177.4	.007	-243§	.65
Earth	59.8	6378	5.52	150	365.25	23.45	.017	1.00	.29
Mars	6.42	3396	3.94	228	687	25.2	.093	1.03	.15
Jupiter	19,100	71,490	1.34	778	4340	3.1	.048	0.41	.52
Saturn	5690	60,260	0.69	1430	10,800	26.7	.054	0.45	.47
Uranus	870	25,560	1.32	2878	30,700	97.7	.047	-0.72§	.50
Neptune	1030	24,765	1.64	4510	60,200	28.3	.009	0.67	.40
Pluto	0.1	1150	2.1	5900	90,700	122.5	.249	-6.39§	.55

\* The first four planets are similar in size, mass, density, and probably chemical composition. They are the *inner planets*. The remaining five are very different from Earth, but apart from Pluto, are similar to one another. They are the *outer planets*.

§ Venus, Uranus and Pluto rotate in the opposite sense to the other planets.