

The Solar System

Name	Type of Object	Diameter (miles)	Rotational Period (days or hours)	Axial Tilt (degrees)	Average Distance (from Sun in million miles or from planet in miles)	Orbital Period (days or years)	Orbit Eccentricity and Inclination		Number of Moons (Large Moons)	Note
The Sun	Star	864,337	25.4 - 36 d	7.25	-	-	-		-	Closest star (G2 V Yellow Dwarf Star)
Mercury	Rocky Planet	3,032	58.6 d	0.0	36.0 mm	88.0 d	.21	7.0	0	Gray and cratered (800° to -290° F)
Venus	Rocky Planet	7,521	243.0 d	177.3	67.2 mm	224.7 d	.01	3.4	0	Thick atmosphere and clouds (900° F). 117 & 584
Earth	Rocky Planet	7,926	23.9 h	23.4	93.0 mm	365.25 d	.02	0.0	1 (1)	The planet that supports life
The Moon	Moon	2,159	27.3 d	6.7	238,855 m	27.3 d	.06	5.2	-	Gray and cratered
Mars	Rocky Planet	4,212	24.6 h	25.2	141.6 mm	687 d	.09	1.85	2	The red planet /Olympus Mons & Valles Marineris
Asteroid Belt	-	-	-	-	-	-	-		-	Belt of rocky objects between Mars and Jupiter
Vesta	Asteroid	329	5.3 h	-	219.4 mm	3.6 y	.09	7.1	0	2 nd Largest Asteroid
Ceres	Dwarf Planet	592	9.1 h	-	257.1 mm	4.6 y	.08	10.6	0	Smallest of the dwarf planets
Jupiter	Gas Giant	86,881	9.9 h	3.1	483.6 mm	11.9 y	.09	1.3	95 (4)	Largest planet made up of hydrogen and helium
Io	Moon	2,264	1.8 d	-	262,094 m	1.8 d	.01	.04	-	Sulphur volcanoes
Europa	Moon	1,940	3.6 d	-	417,002 m	3.6 d	.01	.47	-	Surface of cracked ice
Ganymede	Moon	3,270	7.1 d	-	660,116 m	7.1 d	.00	.21	-	Largest moon in the solar system
Callisto	Moon	2,995	16.7 d	-	1,169,856 m	16.7 d	.01	.51	-	Near the size of Mercury
Saturn	Gas Giant	72,367	10.7 h	26.7	886.5 mm	29.45 y	.05	2.5	146 (7)	Spectacular ring systems
Enceladus	Moon	313	1.4 d	-	147,909 m	1.4 d	.01	.01	-	Plumes of icy particles
Rhea	Moon	950	4.5 d	-	327,505 m	4.5 d	.00	.33	-	Mixture of ice and rock
Titan	Moon	3,200	15.9 d	-	759,232 m	15.9 d	.03	.31	-	Thick orange atmosphere / Methane lakes
Iapetus	Moon	914	79.3 d	-	2,212,610 m	79.3 d	.03	8.3	-	Light and dark hemispheres
Uranus	Ice Giant	31,763	17.2 h	97.8	1,784 mm	84.0 y	.05	.77	28 (5)	Spins on its side
Miranda	Moon	293	-	-	80,716 m	1.4 d	-	-	-	Huge fault lines
Titania	Moon	980	-	-	271,104 m	8.7 d	-	-	-	8th largest moon in the solar system
Oberon	Moon	946	-	-	362,570 m	13.5 d	-	-	-	10th largest moon in the solar system
Neptune	Ice Giant	30,775	16.1 h	28.3	2,795 mm	164.8 y	.01	1.8	16 (1)	The blue planet
Triton	Moon	1,682	-	-	220,437 m	5.9 d	-	-	-	Active geysers / Orbits “backwards”
Kuiper Belt	-	-	-	-	30 – 50 au	-	-		-	“Donut” of ancient icy objects
Pluto	Dwarf Planet	1,430	6.4 d	122.5	3,670 mm	247.9 y	.25	17.1	5 (1)	Thin atmosphere / Mantle of ice with a rocky core
Charon	Moon	750	6.4 d	-	10,896 m	6.4 d	.01	.00	-	Half the width of Pluto
Haumea	Dwarf Planet	808	3.9 h	-	4,010 mm	281.9 y	.20	28.2	2	Shaped like a football
Makemake	Dwarf Planet	888	7.8 h	-	4,253 mm	305.3 y	.16	29.0	1	Redish color
Eris	Dwarf Planet	1,444	25.9 h	-	6,289 mm	561.4 y	.43	46.9	1	Near the same size as Pluto
Oort Cloud	-	-	-	-	> 2k to 5k au	-	-		-	Many icy objects (extends out to 10k - 100k au)

See [NASA's Solar System Exploration](https://science.nasa.gov/solar-system/) for more information about the Solar System: <https://science.nasa.gov/solar-system/>

See [NASA's The Planets](http://solarsystem.nasa.gov/planets/overview) for more information about the planets: <http://solarsystem.nasa.gov/planets/overview>

See [NASA's The Moons of our Solar System](https://science.nasa.gov/solar-system/moons/) for more information about moons: <https://science.nasa.gov/solar-system/moons/>

Additional facts from [NSSDC Planetary Fact Sheets](http://nssdc.gsfc.nasa.gov/planetary/planetfact.html): <http://nssdc.gsfc.nasa.gov/planetary/planetfact.html>

The Solar System

Name	Type of Object	Diameter (miles)	Rotational Period (days)	Average Distance (from planet in miles)	Orbital Period (days)	Number of Moons (Large Moons)	Note
Earth	Rocky Planet	-	-	-	-	1 (1)	
The Moon	Large Moon	2,159	27.3	238,855	27.3	-	Gray and cratered / One side always faces the Earth
Mars	Rocky Planet	-	-	-	-	2	
Phobos	Small Moon	13.8	.32 (7.7 h)	5,826	.32	-	Larger moon. Orbits faster than Mars' rotates
Deimos	Small Moon	7.7	1.3	14,576	1.3	-	Smaller moon.
Jupiter	Gas Giant	-	-	-	-	95 (4)	
Io	Large Moon	2,264	1.8	262,094	1.8	-	Sulphur volcanoes
Europa	Large Moon	1,940	3.6	417,002	3.6	-	Surface of cracked ice
Ganymede	Large Moon	3,270	7.2	660,116	7.2	-	Largest moon in the solar system
Callisto	Large Moon	2,995	16.7	1,169,856	16.7	-	Near the size of Mercury
Saturn	Gas Giant	-	-	-	-	146 (7)	
Mimas	Medium Moon	246.3	.94 (22.6 h)	115,289	.94	-	Made of ice / Herschel Crater
Enceladus	Medium Moon	313.2	1.4	147,909	1.4	-	Surface of Ice / Plumes of icy particles
Tethys	Medium Moon	662.4	1.9	183,101	1.9	-	Mostly Ice / Odysseus Crater
Dione	Medium Moon	698.0	2.7	234,515	2.7	-	Made of Ice with a rocky core / Lengthy fractured cliffs
Rhea	Medium Moon	949.8	4.5	327,505	4.5	-	Mixture of ¾ ice and ¼ rock
Titan	Large Moon	3,199.7	15.9	759,232	15.9	-	Thick orange atmosphere / Methane lakes
Hyperion	Small Moon	167.8	13	832,637	21.3	-	Largest non-spherical object
Iapetus	Medium Moon	914.2	79.3	2,212,610	79.3	-	Light and dark hemispheres
Uranus	Ice Giant	-	-	-	-	28 (5)	
Miranda	Medium Moon	293.0	1.4	80,716	1.4	-	Huge fault lines
Ariel	Medium Moon	719.4	2.5	118,620	2.5	-	Youngest of Uranus' moons
Umbriel	Medium Moon	726.6	4.1	165,285	4.1	-	Darkest of Uranus' moons
Titania	Medium Moon	980.4	8.7	271,104	8.7	-	8th largest moon in the solar system
Oberon	Medium Moon	946.2	13.5	362,570	13.5	-	10th largest moon in the solar system
Neptune	Ice Giant	-	-	-	-	16 (1)	
Triton	Large Moon	1,682	5.9	220,437	5.9	-	Active geysers / Orbits "backwards"
Pluto	Dwarf Planet	-	-	-	-	5 (1)	
Charon	Medium Moon	750.2	6.4	10,896	6.4	-	Half the width of Pluto
Styx	Small Moon	6-16	20.2	26,354	20.2	-	Formally P5 / Discovered 2012
Nix	Small Moon	35	24.9	30,254	24.9	-	Discovered 2005
Kerberos	Small Moon	19	32.2	35,884	32.2	-	Formally P4 / Discovered 2011
Hydra	Small Moon	36	38.2	40,216	38.2	-	Discovered 2005
Haumea	Dwarf Planet	-	-	-	-	2	
Namaka	Small Moon	105.6	18.3	15,943	18.3	-	
Hi'iaka	Small Moon	242.3	49.5	30,994	49.5	-	
Makemake	Dwarf Planet	-	-	-	-	1	
MK2	Small Moon	-	-	-	-	-	
Eris	Dwarf Planet	-	-	-	-	1	
Dysnomia	Small Moon	?	15.8	23,208	15.8	-	

See [NASA's Solar System Exploration](https://science.nasa.gov/solar-system/) for more information about the Solar System: <https://science.nasa.gov/solar-system/>

See [NASA's The Planets](http://solarsystem.nasa.gov/planets/overview) for more information about the planets: <http://solarsystem.nasa.gov/planets/overview>

See [NASA's The Moons of our Solar System](https://science.nasa.gov/solar-system/moons/) for more information about moons: <https://science.nasa.gov/solar-system/moons/>

Additional facts from [NSSDC Planetary Fact Sheets](http://nssdc.gsfc.nasa.gov/planetary/planetfact.html): <http://nssdc.gsfc.nasa.gov/planetary/planetfact.html>

The Solar System

Name	Type of Object	Diameter (x Earth at 7,926 miles)	Rotational Period (hours or days)	Axial Tilt (degrees)	Average Distance (in au at 92.96 million miles)	Orbital Period (years at 365.26 days per year)	Orbit Eccentricity (ellipse from 0 to 1)	Orbit Inclination (degrees vs. Solar System plane)	Number of Moons (Large Moons)
The Sun	Star	109.2	25.4 - 36 d	7.25	-	-	-	-	-
Mercury	Rocky Planet	(1/3) .38	58.6 d	0.0	.39	.24 (88 d)	.21	7.0	0
Venus	Rocky Planet	.95	243.0 d	177.3	.72	.62 (225 d)	.01	3.4	0
Earth	Rocky Planet	1.0	23.9 h	23.4	1.0	1.0	.02	0.0	1 (1)
Mars	Rocky Planet	(1/2) .53	24.6 h	25.2	1.5	1.9	.09	1.8	2
Jupiter	Gas Giant	11.0	9.9 h	3.1	5.2	11.9	.09	1.3	95 (4)
Saturn	Gas Giant	9.1	10.7 h	26.7	9.5	29.4	.05	2.5	146 (7)
Uranus	Ice Giant	4.0	17.2 h	97.8	19.8	84.0	.05	.77	28 (5)
Neptune	Ice Giant	3.9	16.1 h	28.3	30.1	164.8	.01	1.8	16 (1)

Name	Type of Object	Diameter (x Moon at 2,159 miles)	Rotational Period (hours or days)	Axial Tilt (degrees)	Average Distance (in au at 92.96 million miles)	Orbital Period (years at 365.26 days per year)	Orbit Eccentricity (ellipse from 0 to 1)	Orbit Inclination (degrees vs. Solar System plane)	Number of Moons (Large Moons)
Ceres	Dwarf Planet	(1/4) .26	9.1 h	-	2.8	4.6	.08	10.6	0
Pluto	Dwarf Planet	(2/3) .66	6.4 d	122.5	39.5	248	.25	17.1	5 (1)
Haumea	Dwarf Planet	(1/3) .37	3.9 h	-	43.0	282	.20	28.2	2
Makemake	Dwarf Planet	.40	7.8 h	-	45.3	305	.16	29.0	1
Eris	Dwarf Planet	(2/3) .66	25.9 h	-	68.1	561	.43	46.9	1

See [NASA's Solar System Exploration](https://science.nasa.gov/solar-system/) for more information about the Solar System: <https://science.nasa.gov/solar-system/>

See [NASA's The Planets](http://solarsystem.nasa.gov/planets/overview) for more information about the planets: <http://solarsystem.nasa.gov/planets/overview>

See [NASA's The Moons of our Solar System](https://science.nasa.gov/solar-system/moons/) for more information about moons: <https://science.nasa.gov/solar-system/moons/>

Additional facts from [NSSDC Planetary Fact Sheets](http://nssdc.gsfc.nasa.gov/planetary/planetfact.html): <http://nssdc.gsfc.nasa.gov/planetary/planetfact.html>