

Planet	Type	Orbits arou	Diam (km)	Aphelion (au or k	Perihelion (au o
<b>Sun</b>	star	Galaxy cent	1,391,900	0.00	0.00
<b>Mercury</b>	planet	Sun	4,866	0.47	0.31
<b>Venus</b>	planet	Sun	12,106	0.73	0.72
<b>Earth</b>	planet	Sun	12,742	1.02	0.98
<b>Moon</b>	planet	Earth	3,476	405,504.00	362,600.00
International Space Station	asteroid	Earth	unknown	700.00	20,000.00
Other artificial satellites	asteroid	Earth	unknown	700.00	20,000.00
Aphophis	asteroid	Sun	0.32	1.10	0.75
<b>Mars</b>	planet	Sun	6,760	1.66	1.38
Phobos	asteroid	Mars	22	9,517.00	9,234.00
Deimos	asteroid	Mars	12	23,470.00	23,455.00
Vesta	asteroid	Sun	525	2.57	2.15
Juno	asteroid	Sun	258	3.35	1.99
Hebe	asteroid	Sun	186	2.91	1.94
Melpomene	asteroid	Sun	141	2.80	1.80
Eunomia	asteroid	Sun	268	3.14	2.15
Flora	asteroid	Sun	128	2.57	1.86
Bamberga	asteroid	Sun	229	3.59	1.78
Ganymed	asteroid	Sun	33	4.09	1.23
Metis	asteroid	Sun	190	2.68	2.10
Nausikaa	asteroid	Sun	86	3.00	1.81
Massalia	asteroid	Sun	145	2.75	2.06
<b>Ceres</b>	planet	Sun	950	2.98	2.56
Pallas	asteroid	Sun	544	3.41	2.13
Iris	asteroid	Sun	200	2.98	1.83
Eros	asteroid	Sun	17	1.78	1.13
Hygiea	asteroid	Sun	431	3.50	2.77
Others asteroid main belt	asteroid	Sun	0-300 (total of	4.09	1.13
<b>Jupiter</b>	planet	Sun	142,984	5.46	4.95
Metis	asteroid	Jupiter	40	128,026.00	127,974.00
Adrastea	asteroid	Jupiter	20	129,000.00	129,000.00
Amalthea	asteroid	Jupiter	188	182,840.00	181,150.00
Thebe	asteroid	Jupiter	100	226,000.00	218,000.00
<b>Io</b>	planet	Jupiter	3,642	423,400.00	420,000.00
<b>Europa</b>	planet	Jupiter	3,130	676,938.00	664,862.00
<b>Ganymede</b>	planet	Jupiter	5,268	1,071,600.00	1,069,200.00
<b>Callisto</b>	planet	Jupiter	4,806	1,897,000.00	1,869,000.00
Leda	asteroid	Jupiter	16	11,160,000.00	11,160,000.00
Himalia	asteroid	Jupiter	186	13,082,000.00	9,782,900.00
Lysithea	asteroid	Jupiter	36	11,720,000.00	11,720,000.00
Elara	asteroid	Jupiter	76	11,740,000.00	11,740,000.00
Ananke	asteroid	Jupiter	30	29,063,500.00	12,567,000.00
Carne	asteroid	Jupiter	40	23,400,000.00	23,400,000.00
Pasiphae	asteroid	Jupiter	50	31,209,300.00	16,989,250.00
Sinope	asteroid	Jupiter	36	30,191,200.00	18,237,600.00
<b>Saturn</b>	planet	Sun	116,438	10.12	9.05
Pan	asteroid	Saturn	20	133,584.00	133,584.00
Atlas	asteroid	Saturn	30	137,670.00	137,670.00
Prometheus	asteroid	Saturn	92	139,380.00	139,380.00

Pandora	asteroid	Saturn	84	141,720.00	141,720.00
Epimetheus	asteroid	Saturn	114	151,410.00	151,410.00
Janus	asteroid	Saturn	178	151,460.00	151,460.00
<b>Mimas</b>	planet	Saturn	398	189,976.00	181,902.00
<b>Enceladus</b>	planet	Saturn	498	237,948.00	237,948.00
<b>Tethys</b>	planet	Saturn	1,060	294,619.00	294,619.00
Telesto	asteroid	Saturn	30	294,619.00	294,619.00
Calypso	asteroid	Saturn	26	294,619.00	294,619.00
Helene	asteroid	Saturn	33	377,396.00	377,396.00
<b>Dione</b>	planet	Saturn	1,120	377,396.00	377,396.00
<b>Rhea</b>	planet	Saturn	1,528	527,108.00	527,108.00
<b>Titan</b>	planet	Saturn	5,150	1,257,060.00	1,186,680.00
Hyperion	asteroid	Saturn	286	1,481,009.00	1,481,009.00
<b>Iapetus</b>	planet	Saturn	1,436	3,560,820.00	3,560,820.00
Phoebe	asteroid	Saturn	220	12,955,759.00	12,955,759.00
<b>Uranus</b>	planet	Sun	46,940	20.09	18.28
Cordelia	asteroid	Uranus	26	49,751.00	49,751.00
Ophelia	asteroid	Uranus	32	53,790.00	53,790.00
Bianca	asteroid	Uranus	44	59,170.00	59,170.00
Cressida	asteroid	Uranus	66	61,780.00	61,780.00
Desdemona	asteroid	Uranus	58	62,680.00	62,680.00
Juliet	asteroid	Uranus	84	64,350.00	64,350.00
Portia	asteroid	Uranus	110	66,090.00	66,090.00
Rosalind	asteroid	Uranus	54	69,940.00	69,940.00
Belinda	asteroid	Uranus	68	75,260.00	75,260.00
Puck	asteroid	Uranus	154	86,010.00	86,010.00
<b>Miranda</b>	planet	Uranus	472	129,390.00	129,390.00
<b>Ariel</b>	planet	Uranus	1,162	191,020.00	191,020.00
<b>Umbriel</b>	planet	Uranus	1,170	266,300.00	266,300.00
<b>Titania</b>	planet	Uranus	1,578	435,910.00	435,910.00
<b>Oberon</b>	planet	Uranus	1,522	583,520.00	583,520.00
Caliban	asteroid	Uranus	72	7,231,000.00	7,231,000.00
Sycorax	asteroid	Uranus	150	12,179,000.00	12,179,000.00
<b>Neptune</b>	planet	Sun	45,432	30.33	29.81
Naiad	asteroid	Neptune	58	48,227.00	48,227.00
Thalassa	asteroid	Neptune	80	50,074.00	50,074.00
Despina	asteroid	Neptune	148	52,526.00	52,526.00
Galatea	asteroid	Neptune	158	61,953.00	61,953.00
Larissa	asteroid	Neptune	193	73,548.00	73,548.00
Proteus	asteroid	Neptune	418	117,646.00	117,646.00
<b>Triton</b>	planet	Neptune	2,706	354,759.00	354,759.00
Nereid	asteroid	Neptune	340	9,655,000.00	1,372,000.00
Halimede	asteroid	Neptune	62	16,611,000.00	16,611,000.00
Neso	asteroid	Neptune	60	49,285,000.00	49,285,000.00
<b>Pluto</b>	planet	Sun	2,390	48.87	29.66
<b>Charon</b>	planet	Pluto	1,206	17,536.00	17,536.00
Nix	asteroid	Pluto	91	48,708.00	48,708.00
Hydra	asteroid	Pluto	114	64,749.00	64,749.00
<b>Eris (former Xena)</b>	planet	Sun	2,330	97.65	37.91
Dysnomia (former Gabrielle)	asteroid	Eris	350	37,350.00	37,350.00

<b>Makemake</b>	planet	Sun	1,430	52.84	38.59
<b>Sedna</b>	planet	Sun	995	936.00	76.09
<b>Haumea</b>	planet	Sun	1,240	51.54	34.72
Namaka	asteroid	Haumea	170	25,657.00	25,657.00
Hi'iaka	asteroid	Haumea	390	49,880.00	49,880.00
<b>Quaoar</b>	planet	Sun	1,074	45.12	41.70
<b>Orcus</b>	planet	Sun	917	48.07	30.27
<b>Vanth</b>	planet	Orcus	380	9,030.00	9,030.00
<b>2007 OR10</b>	planet	Sun	1,280	100.66	33.03
<b>2002 MS4</b>	planet	Sun	934	47.86	36.00
<b>Salacia</b>	planet	Sun	850	46.54	37.84
Actaea	asteroid	Salacia	286	5,619.00	5,619.00

Distance to Earth	Magnitu	Diameter (arcs seen next close	Visits	Distance to Earth	r Magniti	Rotation p
149,600,000	-26.74	1,900.00	Solar and	149,600,000	-26.74	601.00
77,000,000	-2.60	4.54-13.02	Mariner 1	222,000,000	5.70	12.00
38,000,000	-4.90	9.70-66.00	Venera 3-	261,000		5832 (243 c
0				0		24.00
362,600	-12.74	1,800.00	1959 - 197	405,504	-2.50	synchronou
unknown	-3.60			unknown	-3.00	unknown
unknown	-2.00			unknown	10.00	unknown
31,300	3.40	0.00-2.11	2029 (3.4 mag)	314,160,000	21.00	30.50
57,600,000	-3.00	3.50-25.10	2018 Mars Ody:	401,000,000	1.60	24.55
57,600,000	11.30	0.01-0.07		401,000,000	16.00	synchronou
57,600,000	12.50	0.00-0.04		401,000,000	17.00	synchronou
170,544,000	5.20	0.20-0.64	Dawn 201	534,072,000	8.48	5.34
148,104,000	7.44			650,760,000	11.55	7.20
140,624,000	7.50			584,936,000	11.50	8.30
119,680,000	7.50			568,480,000	12.00	11.57
172,040,000	7.90			619,344,000	11.24	6.08
128,656,000	7.90			534,072,000	11.60	12.80
116,688,000	8.00			686,664,000	13.00	29.43
34,408,000	8.10			761,464,000	15.00	10.31
164,560,000	8.10			550,528,000	11.83	5.08
121,176,000	8.20			598,400,000	13.00	13.62
158,576,000	8.20			561,000,000	12.00	8.10
233,376,000	6.64	0.33-0.84	Dawn 201	595,408,000	9.34	9.07
169,048,000	6.50	0.22-0.66		659,736,000	10.65	7.80
124,168,000	6.73			595,408,000	11.40	7.14
19,448,000	6.80			415,888,000	15.00	5.16
264,792,000	9.00			673,200,000	11.97	27.60
19,448,000	10.00			761,464,000	25.00	unknown
628,743,036	-2.94	29.80-51.00	2015 - 6 ft Pioneer 1f	966,416,000	-1.60	103.92
628,743,036	17.50			966,416,000	19.00	synchronou
628,743,036	19.10			966,416,000	20.00	synchronou
628,743,036	14.10			966,416,000	20.00	synchronou
628,743,036	15.70			966,416,000	16.50	synchronou
628,743,036	5.02	0.80-1.19		966,416,000	6.50	synchronou
628,743,036	5.29	0.69-1.03		966,416,000	6.80	synchronou
628,743,036	4.61	1.15-1.73		966,416,000	6.00	synchronou
628,743,036	5.65	1.06-1.58		966,416,000	7.00	synchronou
628,743,036	20.20			966,416,000	25.00	12.83
628,743,036	14.60			966,416,000	17.00	7.78
628,743,036	18.40			966,416,000	20.00	unknown
628,743,036	16.77			966,416,000	18.00	12.00
628,743,036	18.90			966,416,000	20.00	unknown
628,743,036	18.00			966,416,000	20.00	unknown
628,743,036	17.03			966,416,000	19.00	unknown
628,743,036	18.30			966,416,000	20.00	unknown
1,200,000,000	-0.24	14.50-20.00	Pioneer 1:	1,670,000,000	1.47	10.57
1,200,000,000	20.00			1,670,000,000	22.00	synchronou
1,200,000,000	19.00			1,670,000,000	21.00	synchronou
1,200,000,000	15.80			1,670,000,000	17.00	synchronou

1,200,000,000	16.50			1,670,000,000	17.50	synchronou
1,200,000,000	15.60			1,670,000,000	17.00	synchronou
1,200,000,000	14.40			1,670,000,000	16.00	synchronou
1,200,000,000	12.90			1,670,000,000	14.50	synchronou
1,200,000,000	11.70			1,670,000,000	13.30	synchronou
1,200,000,000	10.20			1,670,000,000	12.80	synchronou
1,200,000,000	18.70			1,670,000,000	20.00	synchronou
1,200,000,000	18.70			1,670,000,000	20.00	synchronou
1,200,000,000	18.50			1,670,000,000	20.00	synchronou
1,200,000,000	10.40			1,670,000,000	13.00	synchronou
1,200,000,000	10.00			1,670,000,000	12.60	synchronou
1,200,000,000	8.20	0.58-0.89		1,670,000,000	9.00	synchronou
1,200,000,000	14.10			1,670,000,000	16.00	synchronou
1,200,000,000	10.20			1,670,000,000	11.90	synchronou
1,200,000,000	16.50			1,670,000,000	18.00	9.27
2,570,000,000	5.32	3.31-4.04	Voyager 2	3,150,000,000	5.90	17.24
2,570,000,000	24.10			3,150,000,000	26.00	synchronou
2,570,000,000	23.80			3,150,000,000	25.00	synchronou
2,570,000,000	23.00			3,150,000,000	25.00	synchronou
2,570,000,000	22.20			3,150,000,000	24.00	synchronou
2,570,000,000	22.50			3,150,000,000	24.50	synchronou
2,570,000,000	21.50			3,150,000,000	23.00	synchronou
2,570,000,000	21.00			3,150,000,000	22.80	synchronou
2,570,000,000	22.50			3,150,000,000	24.00	synchronou
2,570,000,000	22.10			3,150,000,000	23.80	synchronou
2,570,000,000	20.50			3,150,000,000	22.00	synchronou
2,570,000,000	15.80			3,150,000,000	17.00	synchronou
2,570,000,000	14.40			3,150,000,000	15.80	synchronou
2,570,000,000	14.50			3,150,000,000	16.00	synchronou
2,570,000,000	13.90			3,150,000,000	14.50	synchronou
2,570,000,000	14.10			3,150,000,000	15.30	synchronou
2,570,000,000	22.40			3,150,000,000	24.00	2.70
2,570,000,000	20.80			3,150,000,000	22.00	3.60
4,300,000,000	7.78	2.17-2.36	Voyager 2	4,553,000,000	8.02	6.11
4,300,000,000	23.90			4,553,000,000	25.00	synchronou
4,300,000,000	23.30			4,553,000,000	25.00	synchronou
4,300,000,000	22.00			4,553,000,000	23.70	synchronou
4,300,000,000	21.90			4,553,000,000	24.00	synchronou
4,300,000,000	21.50			4,553,000,000	23.00	synchronou
4,300,000,000	19.70			4,553,000,000	21.00	synchronou
4,300,000,000	13.47	0.10-0.13		4,553,000,000	15.00	synchronou
4,300,000,000	18.70			4,553,000,000	20.00	11.51
4,300,000,000	24.00			4,553,000,000	26.00	unknown
4,300,000,000	24.00			4,553,000,000	26.00	unknown
4,200,000,000	13.65	0.01-0.11	New horiz	7,500,000,000	16.30	153.28
4,200,000,000	16.80			7,500,000,000	19.00	synchronou
4,200,000,000	23.70			7,500,000,000	26.00	unknown
4,200,000,000	23.30			7,500,000,000	25.50	unknown
5,820,936,000	18.70	0.03-0.09		14,758,040,000	20.00	26.00
5,820,936,000	23.10			14,758,040,000	24.00	unknown

5,623,464,000	16.70	8,054,464,000	18.00	7.77
11,233,464,000	20.50	140,175,200,000	30.00	10.30
5,044,512,000	17.30	7,859,984,000	19.00	3.92
5,044,512,000	21.90	7,859,984,000	25.00	unknown
5,044,512,000	20.60	7,859,984,000	24.00	unknown
6,088,720,000	19.30	6,899,552,000	21.00	17.68
4,378,792,000	19.10	7,340,872,000	21.00	13.19
4,378,792,000	21.97	7,340,872,000	25.00	synchronou
4,791,688,000	21.30	15,208,336,000	23.00	unknown
5,236,000,000	20.60	7,309,456,000	23.00	unknown
5,511,264,000	22.00	7,111,984,000	24.00	6.09
5,511,264,000	24.00	7,111,984,000	25.00	unknown

**Orbital period Surface g Compositic Comments**

27000a1	270.94	
0.24	3.70	Oxygen, Sodium
0.61	8.87	Carbon dioxide 97%
1.00	9.81	
27.32	1.62	
unknown	unknown	
unknown	unknown	
7.77	0.01	
1.88	3.71	
0.32	0.01	
1.26	0.01	
3.63	0.25	
4.36	0.12	
3.78	0.09	
3.48	0.04	
4.30	0.08	
3.27	0.05	
4.40	0.06	
4.34	0.01	
3.69	0.07	
3.72	0.01	
3.74	0.01	
4.60	0.28	has ice,water and vapors
4.62	0.18	
3.68	0.11	
1.76	0.01	
5.57	0.09	
unknown	unknown	
11.86	24.79	
0.33	0.01	
0.30	0.01	
0.49	0.02	
0.67	0.01	
1.77	1.80	
3.55	1.31	
7.15	1.43	
16.69	1.24	
241.00	0.01	
250.56	0.06	
259.20	0.01	
259.64	0.03	
610.45	0.01	
702.28	0.02	
764.08	0.02	
724.10	0.01	
29.46	10.44	
0.58	0.01	situated within the rings
0.60	0.01	
0.61	0.01	

0.63	0.01	
0.69	0.01	
0.69	0.01	
0.94	0.06	
1.37	0.11	water vaporized up by more than 100 gaysers
1.89	0.15	
1.89	0.01	
1.89	0.01	
2.74	0.01	
2.73	0.23	
4.52	0.26	
15.95	1.35	some ice
21.28	0.01	
79.32	0.22	
550.56	0.01	
84.02	8.69	has ice,water
0.33	0.01	
0.38	0.01	
0.43	0.01	
0.46	0.01	
0.47	0.01	
0.49	0.02	
0.51	0.02	
0.56	0.01	
0.62	0.01	
0.76	0.03	
1.41	0.08	
2.52	0.27	
4.14	0.20	
8.71	0.38	
13.46	0.35	
579.73	0.01	
1288.88	0.01	
164.80	11.15	
0.29	0.01	
0.31	0.01	
0.33	0.03	
0.43	0.02	
0.55	0.03	
1.12	0.07	
5.88	0.78	orbits in the other way
360.13	0.06	
1879.08	0.01	
9740.73	0.01	
248.10	0.58	wird sideral orbit
6.39	0.28	
24.86	unknown	
38.21	unknown	
558.00	0.83	
15.77	unknown	

309.09	unknown
11400.00	unknown
283.28	0.63
18.28	unknown
49.12	unknown
285.97	unknown
245.18	0.27
9.54	0.11
546.60	unknown
271.53	unknown
274.03	unknown
5.49	unknown