

	<u>SUN</u>	<u>MERCURY</u>	<u>VENUS</u>	<u>MOON</u>	<u>EARTH</u>	<u>MARS</u>	<u>CERES</u>
	1,988,500.00	0.33	4.87	0.07	5.97	0.64	1.60E-04
Diameter (km)	1391400.	4,879.00	12,104.00	3,475.00	12,756.00	6,792.00	974.60
Density (kg/m3)	1,408.00	5,427.00	5,243.00	3,340.00	5,514.00	3,933.00	2,077.00
Gravity (m/s2)	274.00	3.70	8.90	1.60	9.80	3.70	0.28
Escape Velocity (km/s)	617.70	4.30	10.40	2.40	11.20	5.00	0.51
Rotation Period (hours)	624.00	1,407.60	-5,832.50	655.70	23.90	24.60	9.00
Sidereal Day	25 d	59 d	8 mo. or 243 d	27.32 d	24 hrs	25 hrs	9 hrs
Distance from Sun (*10^6 km)		57.90	108.20	0.384*	149.60	227.90	413.80
Perihelion (*10^6 km)		46.00	107.50	3.63E-01	147.10	206.60	382.60
Aphelion (*10^6 km)		69.80	108.90	4.06E-01	152.10	249.20	445.40
		1.52	1.01	1.12	1.03	1.21	1.16
		0.24	0.62	0.00	1.00	1.88	4.60
Change in dist to Earth 1 Planet Yr		2.87	6.83	1.12	NA	7.36	2.59
Change in dist to Earth 1 Earth Yr							
ROTATIONAL VELOCITY	7,005.15	10.89	-6.52	16.65	1,676.74	867.39	340.20
Solar Day	24-30 d	175.942 d	116.75 d	29d 12h	24h	24.7 h	9.0744 h
Length of Day (hours)	624.00	4,222.61	2,802.00	708.70	24.00	24.66	9.07
Solar Day seconds		15,201,388.80	10,087,200.00	2,551,320.00	86,400.00	88,920.00	32,668.00
Orbital Period (days)	8.76 * 10^10	87.97	224.65	27.30	365.25	686.98	1,681.60
Planetary Days per Yr		0.4999892010	1.9241970021	0.9245096656	365.25	668.60	4,447.50
Orbital Velocity (km/s)	220.00	47.40	35.00	1.00	29.80	24.10	17.88
Orbital Inclination (degrees)		7.00	3.40	5.10	0.00	1.90	3.00
Orbital Ecc - 0 is circle		0.21	0.01	0.06	0.02	0.09	0.08
Obliquity to Orbit (degrees)	67.23°	0.03	177.40	6.70	23.40	25.20	4.00
Mean Temperature (C)		167.00	464.00	-20.00	15.00	-65.00	-106.00
Surface Pressure (bars)		0.00	92.00	0.00	1.00	0.01	
Number of Moons	10000+	0.00	0.00	0.00	1.00	2.00	0.00
Ring System?		No	No	No	No	No	no
Global Magnetic Field?	Yes	Yes	No	No	Yes	No	
m*dist (kilogram*meters/hr)				has crust field	6,113,280.00	has crust field	
Angular Momentum via Axi	1.55*10^14	1,169.00	160,000.00		25,500,000.00	7,450,000.00	40.50
sidereal spin/orbit res	?	44,595.00	1.0814 or 27/25	1.00	1.43	1.30	1.09
SPIN/ORBIT RESONANCE	?	2.00	1.04	1.08	1.43	1.30	1.09
Centripetal Force to Sun		12.81	55.14		35.44	1.64	0.00
	<u>SUN</u>	<u>MERCURY</u>	<u>VENUS</u>	<u>MOON</u>	<u>EARTH</u>	<u>MARS</u>	<u>CERES</u>
		matches all	2^(1/18) Hits	2^(2/18)	2^(9/18)	2^(7/18)	2^(2/18)

<u>JUPITER</u>	<u>SATURN</u>	<u>URANUS</u>	<u>NEPTUNE</u>	<u>PLUTO</u>	<u>ERIS</u>	
1,898.00	568.00	86.80	102.00	1.46E-02	2.80E-03	Mass (*10^24 kg)
142,984.00	120,536.00	51,118.00	49,528.00	2,370.00	2,400.00	Diameter (km)
1,326.00	687.00	1,271.00	1,638.00	2,095.00	1180-2310	Density (kg/m3)
23.10	9.00	8.70	11.00	0.70		Gravity (m/s2)
59.50	35.50	21.30	23.50	1.30	1.31	Escape Velocity (km/s)
9.90	10.70	-17.20	16.10	-153.30	25.90	Rotation Period (hours)
10 hrs	11 hrs	17 hrs	16 hrs	6d 9h -6.3875d	26 hours	
778.60	1,433.50	2,872.50	4,495.10	5,906.40	10,123.00	Distance from Sun (10
740.50	1,352.60	2,741.30	4,444.50	4,436.80	5,687.00	Perihelion (10^6 km)
816.60	1,514.50	3,003.60	4,545.70	7,375.90	14,581.00	Aphelion (10^6 km)
1.10	1.12	1.10	1.02	1.66	2.56	OD as Interval Span of Oct
11.86	29.46	84.01	164.79	247.94	557.00	Orbital periodo in Earth Years
1.65	1.39	1.22	1.09	1.76	2.66	
45,373.48	35,390.19	-9,336.74	9,664.40	-48.57	291.11	ROTATIONAL VELOCITY
9.92592 h	10.56 h	17.232 h	16.104 h	6 d 9h	25.9 h	Solar Day
9.93	10.56	17.23	16.10	153.30	25.90	Length of Day (hours)
35,733.31	38,018.00	62,035.20	57,974.40	551,880.00	93,240.00	Solar Day in Seconds
4,332.59	10,759.22	30,688.50	60,190.00	90,560.00	203,416.00	Orbital Period (days)
10,475.82	24,452.77	42,741.64	89,701.94	14,177.69	188,493.59	Planetary Days per Yr
13.10	9.70	6.80	5.40	4.70	3.44	Orbital Velocity (km/s)
1.30	2.50	0.80	1.80	17.20	?	Orbital Inclination (degree)
0.05	0.06	0.05	0.01	0.24	0.44	Orbital Eccentricity
3.10	26.70	97.80	28.30	122.50	47.00	Obliquity to Orbit (degrees)
-110.00	-140.00	-195.00	-200.00	-225.00	-230.00	Mean Temperature (C)
Unknown*	Unknown*	Unknown*	Unknown*	0.00		Surface Pressure (bars)
79.00	62.00	27.00	14.00	5.00	1.00	Number of Moons
Yes	Yes	Yes	Yes	No	no	Ring System?
Yes	Yes	Yes	Yes	like mars		Global Magnetic Field?
				has atmosphere		
2.43 x10^12	4.85 x10^11	8.38 x10^9	9.83 x10^9	336.00	389.90	using 2/5M*R^2*period *2pi
1.28	1.47	1.30	1.36	1.73	1.44	sidereal spin/orbit res
1.28	1.47	1.30	1.36	1.73	1.44	solar day/solar year
418.34	37.28	1.40	0.66	0.00	0.00	using M*v^2/R and mean dis
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2^(7/18)	2^(10/18)	2^(9/18)	2^(8/18)	2^(14/18)	2^(10/18)	