Planetary Data Sheet

Celestial Body	Mass in 10^{24} kilograms	Diameter in kilometers	perihelion in 10^6 kilometers	aphelion in 10^6 kilometers	Avg Dist to Sun in 10^6 kilometers	Solar Day Length in Hours	Sidereal Day Length in Hours	Tropical Yr Length in Earth Days	Sidereal orbit period in Earth Days
Sun	1,988,500	1,391,400	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Mercury	0.33	4,879.00	46.0	69.818	57.909	4222.6	1,407.60	87.968	87.969
Venus	4.87	12,104.00	107.48	108.941	108.210	2802.0	-5,832.50	224.695	224.701
Moon	0.0735	3,475.00	0.3633	0.4055	0.3844	708.72	655.72	29.53	27.3217
Earth	5.97	12,756.27	147.095	152.100	149.598	24.0	23.9345	365.242	365.256
Mars	0.642	6,792.00	206.65	249.261	227.956	24.6597	24.6229	686.973	686.98
Ceres	.0009393	938.37	381.336	446.592	413.964	9.074	9.0742	n/a	1,681.338
Jupiter	1,898	142,984.0	740.595	816.363	778.479	9.9259	9.925	4,330.595	4,332.589
Saturn	568	120,536.0	1,357.554	1,506.527	1,432.041	10.656	10.656	10,746.94	10,759.22
Uranus	86.80	51,118.00	2,732.696	3,001.390	2,867.043	17.232	-17.232	30,588.74	30,685.4
Neptune	102	49,528.00	4,471.050	4,558.857	4,514.953	16.104	16.104	59,799.90	60,189
Pluto	.01309	2,376.60	4,436.80	7,375.900	5,906.4	153.282	-153.30	n/a	90,560
Eris	.0167	2,326.00	5,790.847	14,597.960	10,194.4	378.72*	378.72*	n/a	204,196

The data you see here comes from expanding NASA's own planetary fact sheet and data collated from other parts of their public website for the 13 bodies chosen. Their list leaves out Ceres and Eris. The property listed as Mean Tropical Year is not yet known for 3 bodies listed: Ceres, Pluto and Eris. For these I use available data. For the moon the synodic period is used as this is the time from full moon to full moon.

For the Sun the *Complete Solar Cycle Length* has been estimated to be **21.24 yrs.** This was used in conjunction with the planetary days and yrs for the scales

* Figure comes from a recent up close study in 2023, as of 1/2024 NASA has not updated, though they will likely do so soon