Planetary Fact Sheet - Metric

| | MERCURY | <u>VENUS</u> | EARTH | MOON | MARS | JUPITER | <u>SATURN</u> | <u>URANUS</u> | NEPTUNE | <u>PLUTO</u> |
|--|---------|--------------|--------------|--------|-------|----------------|---------------|---------------|----------------|--------------|
| Mass (10 ²⁴ kg) | 0.330 | 4.87 | 5.97 | 0.073 | 0.642 | 1898 | 568 | 86.8 | 102 | 0.0130 |
| Diameter (km) | 4879 | 12,104 | 12,756 | 3475 | 6792 | 142,984 | 120,536 | 51,118 | 49,528 | 2376 |
| Density (kg/m ³) | 5429 | 5243 | 5514 | 3340 | 3934 | 1326 | 687 | 1270 | 1638 | 1850 |
| Gravity (m/s ²) | 3.7 | 8.9 | 9.8 | 1.6 | 3.7 | 23.1 | 9.0 | 8.7 | 11.0 | 0.7 |
| Escape Velocity (km/s) | 4.3 | 10.4 | 11.2 | 2.4 | 5.0 | 59.5 | 35.5 | 21.3 | 23.5 | 1.3 |
| Rotation Period (hours) | 1407.6 | -5832.5 | 23.9 | 655.7 | 24.6 | 9.9 | 10.7 | -17.2 | 16.1 | -153.3 |
| Length of Day (hours) | 4222.6 | 2802.0 | 24.0 | 708.7 | 24.7 | 9.9 | 10.7 | 17.2 | 16.1 | 153.3 |
| Distance from Sun (10 ⁶ km) | 57.9 | 108.2 | 149.6 | 0.384* | 228.0 | 778.5 | 1432.0 | 2867.0 | 4515.0 | 5906.4 |
| Perihelion (10 ⁶ km) | 46.0 | 107.5 | 147.1 | 0.363* | 206.7 | 740.6 | 1357.6 | 2732.7 | 4471.1 | 4436.8 |
| Aphelion (10 ⁶ km) | 69.8 | 108.9 | 152.1 | 0.406* | 249.3 | 816.4 | 1506.5 | 3001.4 | 4558.9 | 7375.9 |
| Orbital Period (days) | 88.0 | 224.7 | 365.2 | 27.3* | 687.0 | 4331 | 10,747 | 30,589 | 59,800 | 90,560 |
| Orbital Velocity (km/s) | 47.4 | 35.0 | 29.8 | 1.0* | 24.1 | 13.1 | 9.7 | 6.8 | 5.4 | 4.7 |
| Orbital Inclination (degrees) | 7.0 | 3.4 | 0.0 | 5.1 | 1.8 | 1.3 | 2.5 | 0.8 | 1.8 | 17.2 |
| Orbital Eccentricity | 0.206 | 0.007 | 0.017 | 0.055 | 0.094 | 0.049 | 0.052 | 0.047 | 0.010 | 0.244 |
| Obliquity to Orbit (degrees) | 0.034 | 177.4 | 23.4 | 6.7 | 25.2 | 3.1 | 26.7 | 97.8 | 28.3 | 119.5 |
| Mean Temperature (C) | 167 | 464 | 15 | -20 | -65 | -110 | -140 | -195 | -200 | -225 |
| Surface Pressure (bars) | 0 | 92 | 1 | 0 | 0.01 | Unknown* | Unknown* | Unknown* | Unknown* | 0.00001 |
| Number of Moons | 0 | 0 | 1 | 0 | 2 | 95 | 146 | 28 | 16 | 5 |
| Ring System? | No | No | No | No | No | Yes | Yes | Yes | Yes | No |
| Global Magnetic Field? | Yes | No | Yes | No | No | Yes | Yes | Yes | Yes | Unknown |
| | MERCURY | <u>VENUS</u> | EARTH | MOON | MARS | JUPITER | <u>SATURN</u> | <u>URANUS</u> | NEPTUNE | <u>PLUTO</u> |

Planetary Fact Sheet in U.S. Units

Planetary Fact Sheet - Values compared to Earth

Index of Planetary Fact Sheets - More detailed fact sheets for each planet

Notes on the Fact Sheets - Explanations of the values and headings in the fact sheet

<u>Schoolyard Solar System</u> - Demonstration scale model of the solar system for the classroom



NASA Official: Dave Williams, david.r.williams@nasa.gov Last Updated: 22 March 2024, DRW