



The Solar System

Planet Data Sheet

DATA SHEET 1

	Distance from Sun		Diameter (km)	Year length (orbit time)
	(millions of km)	(AU)		
Mercury	58	0.4	4,880	88 days
Venus	108	0.7	12,100	224 days
Earth	150	1.0	12,800	365 days
Mars	228	1.5	6,730	687 days
Jupiter	778	5.2	143,000	12 years
Saturn	1,430	9.5	121,000	29.5 years
Uranus	2,870	30	51,100	84 years
Neptune	4,500	39	49,500	165 years

AU stands for Astronomical Unit. 1 AU = the average distance between the Earth and the Sun

DATA SHEET 2

	Day length	Average surface temperature (°C)	Number of moons	Surface gravity (% Earth gravity)
Mercury	176 days	167	0	38%
Venus	117 days	464	0	91%
Earth	24 hours	15	1	100%
Mars	25 hours	-65	2	38%
Jupiter	10 hours	-110	67	240%
Saturn	11 hours	-140	62	92%
Uranus	17 hours	-195	27	89%
Neptune	16 hours	-200	14	110%



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DATA SHEET 3

The Inner Planets

- Mercury** Named after Mercury, the Roman messenger of the gods. Rocky planet with many craters caused by meteorite impacts. Very little atmosphere. Surface temperature varies from 467°C in daytime to – 183°C at night. Water ice can be found in deep craters at the poles.
- Venus** Named after a Roman goddess known for beauty. Rocky planet with high volcanic activity - eruptions, lava flows and earthquakes. Very thick, poisonous atmosphere made up of 96.5% carbon dioxide and 3.5% nitrogen.
- Earth** Rocky planet with liquid water covering over 2/3 of its surface. Atmosphere made of mainly nitrogen (78%) and oxygen (21%). The only place in the solar system where liquid water and life are confirmed to exist.
- Mars** Named after the Roman god of war. Rocky planet with a thin atmosphere of 95% carbon dioxide. Water ice is found at the poles and there is some evidence that liquid water once flowed on its surface. Violent dust storms can cover the whole planet. Its two moons, Phobos and Deimos, were named after the two horses which pulled the Roman god Mars' chariot.

The Outer Planets

- Jupiter** Named after Jupiter, the god of all Roman gods. Made of 90% hydrogen and 10% helium, with a small amount of methane. Thought to have a dense, liquid core and gas outer layers. Its atmosphere features the 'Great Red Spot', a giant storm which has been raging for 300 years and is three times the size of Earth. Its four largest moons were first discovered by Galileo over 400 years ago.
- Saturn** Named after the Roman god of agriculture, and the father of Jupiter. Gas planet made from 96% hydrogen and 3% helium, with a small amount of methane. Winds in its atmosphere can reach 500mph. Its distinctive rings are made from millions of small rocks and dust particles which orbit the planet. Saturn's largest moon, Titan, has large lakes of liquid methane, and is the only place other than Earth where liquid has been found on the surface of a planet or moon.
- Uranus** Named after the Greek god of the sky. Methane in its atmosphere gives it a blue-green colour, although it is mainly made of hydrogen and helium gas. Inside its thick gaseous atmosphere, it has a small rocky core surrounded by frozen water, ammonia and methane.
- Neptune** Named after the Roman god of water. Similar composition and structure to Uranus, although it is slightly larger and more dense. Neptune is the only planet which is not visible from Earth without a telescope, due to its distance from Earth.