

Our Solar System

From our small world we have gazed upon the cosmic ocean for thousands of years. Ancient astronomers observed points of light that appeared to move among the stars. They called these objects planets, meaning wanderers. The words "solar system" refer to the Sun and all of the objects that travel around it. Our solar system is made up of a star - the Sun - nine planets, 138 moons and a bunch of comets, asteroids and other space rocks.

Our solar system is part of a galaxy known as the Milky Way and the Sun is the center of the solar system. Astronomers believe the solar system formed 4.5 billion years ago. The Sun contains 99.8% of all of the mass in our solar system. This mass has a tremendous gravitational pull on planets, satellites, asteroids, comets, and meteoroids. The stargazers also observed comets with sparkling tails, and meteors or shooting stars apparently falling from the sky. Asteroids and comets orbit our Sun in a flattened circle called an ellipse.

Planets

A planet is a large space body which reflects the light of a star around which it revolves. The nine planets that make up our solar system are Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, Neptune and Pluto. They are named after Roman deities - Jupiter, king of the gods; Mars, the god of war; Mercury, messenger of the gods; Venus, the goddess of love and beauty, and Saturn, father of Jupiter and god of agriculture.

Not all planets are the same. Some of them aren't even solid. The planets in our solar system are classified as inner planets and outer planets. The inner planets, the closest to the Sun, are solid spheres of rock like Earth, they include Mercury, Venus, Earth, and Mars. For their first 600 million years, these inner planets were constantly bombarded by asteroids and meteorites. That is why you will find craters of varying sizes on the inner planets and their satellites. Think of the craters on the Moon and Mars. Man stepped onto the Moon in 1969 to study the rocks and craters. In this new century, NASA's Mars Rovers are learning about a place much further away, they are sending us back information about the craters on Mars! There are even craters on the Earth. Over millions of years, the wind, rain, ice, and water have all changed the surface of our Earth since the craters were formed. Still, we can find craters on our planet, like meteor crater in Arizona.

The outer planets, with the exception of Pluto, are large gaseous planets with rings and include Jupiter, Saturn, Uranus, and Neptune. Saturn is not the only planet with rings. Between the inner and outer planets is an asteroid belt. Some of the planets have naturally occurring satellites, or moons, while others do not.