

Solar System

The Solar System is the Sun and all the objects that orbit around it. The Sun is orbited by planets, asteroids, comets and other things.

The Solar System is about 4.6 billion years old.[1] It formed by gravity in a large molecular cloud. Most of this matter came together in the center, and the rest flattened into an orbiting disk that became the Solar System. It is thought that almost all stars form by this process.

The Sun is a star. It makes up 99.9% of the Solar System's mass.[2] This means that it has strong gravity. The other objects are pulled into orbit around the Sun. The Sun is mostly made out of hydrogen, and some helium and higher elements.

There are eight planets in the Solar System. From closest to farthest from the Sun, they are: Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus and Neptune. The first four planets are called terrestrial planets. They are mostly made of rock and metal, and they are mostly solid. The last four planets are called gas giants. This is because they are much larger than other planets and are mostly made of gas.

Titan, one of Saturn's moons, is the only moon in the solar system to have an Atmosphere.

The Solar System also contains other things. There are asteroid belts, mostly between Mars and Jupiter. Further out than Neptune, there is the Kuiper belt and the scattered disc. These areas have dwarf planets, including Pluto, Makemake, Haumea, Ceres and Eris. There are thousands of very small objects in these areas. There are also comets, centaurs, and interplanetary dust.

Top 10 Facts about The Solar System

1. The Solar System has Eight Planets
2. Earth is only a very small part of The Solar System
3. The Solar System formed 4.6 Billion years ago
4. The Solar System is part of The Milky Way
5. The Sun is 93 million miles from the Earth
6. All planets and the Sun in the Solar System are shaped like balls
7. Planets in our Solar System are different temperatures
8. There are 181 moons in The Solar System
9. Neptune was the last planet to be discovered in The Solar System
10. You can see Venus from Earth

Questions/answers

What is the solar system?

The solar system comprises 8 planets, approximately 170 natural planetary satellites (moons), and countless asteroids, meteorites, and comets.

What are the planets in the solar system?

There are eight planets in the solar system. The four inner terrestrial planets are Mercury, Venus, Earth, and Mars, all of which consist mainly of rock. The four outer planets are Jupiter, Saturn, Neptune, and Uranus, giant planets that consist mainly of either gases or ice. Pluto was considered the ninth planet until 2006, when the International Astronomical Union voted to classify Pluto as a dwarf planet instead.

Where is the solar system?

The solar system is situated within the Orion-Cygnus Arm of the Milky Way Galaxy. Alpha Centauri, made up of the stars Proxima Centauri, Alpha Centauri A, and Alpha Centauri B, is the closest star system to the solar system.

How did the solar system form?

Scientists have multiple theories that explain how the solar system formed. The favoured theory proposes that the solar system formed from a solar nebula, where the Sun was born out of a concentration of kinetic energy and heat at the centre, while debris rotating the nebula collided to create the planets.

Is there life in the solar system aside from on Earth?

Europa and Enceladus, moons of Jupiter and Saturn respectively, are ice-covered rocky objects that scientists think may harbour life in the water beneath the surface. Some geological evidence points to the possibility of microorganisms on Mars.