

INTRODUCTION TO THE SOLAR SYSTEM

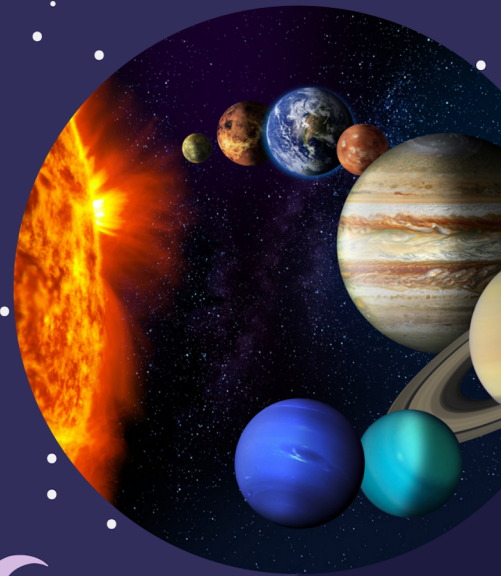


The solar system is a fascinating collection of planets, moons, asteroids, and other celestial objects that **ORBIT AROUND THE SUN**. The solar system is located in the Milky Way galaxy, about 25,000 light-years from the galactic center. It is a vast and complex system that has fascinated astronomers and space enthusiasts for centuries.

The planets in the solar system have a wide range of sizes, temperatures, and compositions. Some are rocky, like Earth, while others are gas giants, like Jupiter and Saturn. The inner planets, Mercury, Venus, Earth, and Mars, are all relatively small and rocky, while the outer planets, Jupiter, Saturn, Uranus, and Neptune, are much larger and made mostly of gas.

The solar system is made up of eight planets, each with unique characteristics and features:

- Mercury
- Venus
- Earth
- Mars
- Jupiter
- Saturn
- Uranus
- Neptune



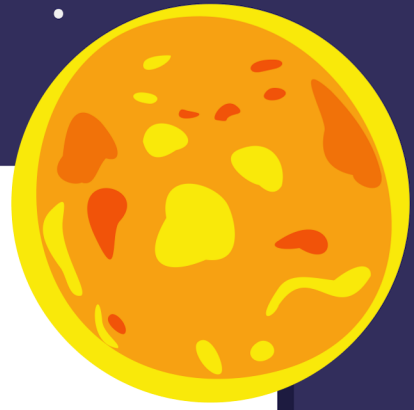
The solar system is also home to a number of moons, many of which are larger than the planet Mercury. These moons have their own unique features, such as volcanoes, geysers, and icy landscapes. Some of the most famous moons in the solar system include Ganymede, the largest moon in the solar system, and Europa, which is believed to have a subsurface ocean of liquid water.

The solar system is not just a collection of planets and moons. It is also home to asteroids, comets, and other small bodies that orbit the sun. Asteroids are rocky objects that range in size from small pebbles to large boulders. Comets are icy bodies that release gas and dust as they approach the sun, creating a spectacular tail that can be seen from Earth.

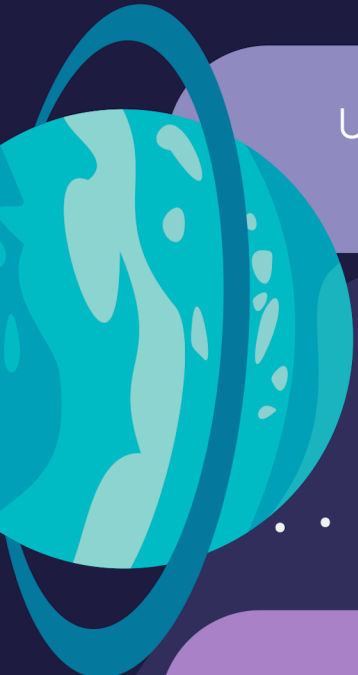


Comets are sometimes referred to as "dirty snowballs" because they are made up of ice, dust, and rock.

The sun is the center of the solar system and contains about 99.86% of the total mass of the system.



Uranus is the only planet in the solar system that rotates on its side.



FUN FACTS!

Venus is the hottest planet in the solar system, with a surface temperature of about 460°C.



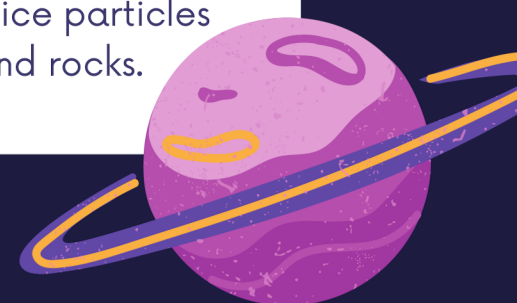
The largest planet in the solar system is Jupiter, which is more massive than all the other planets combined.



Mars is home to the largest volcano in the solar system, Olympus Mons, which is about three times the height of Mount Everest.



Saturn has a unique system of rings made up of ice particles and rocks.



COMPREHENSION QUESTIONS

SET 1 (EASY)

- What is the solar system?
- How many planets are in the solar system?
- What are the two types of planets in the solar system?
- What are some of the features of the moons in the solar system?

SET 2 (MEDIUM)

- What is the sun?
- What is the largest planet in the solar system?
- What is the hottest planet in the solar system?
- What is the largest volcano in the solar system?

SET 3 (HARD)

- What are comets and how do they differ from asteroids?
- What is unique about the rotation of Uranus?
- What is the system of rings around Saturn made of?
- Where is the solar system located in the Milky Way galaxy?

SET 4 (CHALLENGE)

- What is the total mass of the solar system?
- What are some of the theories about the formation of the solar system?
- How has the study of the solar system contributed to our understanding of the universe?
- What are some of the current and future space missions exploring the solar system?