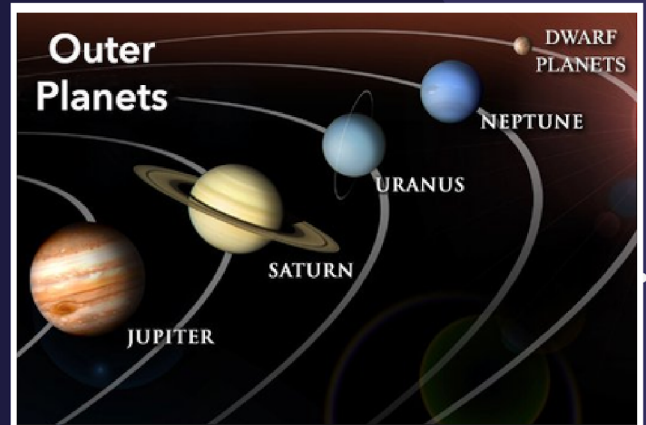


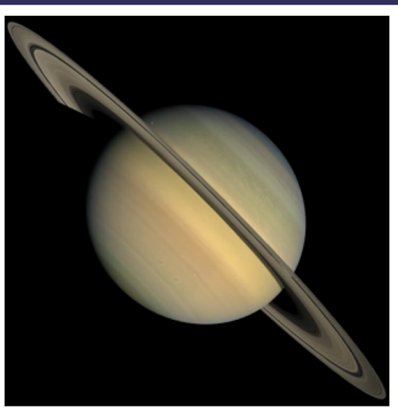
THE OUTER PLANETS

The outer planets of our solar system - Jupiter, Saturn, Uranus, and Neptune - are intriguing celestial bodies that have fascinated astronomers for centuries. These planets are called outer planets because they are located beyond the asteroid belt and are gas giants.



Jupiter

Jupiter is the largest planet in our solar system and has a massive magnetic field that is 20,000 times stronger than Earth's. It is known for its Great Red Spot, a giant storm that has been raging for over 350 years. Jupiter has 79 known moons, the most of any planet in our solar system. Jupiter's magnetic field is so strong that it can trap particles from the sun and create intense radiation belts around the planet.



Saturn

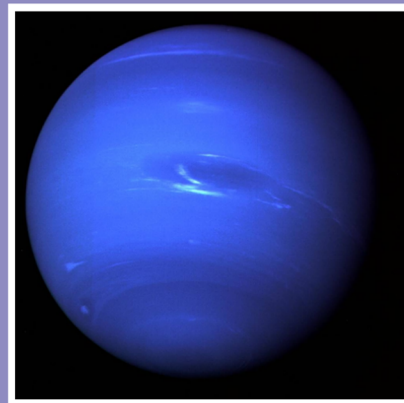
Saturn is famous for its spectacular rings, which are made up of billions of particles of ice and rock. It has the second-largest moon in our solar system, Titan, which is larger than the planet Mercury. Saturn's rings are not solid but are made up of countless individual particles, ranging in size from dust to boulders. Saturn's moon Enceladus has geysers that shoot jets of water and ice particles into space. All of the outer planets have rings, but Saturn's rings are the most famous and visible from Earth.



Uranus

Uranus is the only planet in our solar system that rotates on its side, with its poles facing towards the sun. It is also known for its blue-green color, which is caused by the methane in its atmosphere.

Uranus takes 84 Earth years to orbit the sun, and its seasons last for over 20 years each due to its tilted axis.



Neptune

Neptune is the farthest planet from the sun and is known for its Great Dark Spot, a massive storm system that is similar to Jupiter's Great Red Spot. It is also the windiest planet in our solar system, with winds that can reach up to 1,200 miles per hour.

Neptune's moon Triton is one of the coldest objects in our solar system, with temperatures that can drop to -235°C (-391°F).

Neptune's moon, Nereid, has an extremely eccentric orbit and can vary in distance from Neptune by over 9 million miles.



DID YOU KNOW?

- Uranus and Neptune are classified as ice giants because they are made up of more ice and gas than Jupiter and Saturn.
- All of the outer planets have been visited by spacecraft, with the most recent being NASA's Juno mission, which arrived at Jupiter in 2016.

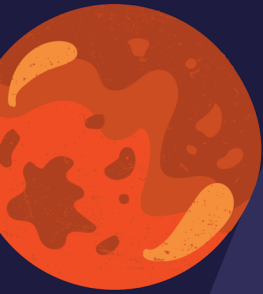


COMPREHENSION QUESTIONS



SET 1 (EASY)

- Which planet is known for its Great Red Spot?
- Which planet has the most moons in our solar system?
- What is the name of Saturn's largest moon?



SET 2 (MEDIUM)

- What causes the blue-green color of Uranus?
- What is the name of Neptune's largest moon?
- What is the name of the spacecraft that arrived at Jupiter in 2016?



SET 3 (HARD)

- What are the main differences between the outer planets and the inner planets in our solar system?
- What are some of the unique features of Saturn's rings?
- What are some of the challenges of studying Uranus and Neptune due to their distance from the sun?

