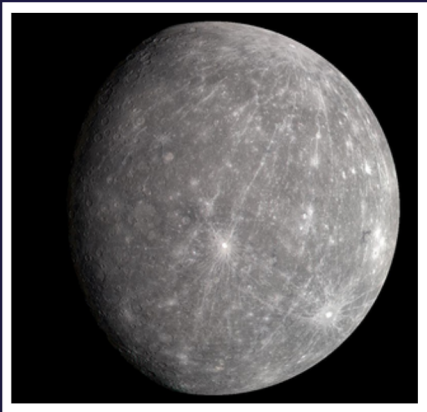
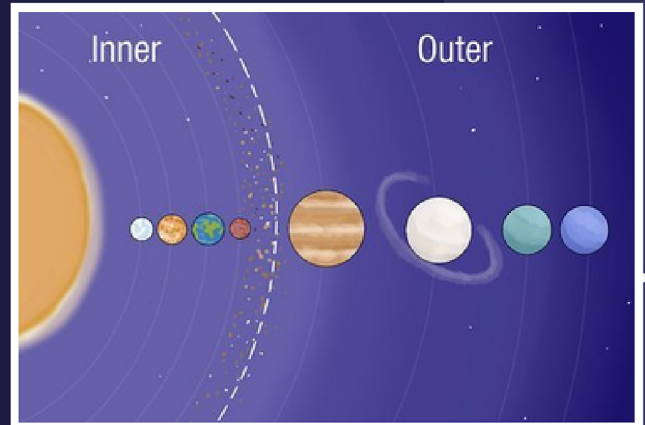


THE INNER PLANETS

The inner planets of our solar system are fascinating objects that have captivated astronomers for centuries. They are called inner planets because they are located closest to the sun, and they are all rocky planets like Earth. They are also known as the terrestrial planets because they are similar in composition to Earth.



Mercury

Mercury is the smallest planet in our solar system, and it is also the closest planet to the sun. It has a rocky surface that is covered in craters, and it has a very thin atmosphere. Despite its small size, Mercury has a relatively large iron core, which is thought to be responsible for its magnetic field. It is the fastest planet in our solar system, traveling around the sun at a speed of about 29 miles per second.



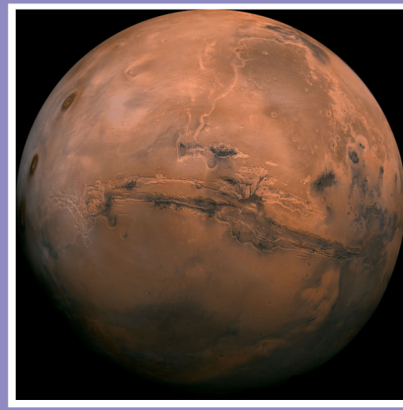
Venus

Venus is the second planet from the sun, and it is known for its extremely hot and thick atmosphere. The surface of Venus is covered in volcanoes, mountains, and vast plains, and it has a very slow rotation, taking about 243 Earth days to complete one rotation. Venus is also the brightest object in our sky after the sun and the moon. Venus has the longest day of any planet in our solar system, taking 243 Earth days to complete one rotation.



Earth

Earth is the third planet from the sun, and it is the only planet in our solar system that is known to support life. It has a dynamic surface that is constantly changing due to tectonic activity and erosion. Earth also has a magnetic field that protects us from the sun's harmful radiation. Earth is the only planet in our solar system that has plate tectonics, which causes the movement of the Earth's crust and creates earthquakes and volcanoes.



Mars

Mars is the fourth planet from the sun, and it is often called the Red Planet because of its rusty, reddish appearance. It has a thin atmosphere and a rocky, cratered surface, and it is home to the largest volcano in the solar system, Olympus Mons. Mars is also thought to have had liquid water on its surface in the past, which has led to speculation about the possibility of life on the planet. Mars has the largest volcano in the solar system, Olympus Mons, which is about three times the height of Mount Everest.



- All of the inner planets have been visited by **spacecraft**, with the most recent being NASA's Perseverance rover, which landed on Mars in February 2021.
- Mercury and Venus are both known as **inferior planets** because they orbit the sun closer to it than Earth does.
- Earth's moon is the **largest moon** in our solar system relative to its host planet.
- Mars has the **longest canyon** in the solar system, Valles Marineris, which is over 4,000 kilometers long.
- All of the inner planets have at least one **natural satellite or moon**, except for Mercury.

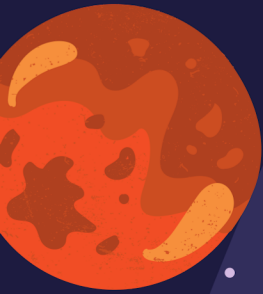


COMPREHENSION QUESTIONS



SET 1 (EASY)

- Which planet is known for its extremely hot and thick atmosphere?
- Which planet is the closest to the sun?
- What is the largest volcano in the solar system, and on which planet is it located?



SET 2 (MEDIUM)

- What causes earthquakes and volcanoes on Earth?
- Which planet has the longest day in our solar system?
- What is the name of NASA's most recent rover that landed on Mars in 2021?

SET 3 (HARD)

- What are the main differences between the inner planets and the outer planets in our solar system?
- What is the significance of plate tectonics on Earth?
- What are some of the challenges of sending spacecraft to Mars?

