

The sun is a star, and it is very important for our planet Earth. It gives us light and heat. However, Earth is not alone. It shares the sun with seven other planets. Together, these planets revolve around the sun in a solar system. Other bodies travel in this solar system, such as moons, asteroids, and comets. They all move around the sun because the sun's gravity is very strong.

Each planet's path around the sun is called an orbit. The planets that are closer to the sun have smaller orbits, so they take less time to go around it. Mercury takes 88 days to complete one orbit. Earth completes one orbit in 365 days, or one year. Neptune's orbit takes 60,200 days, or almost 165 years!

Each planet in our solar system is unique. For example, Mercury is the smallest planet. It has lots of craters, just like our moon. Jupiter is the biggest planet. Its diameter is eleven times bigger than Earth's. Saturn has giant rings of matter around it. Neptune is the farthest planet from the sun.

Mars is a neighboring planet, and scientists are learning a lot about it. They send many space probes to Mars. A space probe called Curiosity landed on Mars on August 6, 2012. Curiosity is as big as a car, and it moves over the surface of Mars. It recently found rocks that had strange shapes. Running water made these shapes. This is an important discovery. Space probes like Curiosity continue to explore the planets, moons, and other bodies in our solar system. If technology continues to grow, we will travel to these places ourselves.

Iron and rock make up most of the four smaller inner planets of our solar system. Gas and water make up most of the four larger outer planets. This means that you can stand on the surface of Earth, but you can't stand on Saturn. In fact, if you tried to stand on Saturn, you would sink down to the core of the planet.

Drawings of our solar system show the planets close to the sun. However, the distance between the planets and the sun is very far. For example, it would take 176 years to drive a car from Earth to the sun. It would take 5,300 years to drive from Neptune to the sun!

Astronomers think that there are many solar systems in our Milky Way galaxy. However, our solar system is special to us. It is our home.

Think

How are the inner planets the same?

How are they different from the outer planets?

Think

How are some of the planets different from Earth?

The Sister Planets

Did you know that Earth and Venus are called "sister planets"? This is because they are almost the same size, and Venus is the closest planet to Earth. However, Venus is much hotter than Earth, and it is always covered in thick clouds.



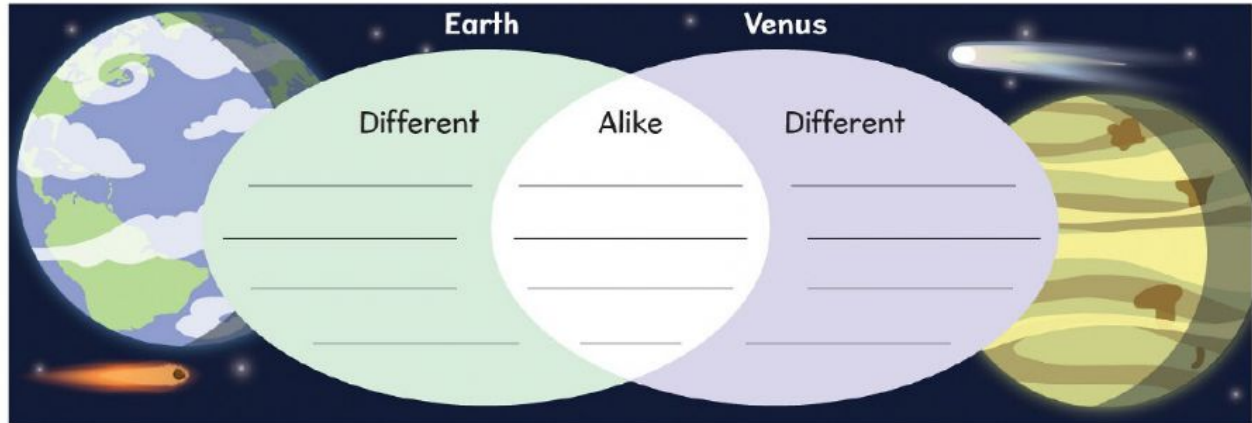
Understand



Comprehension

Think What interesting facts did you learn about our solar system? Discuss your ideas with your partner.

A How are the planets below alike and different? Complete the diagram.



B Circle True (T) or False (F).

- 1 Mercury and our moon both have craters.
- 2 Mars once had flowing water.
- 3 You can stand on the surfaces of the outer planets.
- 4 There are only a few asteroids in our solar system.

T	F
T	F
T	F
T	F

C **Words in Context** Match the sentence parts.

- | | | |
|--|---|--|
| 1 Space probes explore planets and moons. Explore means ... | • | • a ... far from the center. |
| 2 Many bodies travel in space. Bodies means ... | • | • b ... close to the center. |
| 3 Mercury, Venus, Earth, and Mars are inner planets. Inner means ... | • | • c ... to travel around a new place to learn about it. |
| 4 Jupiter, Saturn, Uranus, and Neptune are outer planets. Outer means ... | • | • d ... large objects in space. |