

## THE INNER SOLAR SYSTEM

The inner solar system is the name of the terrestrial planets and asteroid belt. Terrestrial is just a fancy way of saying rocky. Like the Earth, terrestrial planets have a core of iron and rock.

At the center of the solar system is the Sun. The Sun is a big ball of hydrogen powered by nuclear reactions. Massive explosions are going on all of the time inside the Sun. It's what makes the light every day and keeps our planet warm. Light zips from the Sun to us in about eight minutes. The Sun is the most massive thing in our solar system. It is so big you could fit about a million Earths inside of it! Closest to the Sun is the planet Mercury.

You could squeeze about eighteen Mercury's inside of Earth. It is made of mostly rock, but it has a huge iron core and it generates a big magnetic field. Speedy little Mercury sails around the sun in only eighty-eight days. Mercury was the messenger of the gods in Roman mythology, known for his speed.

Second in line comes Venus, which is sometimes called Earth's twin. It's about the same size as Earth, but that's where the similarities end.

Venus is always covered in thick clouds full of sulfuric acid. They whip around the planet at more than two hundred twenty mph. Violent winds shoot sand made of silicate around Venus's very dry, arid surface. The temperature averages nine hundred degrees, and the pressure's ninety times that on Earth. It takes two hundred and twenty four days to orbit the sun. Like Mercury, Venus was also named after a Roman Goddess, the Goddess of love.

You know what planet is next. You live on it! Yup, the Earth is number three. We have a rocky iron core at the center of our planet. We have liquid water, and our air is made of mostly nitrogen and oxygen. It takes three hundred and sixty-five days for us to circle the sun. We only have one moon. Next to us in is Mars. Mars also has a core of rock and iron. It is a little more than half the size of Earth. The most distinct feature about Mars is its red color. Dust rich in iron oxide covers the planet. It's sort of like the planet is rusting. White caps at the poles are water, forever frozen because of the colder temperatures further from the Sun. The only place the temperature rises above freezing is at the equator, or the middle of the planet. Mars has two moons, Deimos and Phobos but they are much smaller than our own moon. It takes nearly twice as long for Mars to circle the sun at almost 684 days.



The last part of the inner solar system is called the Asteroid Belt. It's the line between the inner rocky planets and the outer gaseous planets. Unlike the rest of the inner Solar System, the Asteroid Belt isn't a planet at all. It is a bunch of large rocky chunks, mostly meteoroids. There's also a dwarf planet named Ceres in the asteroid belt. The rest aren't very large.

The Earth is the only planet that we know of with life on it, but universe is a big place. Much of our solar system is still a mystery, there is still plenty to explore.

1 Select the correct answer.

Which of these statements is true?

- a. Venus orbits the sun more quickly than Mercury.
- b. Mercury orbits the sun more slowly than Mars.
- c. Earth orbits the sun more quickly than Venus.
- d. Mars orbits the sun more slowly than Earth.

2 What types of gas make up the majority of Earth's atmosphere?

Oxygen and Nitrogen

3 According to the text, where would you find water on Mars?

We can find the water in Mars at the white ice caps at poles.

4 How long does it take for light to travel from the sun to Earth?

It takes eight minutes and Twenty seconds.

5 Which of the following would be the most appropriate nickname for Venus?

- a. the cold desert planet
- b. the first inner planet
- c. the windy planet
- d. the triple mooned planet