

# The planets in our solar system

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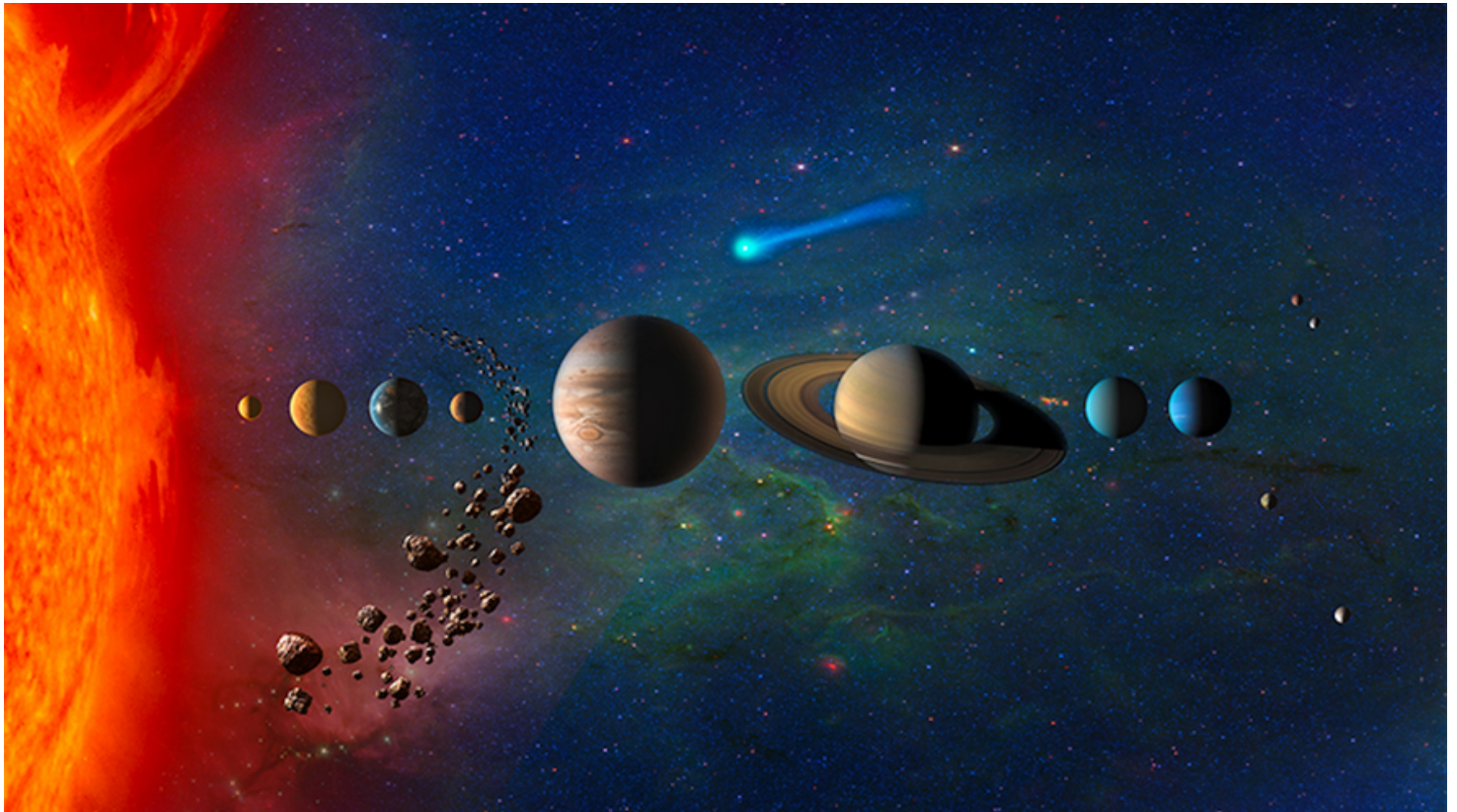


Image 1. An artist's rendering of the solar system. Note that the planet sizes and distances are not to scale. Credit: NASA

A solar system is made up of a star and all the planets that orbit it. Our solar system has eight planets. They circle a star that we call the sun. Our solar system is located in the Milky Way galaxy. The Milky Way contains many other solar systems in addition to ours. There are more planets in our galaxy than stars.

The four planets closest to the sun are Mercury, Venus, Earth and Mars. These are the rocky planets. They have solid outer crusts. After Mars there are two gas giants, Jupiter and Saturn. They are the largest planets in the solar system. The two farthest planets from the sun are the ice giants, Uranus and Neptune.

Beyond Neptune, there are several smaller objects called dwarf planets. You may have heard of Pluto. It used to be known as a planet, but now it is classified as a dwarf planet.

## Mercury

Mercury is the smallest planet in our solar system, and it is located closest to the Sun. It is only slightly larger than Earth's moon.

Mercury is the planet with the fastest orbit. It takes Earth 365 days to circle the Sun. Mercury completes its orbit in just 88 Earth days.

## **Venus**

Venus spins slowly in the opposite direction from most planets. It has a thick atmosphere. An atmosphere is a layer of gas that surrounds a planet. Venus' atmosphere traps heat like a blanket. This atmosphere makes Venus the hottest planet in our solar system.

## **Earth**

Earth is our home planet. It is the only place we know of where life exists. It's also the only planet in our solar system with liquid water on the surface.

## **Mars**

Today, Mars is a dusty, cold desert world with a very thin atmosphere. However, evidence suggests that this wasn't always the case. Billions of years ago, Mars may have been wetter and warmer. It may also have had a thicker atmosphere.

## **Jupiter**

Jupiter is the largest planet in the solar system. It is more than twice as large as all the other planets combined. The giant planet is known for its Great Red Spot. The spot is a giant storm that is bigger than Earth. The storm has been raging for centuries.

## **Saturn**

Saturn is surrounded by a system of icy rings. These rings make the planet unique in our solar system. The other giant planets have rings, but none are as beautiful as Saturn's rings.

## **Uranus**

Uranus is the seventh planet from the sun. It rotates at a nearly 90-degree angle from the path of its orbit. This tilt makes Uranus appear to spin on its side.

## **Neptune**

Neptune is the eighth and most distant planet orbiting our sun. It is dark, cold, and whipped by supersonic winds. These gusts travel faster than the speed of sound.

Scientists discovered most planets using telescopes. But Neptune was the first planet located using mathematical calculations. Scientists had a hunch there was another planet close to Uranus. They used math to predict Neptune's unknown location and size.