

# Birth of the Solar System

Our solar system has eight planets continually orbiting a star.

Artist's impression of the formation of a solar system, showing gas and dust swirling around a young star. In this illustration, some planets have formed and are already orbiting their sun.

**EXPLORE** the solar system with NASA's Eyes application:  
[eyes.nasa.gov](https://eyes.nasa.gov)

## How did our solar system form?

Astronomers use computer simulations to show that our solar system probably formed from a swirling disk of dust, gas, and rocks. Forces such as gravity caused small particles to clump together, and these clumps continued to grow in size as they orbited the young Sun. Over hundreds of millions of years, the planets of the solar system grew to become the objects we now know as Mercury, Venus, Earth, Mars, Jupiter, Saturn, Uranus, and Neptune.

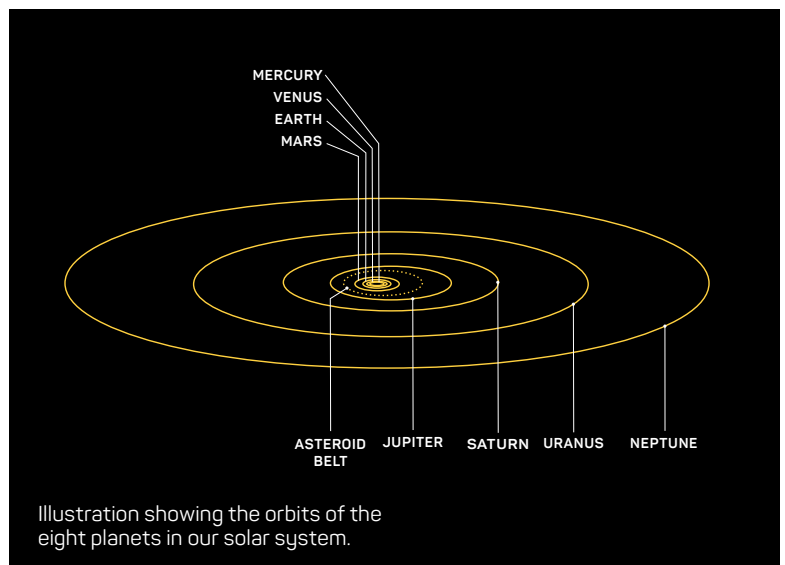


Illustration showing the orbits of the eight planets in our solar system.