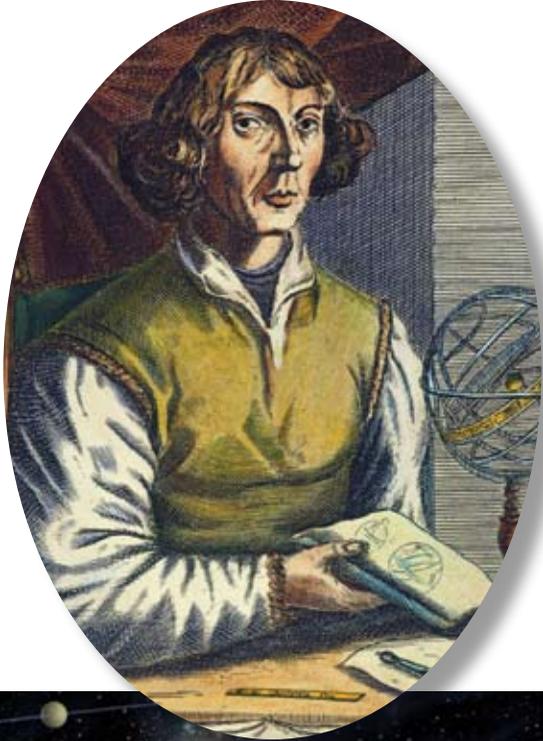
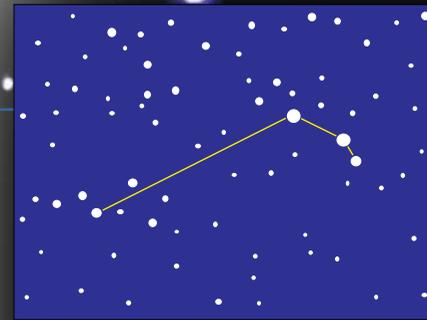
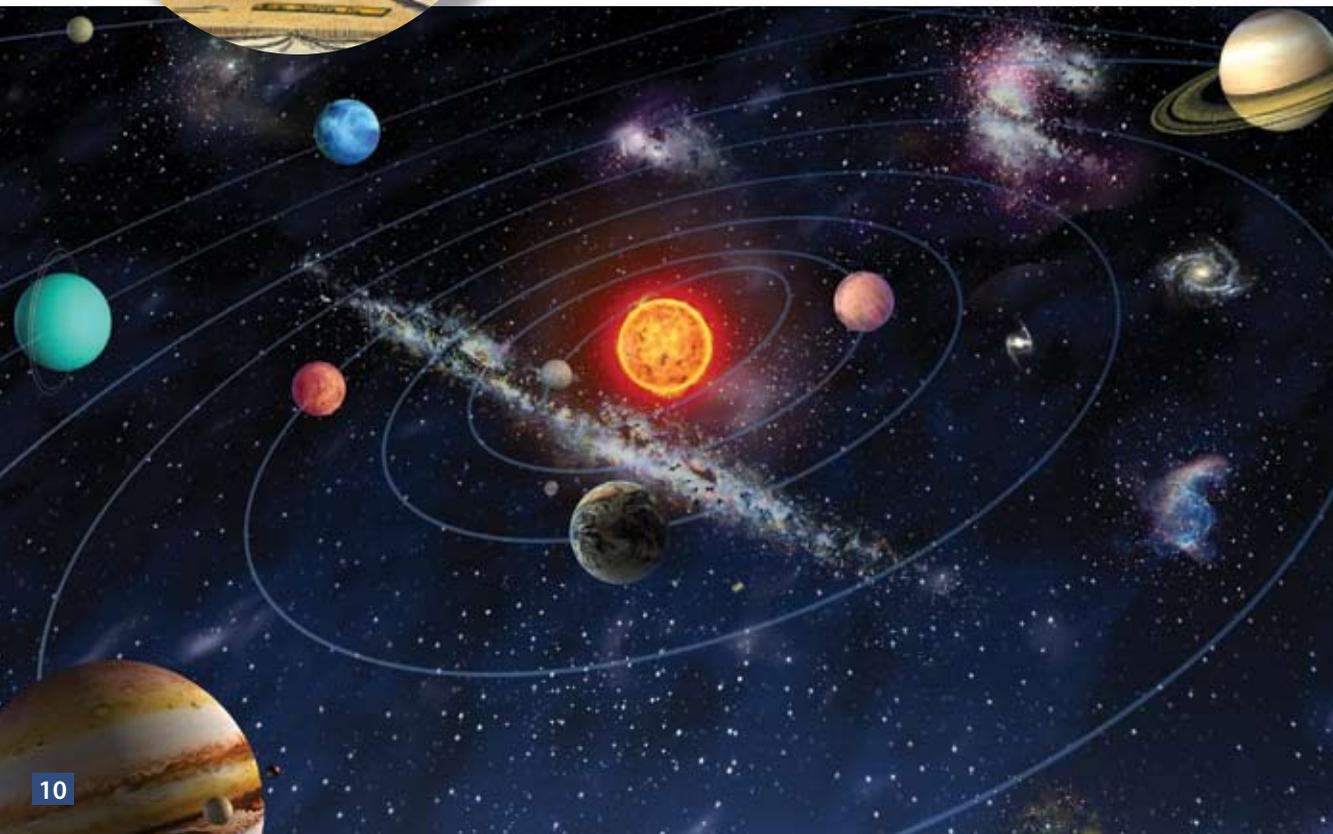


# Nicholas Copernicus (1473-1543)

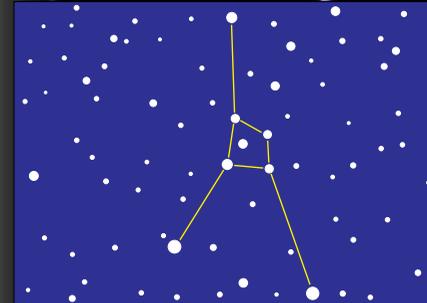


Five hundred years ago, people believed that Earth was the center of the **solar system**. They thought that the sun, moon, stars, and other planets revolved around it. That was until Nicholas Copernicus came along. Copernicus was born in Poland in 1473. He studied law and medicine in Italy, and astronomy in Poland. Astronomy was something he especially enjoyed, like a hobby.

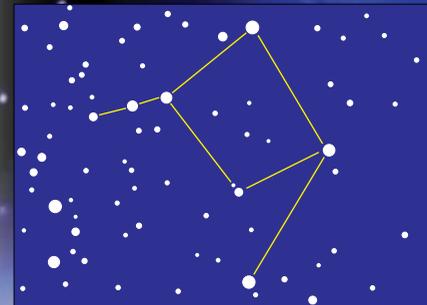
↓ Copernicus figured out that the sun is at the center of the solar system.



Aries



Cancer



Libra

## Constellations

**Constellations** are formations of stars. From ancient times, people have looked into the night sky at stars. They imagined the stars made shapes of things they knew. For example, in these stars they saw a ram (Aries), a crab (Cancer), and a balance (Libra).

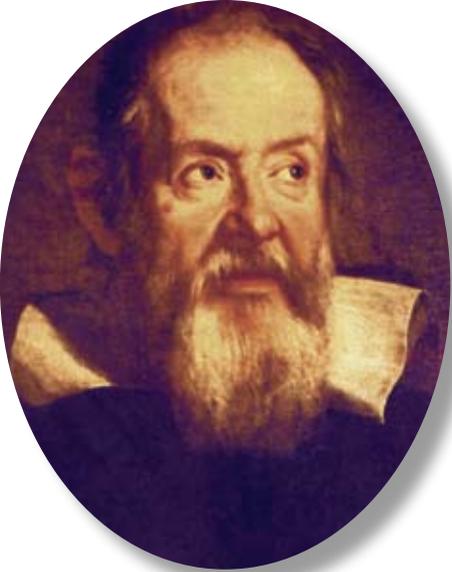
Some people believed the constellations had special powers. Today, people who study the power of the stars and planets are called astrologers. Some people confuse astrology with astronomy. But they are not the same things at all.

Look into the sky on some star-filled night. What do you see?

Copernicus was one of the first scientists to argue that the sun is at the center of the solar system. He also said that Earth spins once a day as it orbits the sun. Most people didn't believe him. Later, the books Copernicus wrote helped other astronomers figure out how the universe works.

Copernicus died in 1543. He didn't know that one day he would be called the founder of modern astronomy.

# Galileo Galilei (1564-1642)

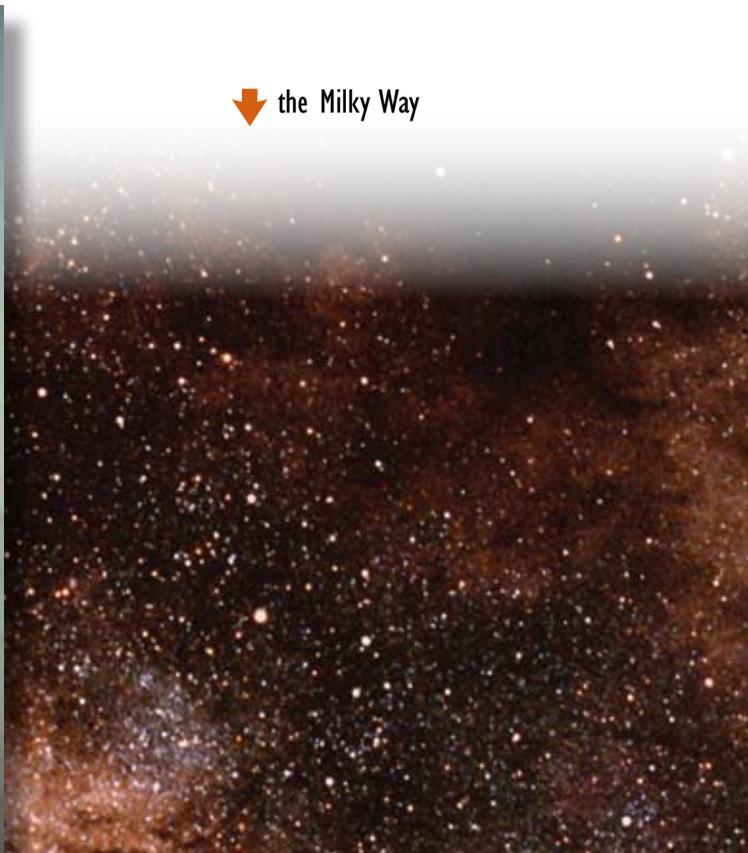


Galileo Galilei was one of history's greatest scientists. He was born in Italy. He was the son of a famous musician. His father wanted him to be a doctor. Galileo was more interested in math. He never got a degree, but he still became a math professor and an inventor. He invented an early calculator to help solve math problems. In 1609, he heard that something called a spy glass had been invented. It was a tool that made distant objects appear closer. Galileo built one himself. He called it a **telescope**.

↓ Galileo's telescope



↓ the Milky Way



↑ moon craters

Galileo's telescope wasn't very powerful. He still made many discoveries when he pointed it at the night sky. He saw craters on the moon. He saw stars in the Milky Way. He studied sunspots on the sun. He spotted four bodies orbiting Jupiter. He wrote of his discoveries in Italian instead of Latin. That made it easier for most people to read about them. Galileo was named court mathematician in Florence, Italy. That gave him more time to study.



← modern telescope