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# CLAUDIUS PTOLEMY

BIOGRAPHY

780L



BIG HISTORY PROJECT

# CLAUDIUS PTOLEMY

AN EARTH-CENTERED  
VIEW OF THE UNIVERSE

**Born**  
85 CE  
Hermiou, Egypt

**Died**  
165 CE  
Alexandria, Egypt

By Cynthia Stokes Brown, adapted by Newsela

Claudius Ptolemy was an ancient astronomer who studied the skies with his naked eye. He believed the Earth was at the center of the Universe. This view was accepted for 1,400 years until Nicolau Copernicus, Galileo Galilei, and Isaac Newton came along.

## Ancient astronomer in Alexandria

Ptolemy lived in Alexandria, Egypt. The famous ancient city was founded by Alexander the Great.

At the time, Alexandria was a great center of learning. There was a famous library where many Greek scholars studied. There was a school for astronomers. Wealthy families gave money to the library and schools.

But then the Romans conquered Egypt in 30 BCE. There was less money for studying the stars. Ptolemy was the only great astronomer from Alexandria during this time.

Claudius Ptolemy wasn't only interested in stars and planets. He also studied maps, math, and astrology. He lived in Egypt, wrote in Greek, and had a Roman first name.

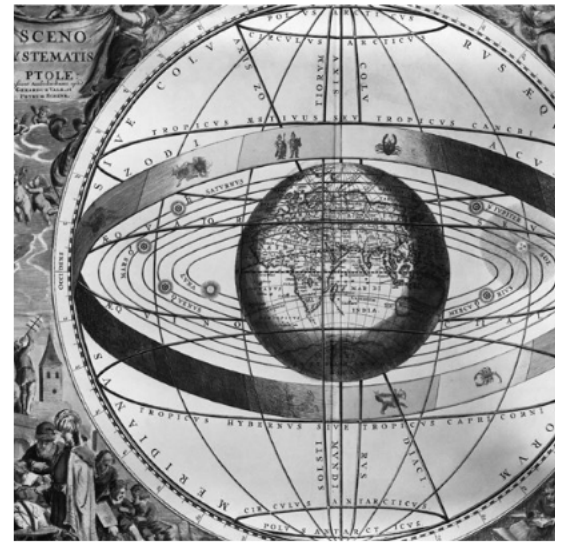
## Earth at the center of the universe?

Ptolemy studied the Greek knowledge of the known Universe. Aristotle said that the Sun and the planets all revolve around Earth. This geocentric view sees Earth as the center of the Universe. (geo - Earth, centric - centered).

Ptolemy agreed with Aristotle.

Of course, the Earth is not the center of the Universe, as we now know. But amazingly, Ptolemy's system worked. He could accurately predict the positions of planets. He could also accurately predict when the Sun and Moon would be eclipsed.

Ptolemy studied the sky with his naked eye — no telescope. He used math to track the planets and stars.



Map of the Universe according to Ptolemy

He saw a Universe with Earth in the center. Around Earth were transparent spheres.

He thought that the Moon, Mercury, Venus, and the Sun all revolved around Earth. Past the Sun were Mars, Jupiter, and Saturn. Past Saturn was the final sphere that had all the stars attached to it. This final sphere was around the other spheres.

Because his system worked, it was believed all over the world. For more than 1,400 years people accepted Ptolemy's spheres.

In 1543, though, Polish astronomer Copernicus correctly claimed the Sun is at the center of our Universe, not the Earth.

## His work lives on

The Roman Empire dissolved, and Muslim Arabs conquered Egypt in 641 CE. Muslim scholars mostly accepted Ptolemy's astronomy. They corrected some of his errors, and made some advances, but they did not consider a heliocentric (Sun-centered) Universe.

Ptolemy's book was translated into Latin in the 12th century. This allowed his teachings to be spread throughout Western Europe.

We know few details of Ptolemy's life. But he left one personal poem, inserted right after the table of contents in his book:

Well do I know that I am mortal, a creature of one day,  
But if my mind follows the wandering path of stars  
Then my feet no longer rest on earth, but standing by  
Zeus himself, I take my fill of ambrosia, the food of the gods.

## Image credits

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Map of the Universe according to Ptolemy, from a 17th century  
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