

Astronomy

Astronomy comes from the Greek word for "star." Astronomy is the scientific study of outer space. Ancient Greeks were pioneers in this field.

People in all civilizations observed the sun, moon, and stars. But a Greek scientist named Aristarchus (ayr-uh-STAIR-kuhs) was the first person to suggest that Earth moves around the sun. This idea upset many Greeks who believed that Earth was the center of the universe.

Another Greek, Hipparchus (hih-PAHR-kuhs), is often called one of the greatest scientists of the ancient world. He studied and named more than 850 stars. He also figured out how to estimate the distances from Earth to both the sun and the moon. His theories allowed later scientists to accurately predict eclipses of the moon.

Mathematics

The Greeks loved reasoning, or looking for logical answers to nature's mysteries. Greek scientists often found those answers in the field of mathematics.

One such scientist, Pythagoras (pih-THAG-er-uhs), believed that numbers were the key to understanding nature. He started a school where students developed mathematical theories [theories: a proposed explanation for something].

Like many Greeks, Pythagoras was especially fascinated by geometry [geometry: the branch of mathematics involving points, lines, planes, and figures]. *Geometry* comes from a Greek word that means "to measure land." Geometry began as a system for measuring areas of land. The Egyptians could also measure shapes and spaces, but the Greeks created new and improved methods. Using geometry, they could figure out problems such as how much seed to buy for planting a field or how to lay out a city.

Another famous Greek mathematician was Euclid (YOOKlid). His geometry textbook has been used as the basis for the teaching of geometry for more than 2,000 years.

Greek culture produced the first woman to earn fame as a mathematician, Hypatia (hie-PAY-shuh). Born in Egypt in about 370 C.E., she taught Greek philosophy and mathematics in the city of Alexandria.