

# Biology

Ancient Greeks developed the science of **biology** [**biology: the study of living things; their structure, growth, and function**]. About 600 B.C.E., Greek thinkers believed each event has a cause and an effect. They used this idea to study the natural world.

Curiosity led Greeks to study plants and animals. Scientists learned about the anatomy, or body structure, of animals and humans. This knowledge helped doctors in their **medical studies**.

The Greeks identified plants and also named their parts. The Greeks learned that plants reproduce by spreading seeds. Greek doctors used plants, such as herbs, as medicines and for pain.

The Greek philosopher Aristotle was fascinated by living things. He collected information about many types of animals and plants. Then he organized animals into groups, such as “those with backbones” and “those without backbones.” He divided plants into such groups as “herbs,” “shrubs,” and “trees.” The way we classify, or group, animals and plants today reflects the work of Aristotle.

# Geography

The study of geography has roots in ancient Greece. The word *geography* comes from Greek words that mean “writing about the earth.” The Greek historian Herodotus created the first map of the known world, in about 450 B.C.E. To gather the information for his map, Herodotus asked geographic questions. He found some answers to his questions by traveling and talking with other travelers. He organized the information by displaying it on a map.

Another great geographer of ancient times was Ptolemy (TAH-luh-mee), a Greek scientist who lived in Alexandria, Egypt. He wrote a book called *Geographia* that listed about 8,000 places around the world. His book contained maps that showed how to represent the curve of Earth on a flat surface.

Ptolemy also designed a system of lines drawn on a map called **latitude** [**latitude: a measure of how far north or south a place on Earth is measured from the equator**] and **longitude** [**longitude: a measure of how far east or west a place on Earth is from an imaginary line that runs between the North and South Poles**]. With this system, he recorded the specific locations for the thousands of places he listed in his book. Centuries later, Arab scholars would further develop the study of geography, especially in the field of mapmaking.