

# bio.

CLASSROOM



## Bio4Kids: Sir Isaac Newton (1642-1727)

### Brief Outline

Sir Isaac Newton, an English scientist, changed the way we look at the world. He made many discoveries in astronomy, mathematics, and physics, which is the study of matter and energy. He is most famous for his work on gravity, or the force that pulls, or attracts, objects to the ground. Some say he figured this out by watching an apple drop from a tree, but others question whether or not this really happened.

Newton was born on December 25, 1642, in Woolsthorpe, Lincolnshire, England. He graduated from Trinity College (which is part of Cambridge University) in 1665. Around this time he wrote out a proof about the law of gravity, which was published about twenty years later as *Philosophiae Naturalis Principia Mathematica* (usually called *Principia*). In this ground-breaking 1687 three-volume publication, Newton discussed how the planets move, how there are forces at work that hold the universe together, and other scientific ideas. He established several rules, which are now known as Newton's Laws of Motion. His revolutionary work got other scientists thinking about how the universe works and about the physical rules that affect life on Earth.

Another important work by Newton was *Opticks*. Published in 1704, this work covers his experiments to better understand the relationship between light and color. He showed how light can be bent or changed to create different colors and how different colored light can change what color we see, such as a yellow light on a blue piece of paper.

Along with his scientific research, Newton worked as a professor of mathematics at Cambridge from 1669 to 1701. He developed new field of mathematics called

calculus and made other mathematical discoveries. Newton was also interested in religion and alchemy, a science that involves trying to change metals into gold.

In addition to his studies and hobbies, Newton served as a member of Parliament, part of the English government. He later became president of the Royal Society, an important science organization, in 1703 and remained its leader until his death. Two years later, he was knighted by Queen Anne, which made him "Sir Isaac Newton."

Newton died on March 20, 1727. He was buried in Westminster Abbey, a famous place of worship where many kings and other important figures have been laid to rest. Newton became the first scientist to receive such an honor. Newton is considered one of the greatest scientists of all time and is often called the father of modern science. His discoveries have influenced the work of later scientists, such as Albert Einstein.

### Related Websites

[Learn more about Newton's Laws of Motion](#)

[Visit Westminster Abbey](#)