

Isaac newton – the
most influential
person in history



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Isaac Newton should be considered as the most influential person in history, because of his many contributions to our world today. His largest field of accomplishment was in math. Growing up as an abandoned child, Newton found his way to becoming the most successful scientist in the world.

He was an English mathematician, astronomer, theologian, author, and physicist (StarChild). His greatest discoveries were calculus, the idea that gravity is a universal force, and the three laws of physics. These ideas and discoveries led to many more crucial theories about science and life and left a long-term impact on our world today. Isaac Newton is not the most influential person in history because his contributions helped the people in his time, but because he has made an impact on the world today.

When Isaac Newton was born, on January 4, 1643, he wasn't expected to survive. He was born in a tiny village of Woolsthorpe in Lincolnshire, English. His father, also named Isaac Newton, was a farmer. Although he was successful and owned a lot of property, he was completely uneducated and did not know how to read or write. He died three months before Isaac Newton was born, so he never knew his father. His mother, Hannah Ayscough, remarried to a churchman, Barnabas Smith, when Isaac Newton was three years old. He disliked his new step-father and decided to leave his childhood home. When he left, he moved in with his mother's mother, Margery Ayscough. This resentment between Newton and his mother and Barnabas Smith stayed with them for many years. When he was a teenager, he threatened to destroy his childhood house. For the next nine years, until Barnabas Smith died, in 1653, Newton stayed away from his mother, and this separation was the main reason for his later pronounced psychotic

tendencies. After his mother was widowed for the second time, she wanted her first-born son to manage her property. Unfortunately, this did not work out, because Newton could not concentrate on simple tasks, like watching the cattle. Instead, he would go under a tree and read his school books. When his mother realized her mistake, she sent him back to his childhood grammar school, King's School in Grantham. This school helped Newton prepare for university. He passed his final exams at this school and was accepted to Trinity College, in Cambridge.

At Cambridge, Newton could pursue his passion of science, mathematics and physics, although he started with majoring in law. He had an incredible ability to comprehend mathematical problems and focus on solving any that came his way. Newton's impressive mathematical and scientific mind led him to sometimes become detached from the real world. For example, he had no time or care for relationships, and he stayed single throughout his life. Also, he had mental problems from the abandonment of his childhood; he was later diagnosed with depression, a severe case of bipolar disorder, and had irrational behavior which led to some violence with classmates. This was a problem, but when he realized that this could affect his learning, he learned how to control his emotions in class. When he arrived at Cambridge in 1661, the scientific revolution was advanced, and many of the basic works of science had appeared. For example, astronomers had developed the heliocentric system of the universe. Galileo had proposed the idea of inertia, which states that a moving object will stay moving unless a force is acted upon it, and an object at rest will stay at rest. While all of these discoveries were being made, the universities of Europe, with Cambridge included,

continued to have a geocentric perspective of the universe, and dealt with nature in qualitative rather than qualitative terms.

Isaac Newton, like thousands of other undergraduates, began his complex learning with the work of Aristotle. Even though this philosophy was not in the curriculum, Newton heard of it from traveling classmates. Also, as an undergraduate, he found the works of other philosophers, who, unlike Aristotle, saw the physical world as composed completely with particles of matter in motion at all times. This is what started and truly inspired Newton's scientific career. A piece of his work called the *Quaestiones* reveal that he had discovered a conception of nature that provided the guidelines for the scientific revolution. He had helped a French philosopher, Pierre Gassendi, discover atomism, another mechanical system to explain particles in nature. Although it is not stated in the *Quaestiones*, Newton had begun his mathematical studies. He started with exploring the works of Descartes, a French philosopher, then moving into other pieces of literature of algebraic techniques. In about a year, Newton had mastered these works and then he developed calculus, a very powerful and complex branch of mathematics, involving the finding of areas under curves and slopes of curves. When he published his work of calculus, he was considered the leading mathematician in Europe. In April of 1665, Isaac Newton received his bachelor degree. His undergraduate career was the most remarkable in the history of education in university, and it had gone unrecognized. Still in 1665, the plague closed his university, and for two years, Newton was forced to stay at home. During this time, he had contemplated what he had learned over his years as an

undergraduate. He kept his thoughts and findings in his notebooks, only for him to see.

Newton was a secretive man, and did not talk to many people about his ideas, because it was very common for others to steal discoveries to obtain popularity and wealth. Throughout this confinement of Newton and his mind at his university, he examined circular motion. Applying his analysis and discoveries to the planets and moon, he created the inverse square. This was the idea that the amount of a force acting on a planet decreased with the square of its distance from the sun. Later, this idea of Isaac Newton's was crucial to the law of universal gravitation. In 1686, Isaac Newton presented his three laws of motion in the "" Principia Mathematica Philosophiae Naturalis."" It is believed that he figured out these laws by watching an apple fall from a tree. There is evidence to support this claim, which was found in Newton's original manuscript. It described how Newton saw an apple fall from his mother's garden and then started to explain in his notebook the theory of gravity and the three laws of motion. This paper was written by William Stukeley, a man who contemplated ideas with Isaac Newton. The paper also describes a conversation that they had together about why an apple falls to the center of the earth. Then, the next part of Newton's notebook consists of possibly his greatest accomplishment, Newton's laws of motion. The first law stated that an object in motion will stay in motion, unless another force is acted upon it. Also, an object at rest will stay at rest, until another force is acted upon it. The second law included the idea that when an external force acts on an object, it produces an acceleration in the direction of the force. The last and third law stated that

when two objects collide, they apply their forces to each other that are equal in magnitude and opposite in direction. Today, these laws are used every day. Just some examples of how these laws are incorporated into our life are that they help simulate collisions, control how cars work, and navigate spacecrafts.

Toward the end of Newton's life, he lived in Winchester, England. He shared a house with his niece, Catherine Conduitt, and her husband, John Conduitt. During this time, he had become one of the most well known men in Europe. He had become very wealthy, and was able to easily support his family. He donated a percentage of his income to charity every month. Despite this fame, Newton still did not have a perfect life. He never had any personal relationships with other people, and in later years, many people around him worried about his mental health. At the age of eighty-four, Newton started to experience an immense amount of pain in his abdomen. He was diagnosed with digestion problems, and he had to change his diet completely. Although he had the best doctors caring for him, he went unconscious one night. The next day, March 31, 1727, Newton was found dead in his house in London, England. Catherine and John Canuitt held a funeral for him and invited people that Newton had written down in his notebook. His surviving letters and writings revealed a person with impressive and tremendous ability to stand long periods of mental strain, concentration, and also the ability to stay focused with no distractions.

After Isaac Newton's death, his fame grew beyond the people of Europe. Many of the people that he had worked with named him as the greatest mind in the seventeenth century. His impacts on the world include one of the most

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complex forms of mathematics, calculus, the idea that gravity is a universal force, and the three laws of motion. He was able to turn theories into practice, and his findings became the basis for modern physics. All of these things cause a long-term impact on the world today, because people use his findings in everyday life. Without Newton's mind and ideas, the world would be very different today. For example, calculus helps people use investment plans, create global mapping, and doctors use with an estimation of the progression of an illness. Next, his idea that gravity is a universal force helps people explain how everything around them is pulled toward the center of the earth. Lastly, and possibly most importantly, Newton's three laws of motion explain how forces affect objects and why these things either stay in motion or stay at rest. Isaac Newton had the greatest mind of the 17th century, and should be considered as one of the most influential persons in history, because of his great ideas and finding to explain the universe.