

Isaac newton – facts and accomplishments



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Also known as Sir Isaac Newton, Isaac Newton was born on January 4, 1643, in Woolsthorpe, Lincolnshire, England. Newton was an only son of a farmer named Isaac Newton. However, his father had passed away three months before the birth of Newton and it was said that he was not supposed to live.

During this time, Newton's family was struggling financially. Due to their poor situation, when Newton became three, his mother, Hannah Ayscough Newton, married minister of the name Barnabas Smith. When Newton's mother remarried to this man, she left Newton to his maternal grandmother. This event in Newton's life left an internal scar in his heart that created insecurities, obsession in his works, and defending merits with unjustifiable behavior. While his mother was away he beginning his education at the King's School in Grantham. Once he became the age of twelve, his mother returned with the death of her second husband and pulled Newton out of school to have him become a farmer like his biological father. However, Newton found farming tedious and was not skilled in this area.

He was then sent back to school to finish the education he had started. As Newton showed natural, academic abilities, his uncle was convinced to have Newton enter the University of Cambridge's Trinity College. He learned and discovered many things at this college and finally, after many years, his work was noticed by the mathematicians. Newton was a physicist and a mathematician that revolutionized the development of science. One of his most influential works towards physics was his book *Philosophiae Naturalis Principia Mathematica*. This book contained concepts in physics excluding energy that helped to Newton to discover and elaborate on the law of motion as well as the theory of gravity. The three basic laws of motion were written

inside of this book and helped to forge his theories. Throughout Newton's life, he theorized and discovered many things of motion, optics, and mathematics. Later he was credited for developing theories in the well-known math level, Calculus. Towards Newton's final years, he was still single and did not have many friends. Newton passed away on March 31, 1727, at the age of 84 because of digestion problems.

Newton's contributed to the development of math and science. He discovered the math level known as Calculus. His work first began when he tried to discover the way in order to find the slope on a curve at any given point to a slope that was constantly different. When calculating the derivative to find the slope he came up with methods called method of fluxions and method of fluent. This two methods became later known as differentiation and integration which later helped to formulate Calculus' first fundamental theorem. The binomial theorem is another contribution of Newton's work. This theorem describes the expansion of powers in a binomial. He also contributed to the theory of finite differences and a more efficient method of finding approximations to roots of a function. While Newton contributed to many things in math he also contributed to science. He had many theories in the fields of optics and gravity. One of his theories was that the entire light spectrum was in white light and also that it was made up of particles. His discovery of the three laws of motion helped to explain almost every motion in the universe such as how the sun's gravitational pull keeps the planets in orbit.

Newton's work is important because it grounded the basis of Calculus and he expanded the world of science greatly. His discovery of gravity laid the

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foundation of a greater future for science. Although both of his works were edited and corrected, he began something revolutionary for the future of math and science.