



ISAAC NEWTON



Born: 4th January 1643 in Woolsthorpe, England

Died: 31st March 1727 in London, England

Occupation: Scientist, mathematician and astronomer.

Best known for: Defining the three laws of motion and universal gravitation.

MAIN ACHIEVEMENT

Isaac Newton is considered one of the most important scientists in history. Even Albert Einstein said that Isaac Newton was the smartest person that ever lived.

Newton developed the theory of gravity, the laws of motion (which became the basis for physics) and a new type of mathematics called calculus. He also made breakthroughs in optics with the reflecting telescope.

- Gravity - His theory about gravity helped to explain the movements of the planets and the Sun. This theory is known today as Newton's law of universal gravitation.
- Laws of Motion - Newton's laws of motion were three fundamental laws of physics that laid the foundation for classical mechanics.
- Calculus - Newton invented a whole new type of mathematics which he called "fluxions." Today we call this math calculus, and it is an important type of math used in advanced engineering and science.
- Reflecting Telescope - In 1668 Newton invented the reflecting telescope. This type of telescope uses mirrors to reflect light and form an image. Nearly all of the major telescopes used in astronomy today are reflecting telescopes.

EARLY LIFE

His father, a farmer who was also named Isaac Newton, died three months before his birth. His mother remarried when Isaac was three years old and left young Isaac in the care of his grandparents.

Isaac attended college at Cambridge in 1661, where he spent most of his life. He became a professor of mathematics and a fellow of the Royal Society (a group of scientists in England). Isaac was elected to represent Cambridge University as a member of parliament in 1689. However, Isaac had to leave Cambridge from 1665 to 1667 because of the Great Plague. He spent these two years in study and isolation at his home in Woolsthorpe developing his theories on calculus, gravity, and the laws of motion.

In 1696, Newton became the warden of the Royal Mint in London. He took his duties seriously and tried to get rid of corruption as well as to reform the currency of England. He was elected President of the Royal Society in 1703 and was knighted by Queen Anne in 1705.

FIND OUT MORE...

<https://www.bbc.co.uk/teach/class-clips-video/science-ks2-discovering-the-work-of-Sir-Isaac-Newton/zr4mf4j>

<https://www.bbc.co.uk/teach/class-clips-video/science-ks2-the-work-of-sir-isaac-newton/zkw3qp3>

<https://study.com/academy/lesson/newtons-three-laws-of-motion-lesson-for-kids.html>



EXAMPLE QUESTIONS:

1. What theory did Newton discover?
2. What type of telescope did Newton develop?
3. What is the mathematics called which Newton invented?
4. Why did Newton have to leave Cambridge from 1665 to 1667?
5. Which theory of Newton's explained the movement of the planets and the sun?