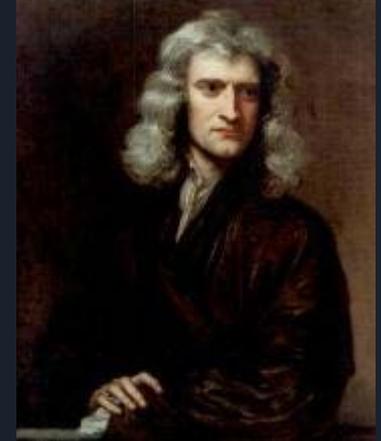


# Isaac Newton's Gravitational Theories

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## Who was Isaac Newton?

- Sir Isaac Newton was born on 4th January 1643 he lived till the age of 84 years, on 31st March 1727.
- He was an English physicist and mathematician.
- He was famous for his work on the laws of motion, optics, gravity, and calculus.
- In 1687, Newton published a book called *Philosophiae Naturalis Principia Mathematica* in which he presents his theory of universal gravitation and three laws of motion.



# Newton's Gravitational Theory

This theory is believed to have all started when Isaac sat under an apple tree and one apple fell on his head.

He started to think about what makes things like apples fall to the ground.

Newton thought that gravity was the force of attraction between two objects, such as an apple and the earth. Isaac also thought that an object with more matter exerted the same force smaller objects as they exerted on it. It meant that the huge mass of the earth is pulling objects towards it.

That is why the apple fell down instead of up, and why people do not float in the air.





# The Laws Of Motion!

1. Inertia (a property of matter by which it continues in its existing state of rest or uniform motion in a straight line, unless that state is changed by an external force.)
2. Net force is equal to mass  $\times$  acceleration
3. For every action there is an equal and opposite reaction.



# Isaac's story of life!

This link shows the story of Isaac Newton's life :)

<https://learnenglishkids.britishcouncil.org/short-stories/isaac-newton>



## What else did he make and how they helped him?

**Isaac Newton changed** the way we understand the Universe.

Isaac was fascinated by light. He was the one that discovered that white light is made up of all the colours of the rainbow. Isaac also invented a special reflecting telescope made out of mirrors. It was also better than other telescopes. Isaac made a very important discovery which he called the three laws of motion which shows how things move. The laws are still used today for sending rockets into space.

Thanks to his discoveries, Isaac became rich and famous!

Thank you  
For listening  
To our  
Gravitational  
presentation!!!