## **Sir Isaac Newton** (1642 – 1727)

Our knowledge of the law of gravity, of the principle by which the whole universe of sun, moon, earth, and stars exist and move, is due to in the main to one man —Isaac Newton.

In 1642 Galileo died. In the same year a child was born into the home of a Lincolnshire farmer.



On Chrismas Day Hannah Newton of Woolsthorpe,

England, gave birth to a son, Isaac. Three years later, Mrs. Newton married again, and the boy was left in charge of his grandmother. He got no affection and care from his parents. He was a sickly, shy boy, and sent to the Grammar School at Grantham, he seems to have taken little interest in his books and to have felt himself inferior to the majority of his classmates.

In 1656 Barnabas Smith, the step-father whom he had hardly known, died, and his mother was left alone with the cares and worries of a farm. The help of the boy of fourteen was required to keep things going, and she withdrew Isaac from the grammar school.

As a boy Isaac was fond of making mechanical toys. He built, for example, a wooden windmill and used a mouse to turn the sails! He also built water-clocks and sundials. This was good experience, as later he had to build much of his experimental apparatus himself. His uncle saw that Isaac was not really suited to farming, and eventually persuaded his mother to let him return to school. One day Isaac was being pestered by the class bully, who kicked him in the stomach. Isaac, who could stand for this no longer, challenged the aggressor to a fight and proceeded to beat him up! This success seemed to give Isaac a new confidence in his physical and mental capabilities! He never looked back. From school he went to Trinity College, Cambridge.

Because of the plague in 1665 the University was closed and Newton returned home for two years of 'private study'. He spent those years reading, writing and thinking. [There in the autumn of 1665 or 1666, he was sitting in an orchard when an apple dripped from a tree. This event first set Newton thinking about gravity and at the age of 23 he was able to develop laws describing gravity and the movements of the planets and the tides]. It was in those two years of quiet, before he was 25 years old, that the foundations were laid for all his great