

Thomas Young 1773 - 1829

Thomas Young, the famous British physicist, was born in Milverton in Somerset on 16 June, 1773. He was the first of ten children. His father, Thomas Young Senior, was a mercer (cloth merchant) and banker. Both his mother, Sarah Davis, and his father were Quakers (Quakers are members of the 'Religious Society of Friends').

Thomas Young spent the first seven years of his life in the home of his maternal grandfather. At **two years of age he had learnt to read** and before he was four years old he had read the Bible 'twice through'. He began to study Latin grammar at the age of six. Although he attended school, most of his knowledge he obtained due to his extraordinary memory, great interest and remarkable ability to read and to learn by himself. He left school at the age of thirteen with a quite good knowledge of Greek, Latin, French, Italian and Hebrew, an interest in Natural Philosophy (as Physics was then called), especially in optics, and competence in the use of the lens and construction of optical apparatus.

In 1787 Young was recommended as a private tutor and companion to share education with his friend Hudson Gurney. This union was extremely fruitful and happy. Young's interest in languages was extended. He read book on mathematics and astronomy, Newton's '*Principia*' and '*Optics*'. He could write in thirteen languages. His manner at this period of his life was described by one who knew him well, as very quiet and pleasing.

He studied medicine at colleges and universities in London, Edinburgh, Göttingen and Cambridge. At the age of 20 he read a paper to The Royal Society on the structure of the eye and on the basis of this in 1794 he was made a Fellow. In 1801 he was appointed Professor of Natural Philosophy at the Royal Institution.



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Young's lectures in Natural Philosophy were published in 1807. There he defined for the first time a quantity which measures the resistance of a rod of any material to compression. This he called the modulus of elasticity and it now bears his name.

Young was married to Eliza Maxwell. The marriage seemed to be happy.

On 22 December 1809 he was elected to a Fellowship of the Royal College of Physicians. Early in 1811 he was elected to the staff of St. George's Hospital.

Young seems to have been the first to suggest the theory of the colour mixture and receiving mechanisms in the retina of the eye. His basic assumption was that *the colours can be matched by suitable mixtures of three primary colours: red, green and violet.* He became the Foreign Secretary of The Royal Society and a member of its Council.

Young was a good conversationalist and could take his part as an accompanist or singer. He enjoyed to the full the good things of life, being fond of dancing and riding.

The end of his life he spent in London. He died in 1829. His versatility is shown by the valuable work he did on subjects as widely different as the wave theory of light and Egyptology, where he made fundamental contribution to deciphering the inscription on the Rosetta Stone. Young was one of the first scholars to contribute to the early editions of the Encyclopedia Britannica.

He helped to decipher the famous Egyptian 'Rosetta Stone'