

Henry Cavendish

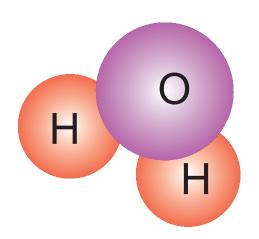
1731 - 1810

Henry Cavendish, the famous British physicist and chemist, was the son of Lord Charles Cavendish, himself an experimentalist, Fellow of The Royal Society and an administrator of the British Museum. Henry's mother, formerly Lady Anne Grey, was the fourth daughter of the Duke of Kent. Her health seemed to be poor, for which reason she went to Nice, where Henry was born on October 10th, 1731. She died two years later, shortly after giving birth to a second son, Frederick.

The two boys attended school in Hackney in London. At the age of eighteen Henry entered St. Peter's College, Cambridge, but left without a degree. He went to London, resided with his father and apparently continued to live with him until the death of his Lordship in 1783. **The whole of his electrical and most of his chemical research was carried out in the laboratory of his father,** who put all of his instruments at his son's disposal.

Much of Cavendish's work remained unpublished in his lifetime. He wrote no books and less than twenty articles in all his fifty years' career. Using his notebooks and manuscripts, his electrical studies were edited by the physicist James Clerk Maxwell in 1879. The work included the distinction between electrical quantity i.e. charge, and potential.

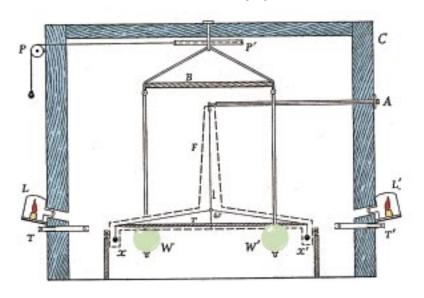
He measured the electrical conductivity of salt solutions and worked on the effect of water vapour and on compression. He seemed to be one of the first who understood that water is not an element but a compound and consists of hydrogen and oxygen in the proportion of 2:1 by volume.



He showed that water was a compound of O and H in proportion 1:2



Cavendish's apparatus



One of his main results, which was published, was the mean density of the Earth determined by means of the torsion balance (above).

Cavendish inherited from his relatives a remarkable fortune with which he built up a large library and an apparatus collection.

He had a most peculiar personality, rarely appearing in public and chiefly at scientific meetings. **Throughout his long life he seemed to have been terrified of women**. He was never married. It is said that once he chanced to meet a housemaid on the stairs carrying a broom and pail, which so upset him that he immediately ordered a back staircase to be built!

In appearance, Cavendish was tall and thin. His voice was hesitant; he wore the costume of the XVII century. When out of doors he was to be seen wearing a three-cornered hat.

In spite of his peculiarities, Cavendish was greatly respected by his scientific colleagues, but he had really very few friends.

He died in 1810 after a short illness. On his death Cavendish left about a million pounds sterling to his relatives. The famous physics laboratory in Cambridge is named after him.