



Antoine Laurent Lavoisier

1743-1794

Antoine Laurent Lavoisier was a brilliant experimentator and scientist. He is regarded as the founder of modern chemistry but was also a distinguished physicist.

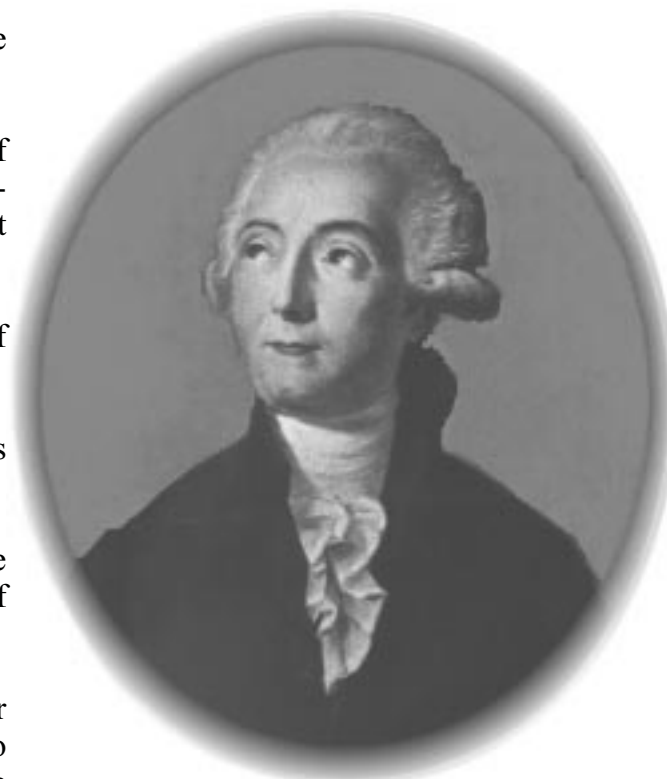
Lavoisier's main achievement was the explanation of combustion - one of the most ancient of human observations. By that time people supposed that when a substance burned, some 'fire-stuff' was being released from it in the form of fire and flame. It was Lavoisier who showed that matter burned by combining with the element **oxygen**, which is a constituent of common air.

Lavoisier designed original instruments and, using precise methods for measuring the quantity of elements in the chemical reaction, formulated the principle of the conservation of matter.

He investigated the process of respiration, and deduced that oxygen is essential to an animal's life. He explained the formation of water from **hydrogen** and **oxygen**.

Lavoisier was born in Paris, on Monday, August 26, 1743 in the Cul-de-Sac Pecquet. He was the first son of Jean Antoine Lavoisier, a lawyer, and Emilie Punctis, the daughter of an advocate of the Parliament.

The first five years of his life passed in the house in which he was born. In 1748 Mme Lavoisier died soon after the birth of their daughter and her husband gave up his house and went with two young children to live at the house of their grandmother. Lavoisier's aunt, Marie Marguarite Constance, aged 22, became so entirely devoted to the two motherless children that, it is said, she abandoned all thoughts of marriage in order to care for them. Jean Antoine did not marry again and devoted his life to his son; a remarkable friendship developed between the two.



Lavoisier heated mercury in a retort to investigate combustion

Lavoisier's school years ran from 1754 to 1766 at the College Mazarin, where, along with the study of classical languages, he received a good training in the sciences, including mathematics, astronomy and chemistry. There, following family tradition, and on the advice of his father, he entered the School of Law. However, his inquiring mind drew him to science.

By the time he was twenty Lavoisier was already quite wealthy. He invested his money in a private tax collecting company, the Ferme Generale, which gathered an indirect tax on tobacco and salt, and thereby became rich enough to build a well equipped laboratory. He was young, elegant, neat and handsome.

In 1771 Lavoisier married Marie Anne Pierrette. His bride was not quite fourteen. The couple were childless. Marie studied under the famous painter David, and learned English and chemistry, and became an assistant for her husband. The marriage seemed to be happy. Although Marie sometimes felt passion for other men, Lavoisier did not mention it. He was entirely occupied with his investigations and his work for different state committees.

Apart from science he made significant contributions to agriculture, the chemical industry, finance and education. However, he lived and worked at the time when France was in the middle of Revolution and, in 1794, Paris was ruled by people who ruthlessly executed thousands of alleged opponents of the revolution. Among these were included the tax gatherers and **Lavoisier, despite his work for the state, was tried as a collector of taxes, found guilty and guillotined at the age of 51.**

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He explained the formation of water from hydrogen and oxygen



Marie Anne became his wife and assistant