

26th August – Antoine Lavoisier's birthday (1743)



Antoine Lavoisier

Born

26 August 1743

Died

8 May 1794

Lavoisier is considered the 'father of modern chemistry'. He discovered oxygen's role in combustion and played an important part in reforming nomenclature in chemistry. He married Marie-Anne Paulze, who observed and recorded notes on their experiments, translated important texts for Lavoisier, and illustrated and spread word of their work. Lavoisier died by the guillotine during the French Revolution.

Lavoisier's key achievements in chemistry

Oxygen theory

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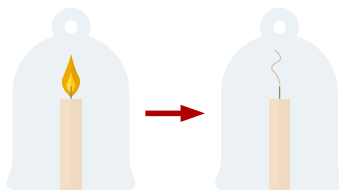
Oxygen



Lavoisier observed that substances gained weight when burned in air. He named oxygen, proved that water is a compound of oxygen and hydrogen, and used his findings to disprove the phlogiston theory of combustion that held sway at the time.

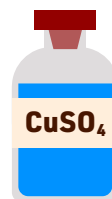
Conservation of mass

Lavoisier described conservation of mass: that the total mass of the reactants in a reaction is equal to the total mass of the products. He proved this by burning a candle in a sealed jar; the weight of the jar and its contents remained the same.



total mass before = total mass after

Nomenclature



Blue vitriol
Bluestone
Vitriol of copper



Roman vitriol

Copper sulfate



With several other French chemists, Lavoisier introduced a new system of nomenclature for chemistry which passed into common use. In this new system, each chemical substance was given a single name which described its composition.