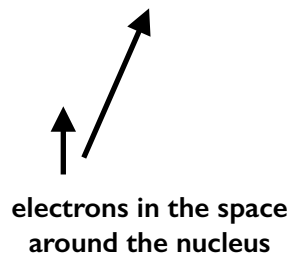


Democritus was born in Greece in 460BC.	JJ Thompson was born 18 December 1856 in the UK.	Niels Bohr was born 7th October 1885	Ernest Rutherford was born 30th August 1871	John Dalton was born 6th September 1766 in England.	Peter Ware Higgs was born 29 May 1929 in Newcastle, England.
Democritus died aged 90.	JJ Thompson died aged 84.	Niels died aged 77.	Known as the father of nuclear physics. Ernest died aged 66.	At age 15 John Dalton ran a school with his brother.	Last year CERN announced that they had experimentally found a Higgs Boson.
Aged 30 Democritus theorised that everything is made up of atoms.	JJ Thompson invented the Mass spectrometer for working out the weight of atoms aged 57.	Niels made the model of the atom which we now use today. And won the 1922 Nobel prize for his work.	Rutherford moved to Manchester University aged 36.	Age 77 John Dalton died.	In March of this year the particle was confirmed and is now accepted as real.
Aged 35 Democritus decided that different things (elements) had different types of atoms.	JJ Thompson was awarded a Nobel prize for his work in physics.	35 years after his death the element bohrium was named after him.	Awarded the nobel prize for chemistry for his work on radiation.	John Dalton was appointed teacher of maths and Natural sciences at Manchester University.	At age 55 Peter Higgs was awarded the Rutherford medal from the institute of physics.

Before he died, Democritus and his teacher Lucretius decided that atoms had a lot of empty space between them, this was the only way they could explain the properties of gases.

JJ Thompson discovered the electron, a very very small part of the atom aged 39.

**FACT**



102 years ago Mr Rutherford created a model of the atom with all the charge in the middle. Realising that protons are in the 'nucleus'.

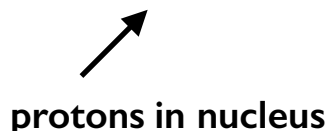
In 1800 after 7 years he resigned and became a private tutor.

Higgs was awarded the Nobel prize for physics for his work on improving our understanding of atoms.

During the renaissance democritus' books became popular and Rembrandt painted a picture of him.

JJ Thompson taught Ernest Rutherford when he was at university.

**FACT**



5 years before he died Rutherford's assistant discovered the neutron, a particle with the charge of 0 in the nucleus of the atom.

Whilst working at Manchester University. Dalton worked out that atoms can not be cut or divided.

European countries decide to build a giant physics laboratory on the French-Swiss border to research particles. As a side project they invented the world wide web.



**FACT**

**ELECTRONS ARE NEGATIVE**

**FACT**

the smallest part of a substance is an atom

60 years after his death, the newly discovered element rutherfordium was named after him.

Dalton after working as a private tutor for 8 years wrote a book about the structure of atoms. "A new system of chemical philosophy"

After 19 years CERN made its first major discovery about particles.

Democritus came up with the name atom from the greek atoms which means "cannot be cut".

**FACT**

**NEUTRONS ARE NEUTRAL**

**FACT**

All the atoms of an element are the same, wherever they are

**FACT**

**PROTONS ARE POSITIVE**

After 2 years as a tutor Dalton worked out that all atoms of the same element are identical in size and weight.

Whilst on a camping trip at age 25 Higgs predicted the existence of a small particle that explained why atoms have weight. If he was right this would mean a lot for science. We called this particle the Higgs Boson.

460BC	18 December 1856	7 October 1885.	30 August 1871	6th September 1766	29th may 1929
370BC	30th August 1940	18 November 1962	19th October 1937	1781	4 July 2012
430BC	1913	1922	1907	27th July 1844	14 March 2013
425BC	1906	1997	1908	1793	1984

310BC	1897	FACT <b>ATOMS ARE MOSTLY EMPTY SPACE</b>	1911	1800	8th October 2013
1628	1895-1898	FACT <b>ELECTRONS WEIGH NOTHING</b>	1932	1798	1954
1628	FACT <b>ELEMENTS ARE ORGANISED INTO THE PERIODIC TABLE</b>	FACT <b>PROTONS AND NEUTRONS WEIGH 1</b>	1997	1808	1973
300BC	FACT <b>EVERYTHING IS MADE OF ATOMS</b>	FACT <b>THE CENTER OF THE ATOM IS CALLED THE NUCLEUS, IT IS VERY SMALL</b>	FACT <b>ONLY PROTONS AND NEUTRONS ARE IN THE NUCLEUS</b>	1802	1954