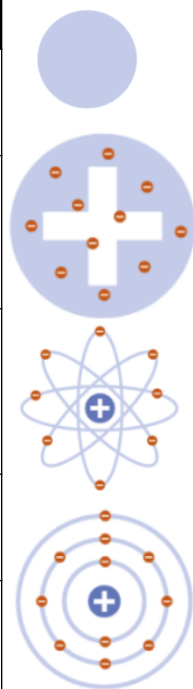


Name	Charge	Mass
Proton	+1	1
Neutron	0	1
Electron	-1	1/1840

Year	History of the Atom
1800s	John Dalton came up with the idea of the atom—tiny, hard spheres.
1800s	J.J. Thomson discovered the electron and theorised the Plum Pudding model.
1900s	Rutherford completed the gold-foil experiment and discovered the nucleus. His model is the nuclear model. He also later discovered the proton
1914	Niels Bohr came up with the idea of energy levels.
1932	James Chadwick discovered the neutron.



Keyword	Definition	Keyword	Definition
Atoms	The smallest part of an element that can still be recognised as that element.	Reactant	The substances you start a reaction with
Element	A substance made up from only one type of atom. An element cannot be broken down chemically into any simpler substance.	Product	The substances made from the reaction
Compound	A substance made when two or more elements are chemically bonded together.	Symbol Equation	An equation that uses the symbols for elements found in the periodic table.
Mixture	When some elements or compounds are mixed together and intermingle but do not react together (i.e. no new substance is made)	Word Equation	An equation that uses words to name the substances found in the reaction.
Periodic Table	An arrangement of elements in the order of their atomic numbers, forming groups and periods.	Law of the conservation of mass	The total mass of the products formed in the reaction is equal to the total mass of the reactants.
Group	A column of the periodic table.	State symbol	Added to a reactant or product to tell you whether or not a substance is solid (s), liquid, (l), gas, (g) or aqueous / solution (aq)
Period	A row of the periodic table.	Atomic Number	The amount of protons found in the nucleus for that particular element.
Nucleus	The very small and dense central part of an atom that contains protons and neutrons.	Ion	When an electron is either gained or lost from an atom
Electron	A tiny particle with a negative charge. Electrons orbit the nucleus of atoms or ions in shells. It has a negligible mass.	Isotope	When the number of electrons and protons for an element is the same but the neutrons have changed
Proton	A tiny positive particle found inside the nucleus. It has a mass of one.	Shell	Electrons are arranged around the nucleus, going up in energy per shell.
Neutron	A dense particle found in the nucleus of an atom. It is electrically neutral, carrying no charge.	Electronic Structure	The arrangement of electrons around the nucleus. There are 2 electrons in the first shell, and 8 in every shell after that.
Molecule	A grouping of two or more atoms bonded together.	Noble Gas	Gases that always have a full outer shell of electrons.