Atomic model

Atomic structure

Key term	Definition
Atomic number	the number of protons in the nucleus of an atom of a particular element
Compound	a pure substance made of two or more different elements whose atoms are joined by chemical bonds; the atoms are in a fixed ratio
Electron	a negatively charged subatomic particle with very little mass found in the electron shells/energy levels of atoms
Electron configuration/structure	gives the number of electrons in each shell/energy level around the nucleus of an atom
Electron shell/energy level	a region surrounding the nucleus of an atom where electrons are found; each level has a maximum number of electrons it can hold
Element	a pure substance made of only one type of atom
Isotopes	atoms with the same number of protons but different numbers of neutrons
Mass number	the total number of protons and neutrons in the nucleus of an atom of a particular element
Molecule	two or more atoms connected by chemical bonds
Neutron	a subatomic particle with no charge and a relative mass of 1, found in the nucleus of an atom
(Atomic) nucleus	the positively charged centre of the atom consisting of protons and neutrons
Proton	a positively charged subatomic particle with a relative mass of 1, found in the nucleus of an atom
Relative atomic mass (A_r)	the average mass of an atom of an element taking into account the naturally occurring percentages of its isotopes
Relative charge	the positive (+) or negative (-) charge of a particle compared to the charge of a single proton
Relative mass	the mass of a particle relative to $^{1}/_{12}$ of the mass of a ^{12}C atom
Subatomic particle	a particle smaller than an atom

Atoms and ions

Key term	Definition
Atom	the smallest possible particle of an element; atoms are made up of protons, neutrons and electrons
Ion	a charged particle formed when one or more electrons are lost or gained from an atom or molecule

Particle diagrams

Key term	Definition
Inelastic	is not flexible
Intermolecular forces	the relatively weak attractive and repulsive forces between molecules
Kinetic energy	the energy an object has because of its motion
Latent heat	energy transferred to or from a substance during a change in its physical state that occurs without changing its temperature
Model	a simple representation of something or a way of explaining something complicated
Regular lattice	an arrangement of repeating atoms or ions that form a 3D structure