

allotropes

different forms of an element; they may have different physical or chemical properties

atmosphere

the envelope of gas, vapour and aerosol particles surrounding the Earth, forming constituent in the environment of most forms of terrestrial life

atomic number

the number of protons in the nucleus of an atom, defining the chemical element

balanced equation

an equation using chemical symbols, having equal numbers of each atom on both sides

biosphere

the region of the Earth inhabited by living things, including air, land and water

chemical changes	changes that lead to a new substance being formed
compound	a substance formed when two or more chemical elements are chemically bonded together in the same ratio
covalent molecules	atoms linked by chemical bonds with sharing of electrons e.g. oxygen, carbon dioxide
covalent network substance	a substance with covalent bonds between atoms extending in a 3-dimensional network e.g. diamond, silicon oxide
decomposition	a chemical reaction when a compound splits up into elements or simpler compounds

electrolysis

the chemical reaction occurring when an electric current passes through a liquid; often used for obtaining pure elements

electron

an elementary particle of an atom, found in shells surrounding the nucleus

element

a substance composed of atoms of the same atomic number, incapable of being broken down to simpler substances displaying the same properties

empirical formula

a formula giving the proportions of the elements present in a compound but not the actual numbers or arrangement of atoms

gravimetric analysis

a set of methods for quantitatively determining a sample based on mass

hydrosphere

all the water of the Earth, in the oceans, rivers, lakes etc.

ion

an atom or group of atoms that has become electrically charged by the gain or loss of electrons e.g. Cl^- , Na^+

ionic compounds

a substance with attraction between positive and negative ions e.g. NaCl

ionic equations

chemical equations that show the formation of ions by the loss or gain of electrons

isotopes

atoms of the same element that have the same atomic number but different mass number i.e. they have the same number of protons, but a different number of neutrons