

halon	a halogenated alkane in which molecules such as methane or ethane have some of their hydrogen atoms replaced with halogens
heavy metals	metals with high atomic masses and densities; they are normally toxic to humans; examples are mercury, lead, cadmium, chromium and arsenic
incomplete combustion	when a hydrocarbon burns in a limited oxygen supply and the combustion products are carbon monoxide and carbon
isomers	chemical compounds having identical chemical compositions and molecular formula but different arrangement of atoms in their molecules and different properties
lewis structure	a diagram showing the electrons in the outer shell of an atom or group of atoms in a molecule or ions; each electron is shown as a dot

parts per million (ppm)

a unit for determining the concentrations of substances that are present in very small amounts

pathogen

a disease-causing organism

photochemical smog

a brown smog produced when, under the influence of ultraviolet light, nitrogen oxides and reactive hydrocarbons in the atmosphere react with oxygen to form PAN (peroxyacetylnitrate, $\text{CH}_3\text{CHOONO}_2$) and ozone

photodissociation

the removal of one or more atoms from a molecule when it absorbs energetic electromagnetic radiation

polyatomic ion

an ion consisting of a group of atoms, such as CO_3 , NH_4 or PO_4

potable	means fit to drink
qualitative analysis	testing something to find out what chemical substances are in it
quantitative analysis	testing something to find out how much of each substance is present
radical	a molecule or atom; free radicals are molecules or atoms that have one unpaired electron and hence an unused valence; most are very reactive and short-lived, such as the O radical
sedimentation	the settling out of larger, insoluble particles over time

toxicology

the science dealing with poisons, their effects on people, antidotes and detection

trace element

a mineral required in minute quantity in an adequate human diet or for the optimum growth and yield of plants

turbidity

the quantity of suspended matter in water, such as silt or clay, that may make it look muddy or discoloured; it is measured by the ability of a light beam to pass through a water sample

ultraviolet radiation

high-energy, electromagnetic radiation emanating from the sun with a wavelength range between 200 and 2000m