

T1 atom	T1 compound	T1 mixture
T1 filtration	T1 crystallisation	T1 distillation
T1 chromatography	T1 plum pudding model	T1 neutron

T1 A combination of substances that are not chemically bonded together in fixed proportions.	T1 A substance containing two or more different elements chemically bonded in fixed proportions.	T1 The smallest unit of an element that retains its chemical identity, consisting of a nucleus and electrons.
T1 Separating substances by vaporising and condensing them, using differences in volatility or boiling point.	T1 Dissolved solid forms crystals when a concentrated solution cools; recover salt from solution.	T1 Separating insoluble particles from a fluid by passing the mixture through a porous barrier.
T1 An electrically neutral subatomic particle found in most atomic nuclei.	T1 Meaning pending review.	T1 A separation technique based on different affinities of substances for a stationary phase and a mobile phase.

T1 isotope	T1 atomic number	T1 displacement
T1 catalyst	T1 simple distillation	T1 fractional distillation
T1 outer shell electron	T1 element	T1 chemical reaction

T1 A reaction in which one element replaces another in a compound.	T1 The number of protons in the nucleus of an atom.	T1 An atom of an element with the same proton number but a different neutron number from another atom of that element.
T1 Separating components of a liquid mixture through repeated evaporation and condensation based on differences in volatility.	T1 A liquid evaporates and then condenses; recover water from salt solution. Non-volatile salt remains in the flask.	T1 A substance that increases a reaction rate without being used up overall.
T1 A process in which substances are transformed into new substances by rearranging atoms and electrons.	T1 A substance made of atoms with the same proton number.	T1 Meaning pending review.

T1 word equation	T1 symbol equation	T1 model
T1 nuclear model	T1 proton	T1 electron
T1 mass number	T1 Relative atomic mass	T1 energy levels

T1 A simplified representation of a system used to explain, analyse or predict its behaviour.	T1 Meaning pending review.	T1 Meaning pending review.
T1 A negatively charged subatomic particle found outside an atom's nucleus.	T1 A positively charged subatomic particle found in an atom's nucleus.	T1 Meaning pending review.
T1 The allowed energy values of a quantum system.	T1 Meaning pending review.	T1 The total number of protons and neutrons in an atomic nucleus.

T1 periodic table	T1 period	T1 group
T1 Mendeleev	T1 Noble gases	T1 Alkali metals
T1 Halogens	T1 transition metals	T2 ionic bond

T1 A vertical column in the periodic table whose elements have related outer-electron configurations and chemical properties.	T1 A horizontal row of the periodic table, corresponding to the principal shell occupied by the outer electrons of its elements.	T1 An arrangement of chemical elements by atomic number that displays recurring patterns in their properties.
T1 Meaning pending review.	T1 Meaning pending review.	T1 Meaning pending review.
T2 The electrostatic attraction between oppositely charged ions.	T1 Meaning pending review.	T1 Meaning pending review.

T2 covalent bond	T2 metallic bond	T2 delocalised electron
T2 intermolecular force	T2 giant covalent structure	T2 fullerene
T2 carbon nanotube	T2 nanoparticle	T2 alloy

T2 Meaning pending review.	T2 Meaning pending review.	T2 A chemical bond involving a shared pair of electrons attracted to the nuclei of bonded atoms.
T2 Meaning pending review.	T2 Meaning pending review.	T2 Meaning pending review.
T2 Meaning pending review.	T2 Meaning pending review.	T2 A cylindrical carbon structure with atoms arranged in a network resembling a rolled sheet of graphene.

T2 lone pair	T2 line representation	T2 electrostatic force
T2 ionic lattice	T2 graphene	T2 diamond
T2 graphite	T2 surface area	T2 volume

T2 Meaning pending review.	T2 Meaning pending review.	T2 A pair of valence electrons associated with an atom and not shared in a covalent bond.
T2 A form of carbon in which each atom bonds to four others in a three-dimensional giant covalent structure.	T2 Meaning pending review.	T2 Meaning pending review.
T2 The amount of three-dimensional space occupied.	T2 The total area of the outer surfaces of a three-dimensional object.	T2 A form of carbon with layers of bonded atoms, used in pencils and able to conduct electricity through delocalised electrons.

T2 charge carrier	T3 conservation of mass	T3 relative formula mass
T3 mole	T3 Avogadro constant	T3 limiting reactant
T3 percentage yield	T3 atom economy	T3 concentration

T3 Meaning pending review.	T3 The principle that total mass remains unchanged in an ordinary chemical reaction within a closed system.	T2 A charged particle, such as an electron or ion, whose movement contributes to an electric current.
T3 The reactant that is used up first and therefore limits the amount of product formed.	T3 The number of specified elementary entities in one mole, exactly 6.02214076 times ten to the power 23 per mole.	T3 The SI unit of amount of substance, containing exactly 6.02214076 times ten to the power 23 specified entities.
T3 The amount of a substance per unit volume of a mixture or solution.	T3 Meaning pending review.	T3 Actual product yield divided by the theoretical maximum yield, multiplied by one hundred.

T3 titration	T4 reactivity series	T4 displacement
T4 reduction	T4 oxidation	T4 neutralisation
T4 salt	T4 electrolysis	T4 cathode

T4 A reaction in which one element replaces another in a compound.	T4 Meaning pending review.	T3 A method of finding an unknown concentration by measuring the volume needed to react with a solution of known concentration.
T4 A reaction between an acid and a base that forms a salt, usually with water.	T4 A chemical change involving a loss of electrons or an increase in oxidation state.	T4 A chemical change involving a gain of electrons or a decrease in oxidation state.
T4 An electrode at which reduction occurs.	T4 The decomposition of an electrolyte by an electric current passing through its molten form or a solution.	T4 An ionic compound formed when hydrogen ions in an acid are replaced by metal ions or other positive ions.

T4 anode	T4 electrolyte	T4 half equation
T4 titration	T4 strong acid	T4 weak acid
T4 concordant titres	T5 exothermic	T5 endothermic

T4 Meaning pending review.	T4 A substance that conducts electricity when molten or dissolved because it contains mobile ions.	T4 An electrode at which oxidation occurs.
T4 An acid that only partially ionises in aqueous solution.	T4 An acid that essentially completely ionises in aqueous solution at the concentrations being considered.	T4 A method of finding an unknown concentration by measuring the volume needed to react with a solution of known concentration.
T5 Describing a process that takes in heat from its surroundings.	T5 Describing a process that transfers heat to its surroundings.	T4 Meaning pending review.

T5 activation energy	T5 reaction profile	T5 fuel cell
T5 rechargeable	T5 bond energy	T5 cell
T5 battery	T5 electrolyte	T5 non-rechargeable

T5 An electrochemical device that converts the chemical energy of a continuously supplied fuel and oxidant into electricity.	T5 A diagram showing how the energy of a reacting system changes along a reaction pathway.	T5 The minimum energy that reacting particles need for a successful reaction.
T5 A device that converts chemical energy into electrical energy.	T5 The energy required to break one mole of a specified covalent bond in gaseous molecules.	T5 Meaning pending review.
T5 Meaning pending review.	T5 A substance that conducts electricity when molten or dissolved because it contains mobile ions.	T5 Two or more electrochemical cells connected to supply electrical energy.

T6 rate of reaction	T6 collision theory	T6 activation energy
T6 catalyst	T6 reversible reaction	T6 dynamic equilibrium
T6 Le Chatelier principle	T6 tangent	T6 mean rate

T6 The minimum energy that reacting particles need for a successful reaction.	T6 The explanation that reactions require collisions with sufficient energy and suitable orientation.	T6 The change in the amount or concentration of a reactant or product per unit time.
T6 A state in which opposing processes continue at equal rates, so there is no overall change in composition.	T6 A reaction whose products can react to form the original reactants under suitable conditions.	T6 A substance that increases a reaction rate without being used up overall.
T6 Meaning pending review.	T6 A straight line that touches a curve at a point and has the same direction there.	T6 Meaning pending review.

T6 instantaneous rate	T6 surface-area-to-volume ratio	T6 enzyme
T6 turbidity	T6 closed system	T7 crude oil
T7 hydrocarbon	T7 alkane	T7 fractional distillation

T6 A biological catalyst that increases the rate of a reaction without being used up overall.	T6 An object's total surface area divided by its volume.	T6 Meaning pending review.
T7 A naturally occurring liquid mixture containing many hydrocarbons and smaller amounts of other substances.	T6 Meaning pending review.	T6 Meaning pending review.
T7 Separating components of a liquid mixture through repeated evaporation and condensation based on differences in volatility.	T7 A saturated hydrocarbon containing only single bonds between carbon atoms.	T7 A compound containing only carbon and hydrogen atoms.

T7 fraction	T7 viscosity	T7 flammability
T7 feedstock	T7 cracking	T7 alkene
T7 functional group	T7 unsaturated	T7 addition

T7 Meaning pending review.	T7 A measure of a fluid's resistance to flow or to relative motion between adjacent layers.	T7 Meaning pending review.
T7 An unsaturated hydrocarbon containing at least one carbon-carbon double bond.	T7 Meaning pending review.	T7 Meaning pending review.
T7 A different reaction from burning in oxygen.	T7 Containing one or more carbon-carbon double or triple bonds rather than only single bonds.	T7 An atom or group of atoms responsible for characteristic chemical reactions of an organic compound.

T7 alcohol	T7 fermentation	T7 carboxylic acid
T7 ester	T7 ethyl ethanoate	T7 monomer
T7 addition polymerisation	T7 repeating unit	T7 condensation polymerisation

T7	T7	T7
An organic compound containing the COOH functional group.	The breakdown of sugars without oxygen, often by microorganisms, to release energy and form products such as ethanol or lactic acid.	An organic compound with a hydroxyl group bonded to a saturated carbon atom.
T7	T7	T7
A molecule that can join with other molecules to form a polymer.	Meaning pending review.	An organic compound containing a carbonyl group bonded to an oxygen atom that is bonded to another carbon group.
T7	T7	T7
Meaning pending review.	Meaning pending review.	The joining of unsaturated monomers into a polymer without forming a separate small-molecule product.

T7 polyester	T7 amino acid	T7 polypeptide
T7 nucleotide	T7 double helix	T8 chemical analysis
T8 pure substance	T8 formulation	T8 chromatography

T7 A chain of amino acids joined by peptide bonds.	T7 An organic molecule containing amino and carboxyl groups; these molecules join to form proteins.	T7 A polymer containing repeated ester links in its main chain.
T8 Meaning pending review.	T7 The structure formed by two strands coiled around a common axis, as in DNA.	T7 A unit of a nucleic acid containing a nitrogenous base, a pentose sugar and a phosphate group.
T8 A separation technique based on different affinities of substances for a stationary phase and a mobile phase.	T8 A mixture designed as a useful product.	T8 A single element or compound, not mixed with another substance.

T8 stationary phase	T8 mobile phase	T8 baseline
T8 solvent front	T8 Rf value	T8 flame test
T8 precipitate	T8 instrumental method	T8 sensitivity

T8 The starting line on a chromatogram where sample spots are placed before the solvent moves.	T8 Meaning pending review.	T8 The phase that remains fixed in a chromatography system and interacts differently with components of a mixture.
T8 Meaning pending review.	T8 In planar chromatography, the distance travelled by a substance's spot divided by the distance travelled by the solvent front from the same starting line.	T8 The furthest position reached by the mobile solvent during a chromatographic separation.
T8 Meaning pending review.	T8 Meaning pending review.	T8 An insoluble solid formed when substances in solution react.

T8 spectroscopy	T8 flame emission spectroscopy	T8 line spectrum
T9 volcanic activity	T9 condensation	T9 algae
T9 photosynthesis	T9 limestone	T9 coal

T8 Meaning pending review.	T8 Meaning pending review.	T8 Meaning pending review.
T9 A diverse group of mainly aquatic photosynthetic organisms that lack the true roots, stems and leaves of plants.	T9 The change of a substance from a gas to a liquid.	T9 Meaning pending review.
T9 Meaning pending review.	T9 Meaning pending review.	T9 The process by which plants and other organisms use light energy to make organic substances from carbon dioxide and water.

T9 crude oil	T9 natural gas	T9 fossil fuel
T9 greenhouse gas	T9 greenhouse effect	T9 infrared radiation
T9 peer review	T9 global climate change	T9 carbon footprint

T9 Coal, oil and natural gas formed from ancient organic matter over millions of years.	T9 Meaning pending review.	T9 A naturally occurring liquid mixture containing many hydrocarbons and smaller amounts of other substances.
T9 Meaning pending review.	T9 The warming caused when atmospheric gases absorb and emit infrared radiation, reducing the rate at which energy escapes to space.	T9 A gas that absorbs and emits infrared radiation, contributing to atmospheric warming.
T9 The total carbon dioxide and other greenhouse gases emitted over the full life cycle of a product, service or event.	T9 Meaning pending review.	T9 Meaning pending review.

T9 system boundary	T9 incomplete combustion	T9 particulates
T9 acid rain	T9 global dimming	T10 finite resource
T10 renewable resource	T10 sustainable development	T10 potable water

T9 Small solid particles or liquid droplets suspended in air or another fluid.	T9 Burning with insufficient oxygen for complete oxidation, often producing carbon monoxide or carbon as well as other products.	T9 Meaning pending review.
T10 Meaning pending review.	T9 Meaning pending review.	T9 Precipitation made unusually acidic mainly by atmospheric reactions involving sulfur dioxide and nitrogen oxides.
T10 Meaning pending review.	T10 Development that meets present needs while preserving future generations' ability to meet their own needs.	T10 Meaning pending review.

T10 sterilise	T10 desalination	T10 reverse osmosis
T10 sedimentation	T10 sludge	T10 effluent
T10 anaerobic digestion	T10 aerobic biological treatment	T10 phytomining

T10 Meaning pending review.	T10 A different route.	T10 Meaning pending review.
T10 Meaning pending review.	T10 Meaning pending review.	T10 Meaning pending review.
T10 Meaning pending review.	T10 Meaning pending review.	T10 Meaning pending review.

T10 bioleaching	T10 leachate	T10 life cycle assessment
T10 corrosion	T10 sacrificial protection	T10 alloy
T10 carat	T10 thermosoftening polymer	T10 thermosetting polymer

T10 Meaning pending review.	T10 Meaning pending review.	T10 Meaning pending review.
T10 Meaning pending review.	T10 Meaning pending review.	T10 The gradual destruction of a material through chemical or electrochemical reactions with its surroundings.
T10 Meaning pending review.	T10 Meaning pending review.	T10 Meaning pending review.

T10 composite	T10 matrix	T10 reinforcement
T10 Haber process	T10 NPK fertiliser	

T10 Meaning pending review.	T10 Meaning pending review.	T10 A material made by combining distinct components that retain their identities and contribute different useful properties.
	T10 A formulation of salts supplying nitrogen, phosphorus and potassium for plant growth.	T10 The industrial production of ammonia by reacting nitrogen with hydrogen under controlled temperature and pressure using a catalyst.