

Subject	Science
Unit/Topic	Particles

Key Vocabulary	Definition
Particles	A very tiny object such as an atom or molecule, too small to be seen with a microscope.
Atoms	The smallest particle of an element that can exist.
Molecules	Two to thousands of atoms joined together. Most non-metals exist either as small or giant molecules.
Particle model (solid, liquid, gas)	A way to think about how substances behave in terms of small, moving particles.
Boiling	Change from liquid to a gas of all the liquid when the temperature reaches boiling point.
Freezing	Change from liquid to a solid when the temperature drops to the melting point.
Condensing	Change of state from gas to liquid when the temperature drops to the boiling point.
Melting	Change from solid to liquid when the temperature rises to the melting point.
Evaporating	Change from liquid to gas at the surface of a liquid, at any temperature.
Sublimation	Change from a solid directly into a gas.
Solute	A substance that can dissolve in a liquid.
Solvent	A substance, normally a liquid, that dissolves another substance.
Solution	Mixture formed when a solvent dissolves a solute.
Dissolve	When a solute mixes completely with a solvent.
Soluble (insoluble)	Property of a substance that will (will not) dissolve in a liquid.

Diffusion	The process by which particles in liquids or gases spread out through random movement from a region where there are many particles to one where there are fewer.
Element	What all substances are made up of, and which contain only one type of atom.
Compound	Pure substances made up of two or more elements strongly joined together.
Mixture	Two or more pure substances mixed together, whose properties are different to the individual substances.
Pure substance	Single type of material with nothing mixed in.
Filtration	Separating substances using a filter to produce a filtrate (solution) and residue.
Evaporation	A way to separate a solid dissolved in a liquid by the liquid turning into a gas.
Distillation	Separating substances by boiling and condensing liquids
Chromatography	Used to separate different coloured substances.