

## 7Ea Mixtures and separation

Word	Pronunciation	Meaning
liquid	<i>li-kwid</i>	One of the states of matter. Has a fixed volume but not a fixed shape.
solid		One of the states of matter. Has a fixed shape and fixed volume.
gas		One of the states of matter. Does not have a fixed shape or a fixed volume and is easy to squash.
dissolve		When a substance breaks up into such tiny pieces in a liquid that it can no longer be seen and forms a solution.

## 7Ea Writing a method

Word	Pronunciation	Meaning
method		A description of how an experiment is carried out, written in simple, well-organised steps.
sequence		Step-by-step in the correct order, such as the steps in a method for an experiment.
imperative verb		A command to do something.
filtrate		The liquid that passes through a filter.

## 7Ea Mixtures

Word	Pronunciation	Meaning
mixture		Two or more substances jumbled together but not joined to each other. The substances in mixtures can often be separated from each other.
suspension	<i>sus-pen-shun</i>	A mixture of a solid and liquid, where the solid bits are heavy enough to settle out if the mixture is left to stand.
colloid		A mixture of a solid, liquid or gas in a solid, liquid or gas, where the substances do not settle out if left to stand.
disperse		To spread without settling out, such as the bits in a colloid.
opaque	<i>o-payk</i>	Not possible to see through.
solution	<i>sol-oo-shun</i>	When a substance has dissolved in a liquid. Solutions are transparent.
transparent		Clear, can be seen through. (Note: transparent substances may be coloured or colourless.)
filter		Anything, such as cloth, paper or a layer of sand, through which a liquid is passed to remove suspended pieces of solid.
to filter		To separate solid substances that have not dissolved from a mixture containing solids and liquid. The liquid is passed through a filter (such as filter paper) to do this.
sieve	<i>siv</i>	A mesh or grid with holes that holds back large solids from a mixture but allows smaller solid pieces and liquids through.
to sieve		To separate large solids from a mixture using a sieve.

## 7Eb Solutions

Word	Pronunciation	Meaning
solvent		The liquid in which a substance dissolves to make a solution.
solute		The substance that has dissolved in a liquid to make a solution.
soluble		Describes a substance that can dissolve in a liquid.
insoluble		Describes a substance that cannot dissolve in a liquid.
saturated		A solution that contains so much dissolved solute that no more solute can dissolve in it.
solubility		The amount of substance that dissolves in a particular solvent at a particular temperature to make a saturated solution.

## 7Ec Safety when heating

Word	Pronunciation	Meaning
heating to dryness		Evaporating the liquid from a solution to leave the solids that had been dissolved in it. Direct heating is stopped before all the liquid has evaporated, to prevent spitting of the solution.
evaporate		To change from the liquid state to the gas state.
hazard		A danger, or something that can harm.
risk		The likelihood that a hazard may cause harm.

## 7Ec Evaporation

Word	Pronunciation	Meaning
evaporation	<i>ee-vap-or-ay-shun</i>	When a substance changes from its liquid state to its gas state, for example when the gas escapes from the surface of the liquid into the air.
sodium chloride	<i>so-dee-um klor-ide</i>	The chemical name for table salt.
boiling		When there is liquid turning into a gas in all parts of a liquid, creating bubbles of gas in the liquid.
boiling point		The temperature at which a liquid boils.

## 7Ed Chromatography

Word	Pronunciation	Meaning
chromatography	<i>krome-a-tog-ra-fee</i>	A method that separates out dissolved substances in a mixture, using a liquid or gas solvent. The different substances are carried different distances by the solvent.
paper chromatography		Chromatography where the solvent moves through paper, carrying the dissolved solids.
chromatogram	<i>kro-ma-t-o-gram</i>	The results of chromatography (e.g. a dried piece of paper for paper chromatography), when the dissolved solids have been separated.

## 7Ee Distillation

Word	Pronunciation	Meaning
desalination	<i>dee-sal-in-ay-shun</i>	To produce fresh drinking water by separating the water from the salts in salty water.
distillation	<i>dis-till-ay-shun</i>	The process of separating a liquid from a mixture by evaporating the liquid and then condensing it (so that it can be collected).
steam		Water as a gas. May also be called water vapour.
condense		When a substance changes from its gas state to its liquid state.
still		Apparatus that can be used for distillation.