

Keyword	Definition
<b>Solution</b>	A liquid mixture in which a solute dissolves in the solvent
<b>Solute</b>	A minor component in a solution – dissolves in the solvent
<b>Solvent</b>	The liquid which the solute dissolves in
<b>Saturated</b>	The point at which no more solute can dissolve
<b>Pure</b>	Only one type of particle
<b>Dissolve</b>	Solid is mixed into a liquid to become a solution
<b>Particle</b>	A small piece of matter – everything is made up of these
<b>Filter</b>	To remove solid particles from liquid particles
<b>Evaporate</b>	Particles go from liquid to a gas
<b>Separate</b>	To remove one type of particle from another
<b>Soluble</b>	A substance is capable of dissolving
<b>Mixture</b>	More than one type of particle
<b>Solubility</b>	How much of a substance will dissolve in a solution
<b>Insoluble</b>	A substance is not capable of dissolving

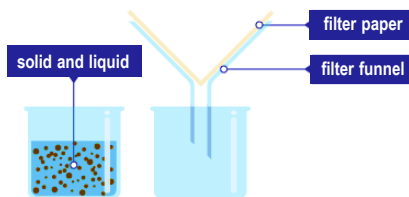


**Further Reading:**

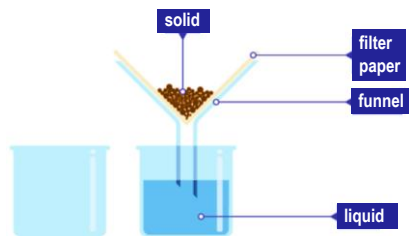
<https://www.bbc.co.uk/bitesize/guides/zgvc4wx/revision/1>

**Filtration:**

- A method for separating an insoluble solid from a liquid. A beaker containing a mixture of insoluble solid and liquid. There is filter paper in a filter funnel above another beaker.



- The mixture of insoluble solid and liquid is poured into the filter funnel.
- The liquid particles are small enough to pass through the paper as a filtrate. The solid particles are too large to pass through the filter paper and stay behind as the residue.



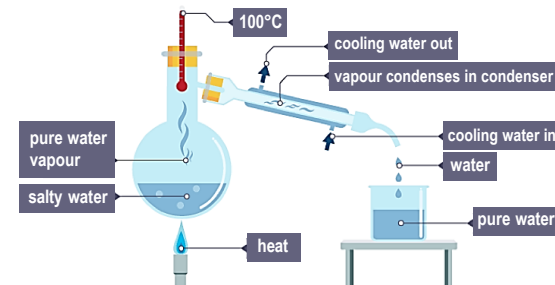
**Evaporation:**

- A method used to separate a soluble solid from a liquid.
- A solution is placed in an evaporating basin and heated with a Bunsen Burner
- The water will begin to evaporate and solid particles will begin to form in the basin.
- Once the water has evaporated, it will leave solid crystals behind



**Distillation:**

- A method used for separating the solvent from a solution. E.g. water can be separated from a salt solution because the water has a much lower boiling point than the salt
- Salt water is heated. The water evaporates and its vapours rise
- The vapours rise and pass into the condenser, where they cool and condense
- Liquid water drips into a beaker and the salt will be left in the round bottom flask



**Chromatography:**

- Paper chromatography is a method for separating dissolved substances from one another. Often used when the dissolved substances are coloured such as inks, food colouring or plant dyes
- A pencil line is drawn on the paper and spots of ink are placed on the line
- There is a solvent, usually water or ethanol, in a container/beaker
- The paper is lowered into the solvent. The solvent travels up the paper, taking some of the substance with it
- As the solvent travels up the paper, the different coloured substances are spread apart

