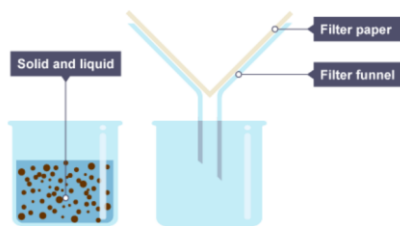


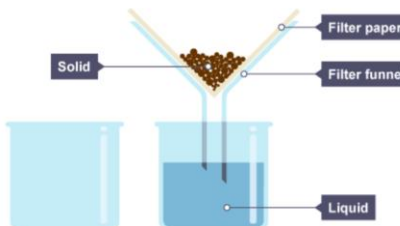
| Keyword           | Definition                                                      |
|-------------------|-----------------------------------------------------------------|
| <b>Solution</b>   | A liquid mixture in which a solute has dissolves in the solvent |
| <b>Solute</b>     | A minor component 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 a 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                        |

## 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.

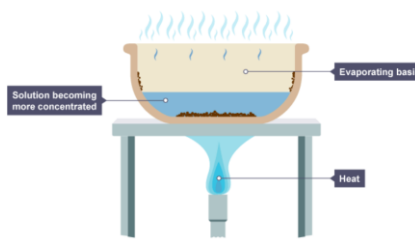


- The mixture of insoluble solid and liquid is poured into the filter funnel.
- The liquid particles are small enough to pass through the paper as a filtrate. The solid particles are too large to pass through the filter paper and stay behind as the residue.



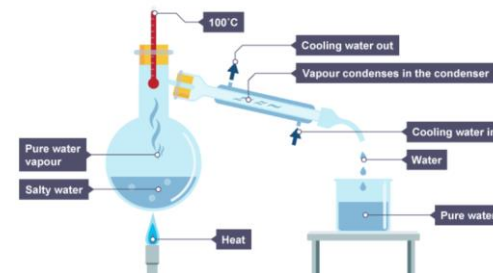
## Evaporation:

- 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.



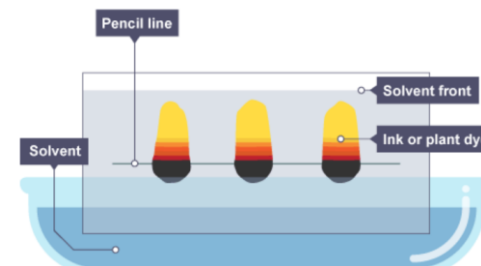
## Distillation:

- 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 substance from one another. Often used when the dissolved substance 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 substances with it.
- As the solvent travels up the paper, the different coloured substances are spread apart.



## Further Reading:

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

