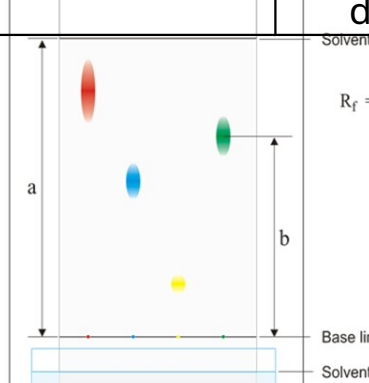
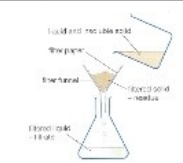

Science Year 9 C1 Part 3

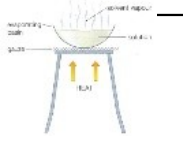
Key term	Definition
Chromatography	Used to separate mixtures of substances by using two phases: a mobile phase (Solvent) and a stationary phase (Paper).
Condensing	Change of state from gas to liquid.
Crystallization	Used to produce solid crystals from a solution by evaporating the solvent.
Distillation	A procedure by which two liquids with different boiling points can be separated.
Evaporation	Change of state from liquid to gas.
Filtration	A separation technique used to separate solids from liquids.
Fractional distillation	Separating a mixture of substances according to their different boiling points.
Solution	The mixture formed when a solute dissolves in a solvent.
Solute	The substance that gets dissolved.
Solvent	The liquid in which a solute dissolves to form a solution
Rf Value =	Distance traveled by substance / Distance travel by solvent
	



Filtration

An insoluble solid from a liquid

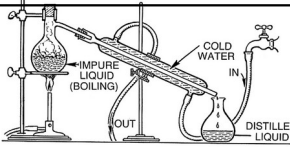
The mixture is poured through filter paper. The liquid goes through the filter paper and the solid remains in the filter paper.



Evaporation

A soluble solid from a solution

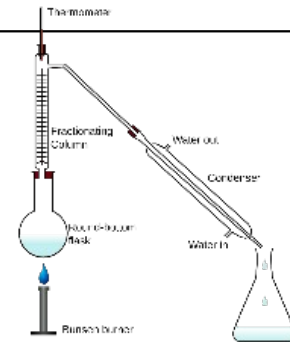
The solution is slowly heated until all of the liquid has evaporated. You are left with a dry solid.



Distillation

A liquid from a solution (can be two liquids or a soluble solid and a liquid).

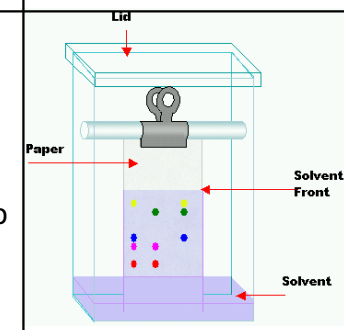
The solution is heated until the part of the solution with the lowest boiling point evaporates. The vapour is condensed and the liquid collected.



Fractional distillation

A mixture of liquids with different boiling points.

The solution is heated until the part of the solution with the lowest boiling point evaporates. The vapour is condensed and the liquid collected. This is repeated at higher temperatures to collect fractions with higher boiling points.



Chromatography

A mixture of dissolved solids or liquids (such as dyes in inks or food).

A mixture of the dissolved substance is put onto chromatography paper. A solvent is added, and this runs up the paper. The different substances in the mixture move at different speeds.


[Chromatograph](#)


[Distillation](#)


[Mixtures](#)


[Filtering](#)