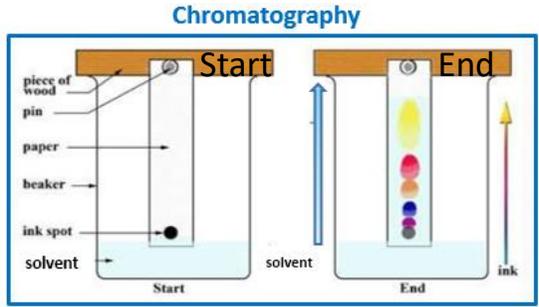
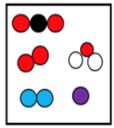


Key word	Definition
Mixtures	Made up of substances that are not chemically joined together
Pure	A substance is pure if it has no other substances mixed with it.
Impure	A substance is impure if it has different substances mixed with it.
Solute	The solid or gas that dissolves in a liquid.
Solvent	The liquid in which a solid or gas dissolves.
Solution	A mixture of a liquid with a solid or a gas.
Dissolve	The mixing of a substance with a liquid to make a solution.
Soluble	A substance that can dissolve in a certain solvent
Insoluble	A substance that cannot dissolve in a certain solvent.
Filtration	A way of separating pieces of solid that are mixed with a liquid or solution by pouring through filter paper.
Chromatography	A technique to separate mixtures of liquids that are soluble in the same solvent.
Distillation	A technique that uses evaporation and condensation to obtain a liquid solvent from a solution, or from a mixture of two liquids.

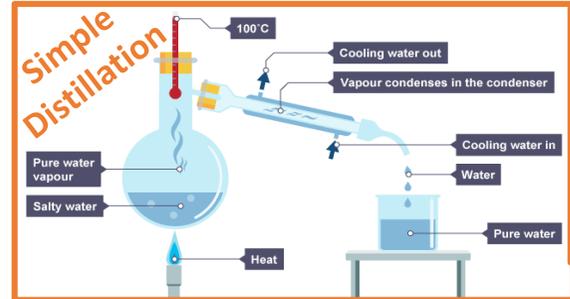
Chemistry: Techniques for Separating Mixtures

Mixture

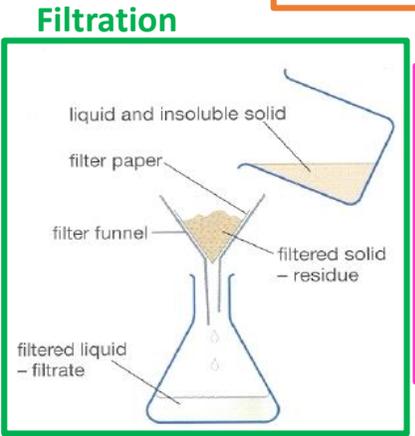
Air = Oxygen, Water, Nitrogen, Carbon dioxide



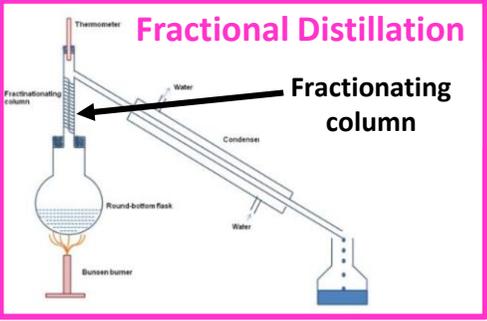
solvent travels up the paper. Different coloured substances **separate because they travel at different rates.** Pure substance appears as **one spot.** Impure (mixture) separates out into **multiple spots.**



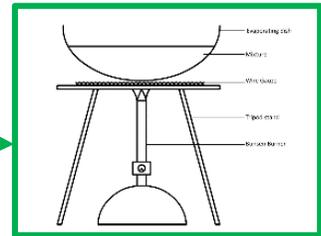
The **solution is heated** and the solvent **evaporates** and the solid is left behind. The solvent **vapour** is then **condensed** and collected as a **pure liquid.**



An **insoluble solid** is **separated** from a **solution.** The solution is then heated to **evaporate** off the **solvent** leaving the **soluble solid** behind.



The solution is **heated** and the solvents **evaporate.** The solvent with the lowest boiling **passes through** the fractionating column and **condenses** in the **condenser.** It is collected as a **pure liquid.** The highest boiling solvent **condenses** in the **column** and runs back into the boiling flask.



Crystallisation

