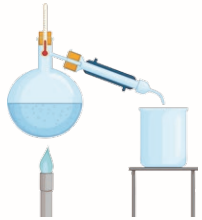
Separating Mixtures **Cut and Stick**

Cut out the cards below and match them under their correct headings to complete the table.

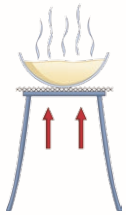
filtration

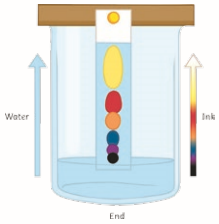
To separate out a mixture of liquid and solid, collecting both parts, e.g. pure water from ink, or sea water.

Insoluble materials won't pass through the tiny holes of the filter paper and so are separated from the soluble materials.



Different dyes in the ink can be separated as they move through the paper at different rates – they get stuck at different points based on their solubility.





To separate out a mixture of dissolved solids from a liquid e.g. salt water (this method collects the solid only).

distillation

As the liquid is heated it will evaporate and rise. It is then cooled and returned to liquid to be collected. Any solids will remain in the flask.

The water will evaporate as steam when heated, leaving behind the soluble materials in the base of the dish.

To separate different dyes in inks.

evaporation

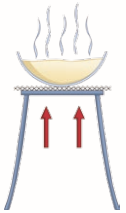
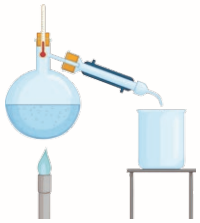
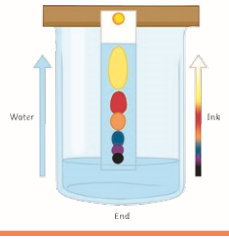
To separate out a mixture of soluble and insoluble solids, e.g. rock salt.

chromatography

Separating Mixtures **Cut and Stick**

Name	Diagram of Equipment	Scientific Explanation	Examples of Use

Separating Mixtures Cut and Stick **Answers**

Name	Diagram of Equipment	Scientific Explanation	Examples of Use
filtration		Insoluble materials won't pass through the tiny holes of the filter paper and so are separated from the soluble materials.	To separate out a mixture of soluble and insoluble solids, e.g. rock salt.
evaporation		The water will evaporate as steam when heated, leaving behind the soluble materials in the base of the dish.	To separate out a mixture of dissolved solids from a liquid e.g. salt water (this method collects the solid only).
distillation		As the liquid is heated it will evaporate and rise. It is then cooled and returned to liquid to be collected. Any solids will remain in the flask.	To separate out a mixture of liquid and solid, collecting both parts, e.g. pure water from ink, or sea water.
chromatography		Different dyes in the ink can be separated as they move through the paper at different rates – they get stuck at different points based on their solubility.	To separate different dyes in inks.