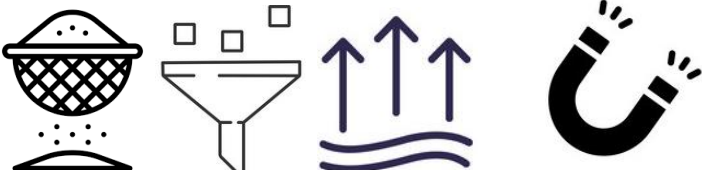
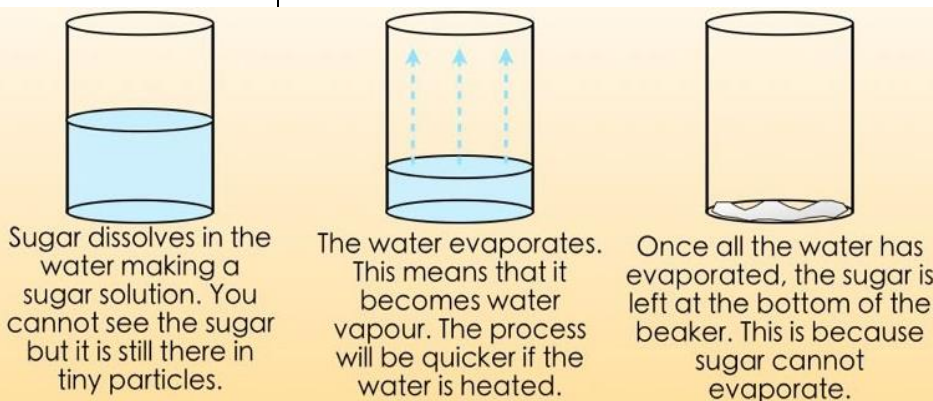


Materials

Key Knowledge

Reversible	When something is able to be reversed back to its original state	Dissolve	When something solid mixes with a liquid and becomes part of the liquid
Irreversible	When something is not able to be reversed back to its original state	Soluble Insoluble	Substance which dissolves in a liquid Substance which does not dissolve
Insulator	A substance or material which does not readily allow the passage of heat, electricity or sound	Evaporation	The process of turning from liquid to vapour
Conductor	A material or device which allows heat or electricity to carry through	Flexible	Something that is capable of bending easily without breaking
Magnetic	A material which is attracted to a magnet	Melting	Heating a solid until it changes into a liquid
Transparent Opaque	Allows light to pass through Does not allow any light to pass through	Freezing	When a liquid cools and changes into a solid
<p><u>Methods to Separate Mixtures</u></p>  <p>Sieving Filtering Evaporating Magnetic Attraction</p>		Gas	An air-like fluid substance which expands freely to fill any space available
		Liquid	A substance that can flow freely and can be measured by volume e.g. water or oil
		Solid	Firm and stable in shape, not a liquid or fluid

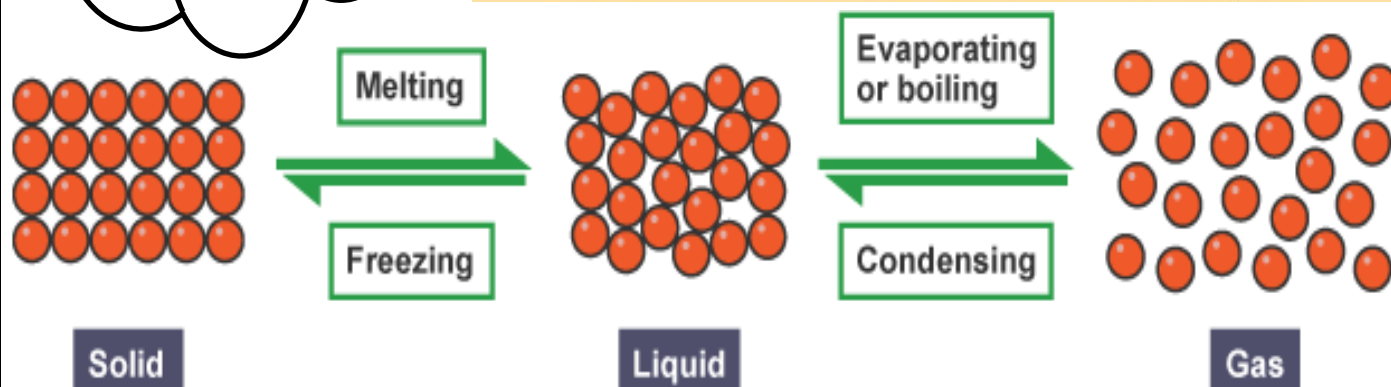
How could you separate a mixture of salt, sand, paperclips and rice?



Sugar dissolves in the water making a sugar solution. You cannot see the sugar but it is still there in tiny particles.

The water evaporates. This means that it becomes water vapour. The process will be quicker if the water is heated.

Once all the water has evaporated, the sugar is left at the bottom of the beaker. This is because sugar cannot evaporate.



Scientific Inquiry

How can we separate mixtures? Are all changes reversible? Explain why materials been chosen for a particular purpose.