

Prior Learning

- I can say whether materials are solids, liquids or gases.
- I can compare and group materials together, according to whether they are solids, liquids or gases.
- I observe that some materials change state when they are heated or cooled and find out what temperature (degrees Celsius - °C) this happens at.
- I can identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature.

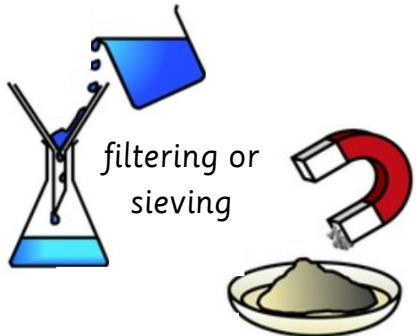
Sticky Knowledge

- I can compare and group together everyday materials based on their properties.
- I know that some materials will dissolve in liquid to form a solution, and how to recover a substance from a solution.
- I can use my knowledge to decide how mixtures might be separated.
- I can give reasons for the particular uses of everyday materials.
- I can demonstrate a reversible change.
- I can explain that some changes result in making new materials which is not usually reversible.

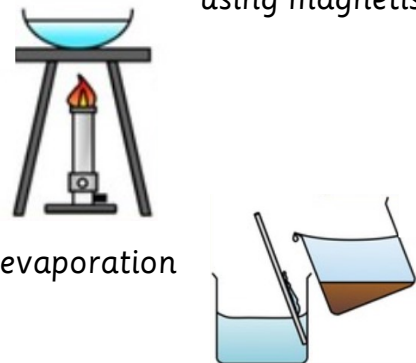
Vocabulary

Change of state	When a material changes to another form, i.e. a liquid to a solid or a gas into a liquid.
Conductor	A material that can carry heat or electricity through it.
Dissolve	When something solid mixes with a liquid and becomes part of the liquid, looking like it has disappeared.
Evaporation	The process of turning from liquid to vapour
Flexible	Can be easily bent without breaking
Gas	An air-like substance which expands freely to fill any space available
Insoluble	Something that cannot be dissolved.
Insulator	A material that cannot carry heat or electricity through it.
Irreversible Change	When a material is changed and cannot be changed back, such as frying an egg or burning wood.
Liquid	A material that flows freely but can be measured by volume e.g. water or oil
Magnetic	A material that can be attracted by a magnet.
Melting	When a solid changes state into a liquid.
Opaque	Something you cannot see through.
Reversible Change	When a material turns into something that looks or feels different and can be changed back, e.g.
Solid	Firm and stable in shape, not a liquid or fluid
Soluble	Able to be dissolved, especially in water.
Solution	A liquid with another material dissolved into it.
Translucent	Something that allows some light through.
Transparent	Something that is see through, such as glass.

Ways of separating materials



using magnetism



decanting

Changing States

