



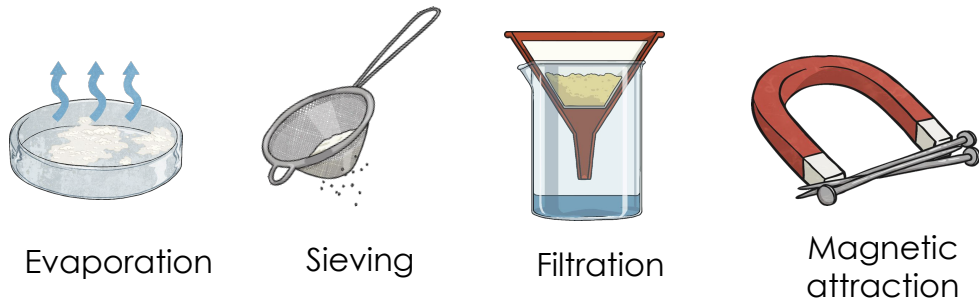
Science – Year 5 Properties and Materials (Previous knowledge – refer to Year 2 – Animals Including Humans)

Vocabulary		
Tier 1	Tier 2	Tier 3
materials	irreversible	solution
evaporation	reversible	conductor
magnetic	dissolve	solution
transparent	filtering	soluble

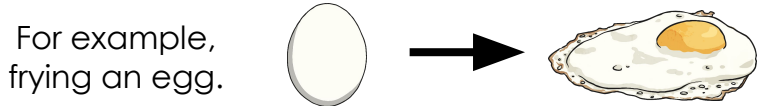
- don't know
- I know this word
- I can use it in a sentence

Some changes to materials are reversible, which means that they can be changed back to their previous state.

Some methods to separate materials that have been mixed are:



Some changes to materials are irreversible, which means they cannot be changed back to their previous state.



- Useful Resources
- Water, sugar, sand, bicarbonate of soda and magnets to investigate reversible changes.
 - Range of different materials to investigate their properties and group.

Key Questions/Facts

What are the different types of material?

- Natural materials are used in the way they are found in nature, such as stone.
- Synthetic or human-made materials are altered with the help of heat or chemicals, such as plastic.

What is the difference between a thermal conductor and a thermal insulator?

- Heat can travel easily through thermal conductors, such as metal pots and pans.
- Thermal insulators do not let heat travel through them easily. Some fabrics, wood and plastics are good thermal insulators. Thermal insulators can keep heat out or in.

What is the difference between an electrical conductor and an electrical insulator?

- Electricity can travel easily through electrical conductors but some materials do not let electricity pass through them. These are known as electrical insulators.
- All materials have some electrical resistance. Resistance is the opposition to the flow of electricity through a material.

Scientific Enquiry Skills

- Asking questions**
Asking questions that can be answered using a scientific enquiry.
- Making predictions**
Using prior knowledge to suggest what will happen in an enquiry.
- Setting up tests**
Deciding on the method and equipment to use to carry out an enquiry.
- Observing and measuring**
Using senses and measuring equipment to make observations about the enquiry.
- Recording data**
Using tables, drawings and other means to note observations and measurements.
- Interpreting and communicating results**
Using information from the data to say what you found out.
- Evaluating**
Reflecting on the success of the enquiry approach and identifying further questions for enquiry.