

Properties and changes of materials

Chemistry



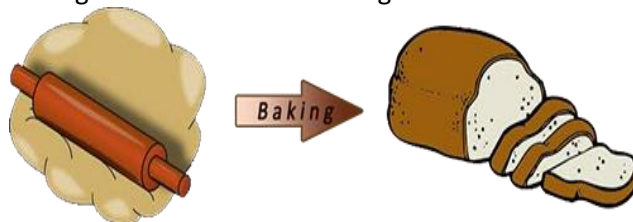
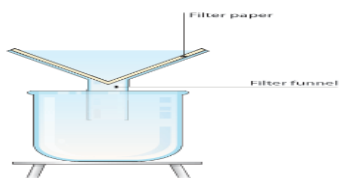
What should I already know?

The names of different objects and their properties.
Some materials can change state.

Diagrams

Some mixtures can be separated by filtering.

Baking is a non-reversible change.



Vocabulary



Flexible



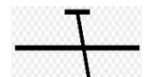
Easily bent without breaking.

Durable



Not easily broken or worn out.

Conductor



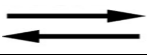
Anything that allows heat, electricity, or sound to pass through.

Insulator



Anything that stops heat, electricity, or sound passing through.

Reversible



A change that can be undone.

Irreversible



A change that cannot be undone.

Dissolve



To mix completely with liquid.

Separate



To isolate from a mixture through sieving, filtering and evaporating.

Evaporation



When liquids turn into gases from being heated.

Melting



When a solid turns into a liquid from being heated.

Quick Facts

Some materials are soluble (dissolve in water) and some are not.



Investigations into the properties of different materials give reasons as to why particular materials are used for particular purposes.

For example: A wooden spoon is good for cooking because it does not conduct heat.

Some changes to materials are reversible such as ice, water and water vapour and some changes are not reversible such as cake mixture and cake.

When acid (vinegar) and bicarbonate of soda are mixed a new material is made and this change cannot be reversed.

Some materials such as salt will dissolve in liquid to make a solution and some will not.

This process is different to melting because there are two materials involved in making a solution whereas melting just involves heating a material.

When a solution is made, it is possible to recover that substance from the solution.

Mixtures can be separated by a process of sieving, filtering and evaporating.

Working Scientifically

Questioning, Planning and Enquiring	Investigating
Observing and Recording	Concluding and Evaluating