

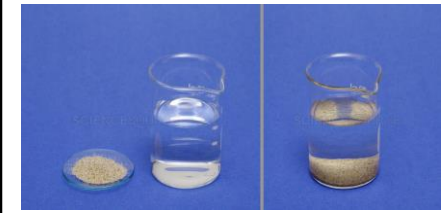
| Vocabulary | Meaning |
|-----------------|---|
| brittle | hard but can easily break |
| elasticity | the ability of an object or material to resume its normal shape after being stretched or compressed |
| indentation | a dent made in an object's edge or surface |
| thermal | relates to heat |
| insulator | a material which does not readily allow the passage of heat or sound |
| conductor | a material which readily allows the passage of heat or sound |
| dissolve | become incorporated into a liquid so as to form a solution |
| solution | a substance or matter in a state which it will expand freely to fill the whole of a container |
| solute | the minor component in a solution |
| filter | remove impurities or solid particles from a liquid or a gas |
| evaporate | turn from liquid into vapour or gas |
| immiscible | liquids which do not mix |
| filtration | the action or process of filtering something |
| chemical change | make or become different through a chemical process |
| state of matter | a solid, liquid or a gas |

Key knowledge – What are soluble and insoluble substances?

Substances that dissolve in water are called soluble substances. When you mix sugar with water, the sugar dissolves to make a transparent solution. Salt is soluble in water too.



Substances that do not dissolve in water are called insoluble substances. When you mix sand or flour with water, they do not dissolve.



Key knowledge – What are reversible and irreversible changes?

A reversible change is a change that can be undone or reversed. If you can get back the substances you started the reaction with, that's a reversible reaction. A reversible change might change how a material looks or feels, but it doesn't create new materials.



A change is called irreversible if it cannot be changed back again. In an irreversible change, new materials are always formed. Sometimes these new materials are useful to us. The new materials have undergone a chemical change.

