

## Knowledge Organiser – Properties of Materials

Key Vocabulary	Definition
Electrical conductivity	Ability to conduct or transmit electricity.
Solubility	How well a substance dissolves.
Thermal conductivity	Ability to conduct or transmit heat.
Dissolve	To mix with a liquid and become part of the liquid.
Insoluble	Something that is not able to dissolve.
Filtering	Process to use when you can separate small objects.
Reversible change	Capable of being reversed.

Examples of reversible changes that can change back to their original form.



Boiling water



Ice cubes melting

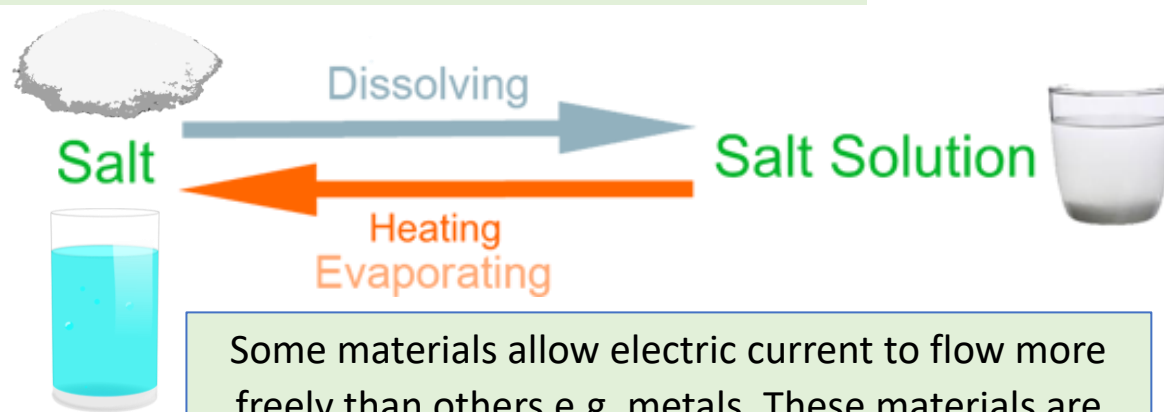


Melting butter



Solution of sugar and water

When a solid (**solute**) dissolves in the liquid (**solvent**), a **solution** is formed.



Most metals are good conductors of heat.

Some materials allow electric current to flow more freely than others e.g. metals. These materials are called electrical conductors.

Mixing materials together forms a mixture where two or more substances are physically combined. It can be separated by physical methods such as:

sieving



Separating different solids.

filtering

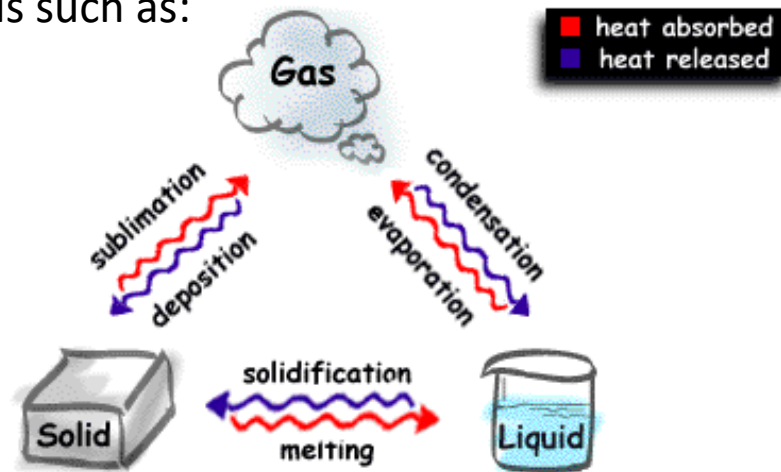


Separating insoluble solids from liquids.

evaporating

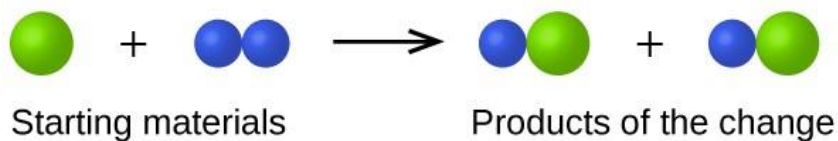


Separating soluble solids from liquids.



State changes are reversible.

Chemical changes produce new substances.



Examples of chemical changes are:

burning

cooking and baking

rusting

fermentation

Evidence of a chemical reaction can be identified through:

Change of composition

Change of colour

The change cannot be reversed

Change of smell