

## Knowledge Organiser – Properties of Materials (Science Year 5)

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.

Most metals are good conductors of heat.

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



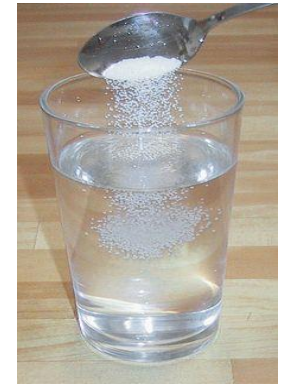
Boiling water



Ice cubes melting



Melting butter



Solution of sugar and water

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



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

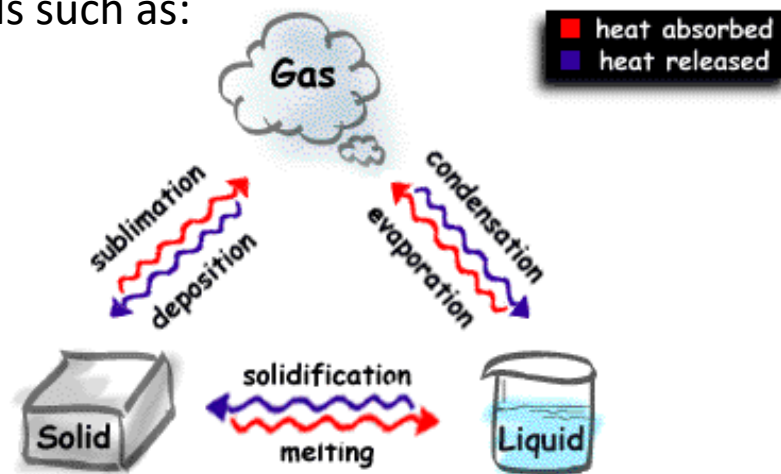


Separating  
insoluble solids  
from liquids.

evaporating

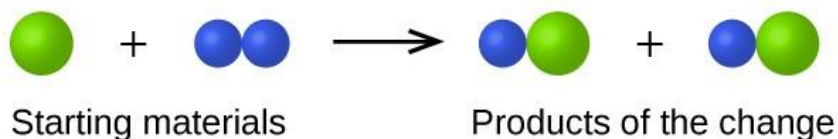


Separating  
soluble solids  
from liquids.



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