



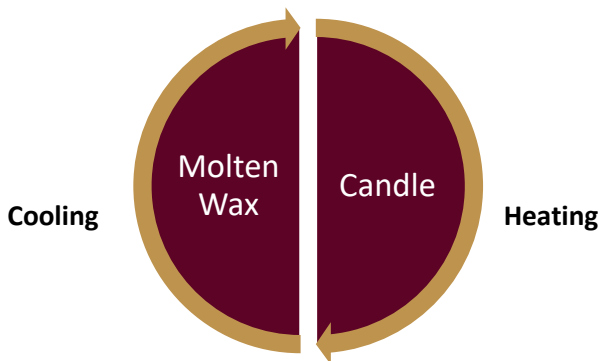
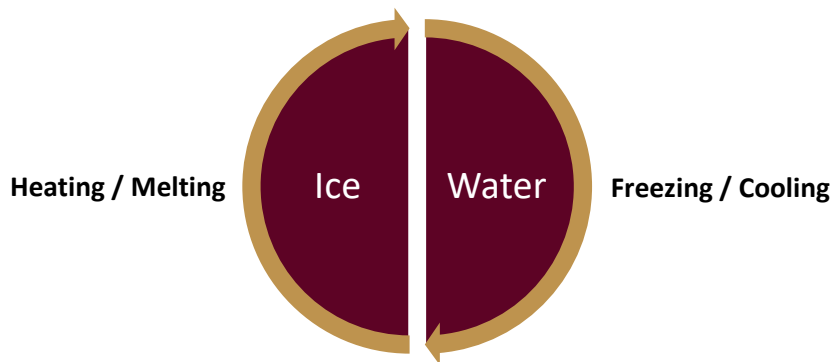
# Y5 Science – Reversible and Irreversible Changes

## Changes

- Changes can occur when different materials are mixed.
- Some material changes can be reversed and some cannot.
- Changes to materials can happen at different rates.

## Reversible Changes

- Dissolving, mixing, freezing, melting and boiling are all reversible changes.

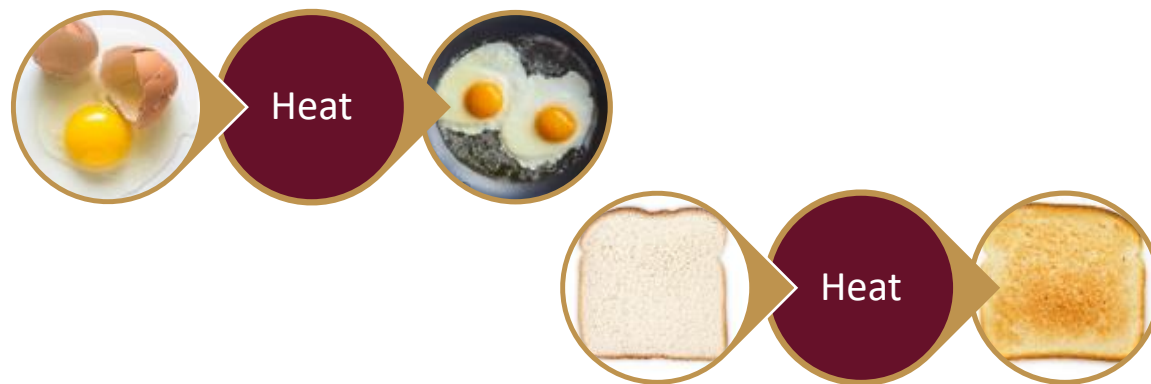


## Vocabulary

<b>Dissolved</b>	When a substance is mixed with a liquid and the substance has disappeared.
<b>Solution</b>	A mixture that contains two or more substances combined
<b>Insoluble</b>	A substance that will not dissolve.
<b>Filter</b>	To remove dirt or other solids from liquids or gases. A filter can be made of paper, charcoal, or other material with tiny holes in it.
<b>Sieve</b>	A utensil with meshes or holes to separate finer particles from coarser ones or solids from liquids.
<b>Evaporate</b>	To turn from liquid into gas (vapour)
<b>Condense</b>	Turning water vapour or steam back into a liquid (water)
<b>Melting</b>	To change from a solid to a liquid state through heat or pressure
<b>Reversible</b>	Able to turn or change back.
<b>Irreversible</b>	Not able to change or turn back.

## Irreversible Changes

- In an irreversible change, new materials are always formed.
- Irreversible changes usually involve heating, mixing or burning.

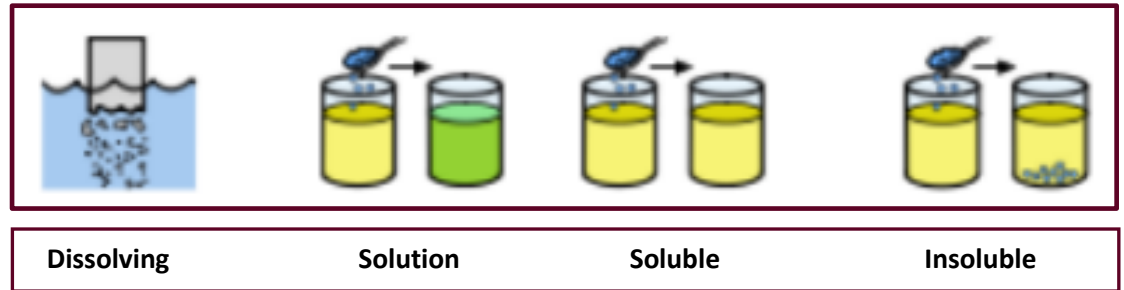




# Y5 Science – Reversible and Irreversible Changes

## What is Dissolving?

- When the particles of a solid mix with the particles of a liquid, this is called dissolving.
- The result of dissolving is a **solution**.
- Materials that dissolve are **soluble**.
- Materials that do not **dissolve** are **insoluble**.



### Filtering

Removing dirt or other solids from a liquid. The filter allows the liquid to pass through but not the solids.



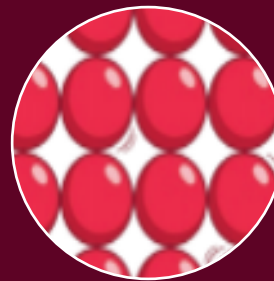
### Sieving

By using a utensil with small holes in it you can separate finer particles from larger ones or solids from liquids.



### Evaporating

A process caused by heat in which a liquid vaporises, beginning from its surfaces and turns into a gaseous substance.



### Solids

Particles are packed closely together.



### Liquids

Particles have some space to move.



### Gases

Particles are free to move.

