

Lent Term 2 - Year 5 - Science

Reversible Changes



In a reversible change a material turns into something that looks and feels different. But then it can be changed back to its original form.

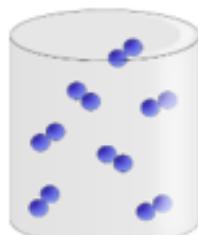
Reversible and Irreversible Changes

Three states of matter

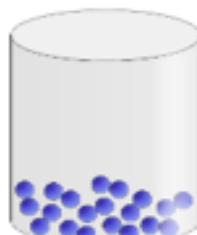
GAS: particles far apart and randomly arranged / move around

LIQUID: particles close but randomly arranged / move around

SOLID: particles very close together / vibrate around a fixed position



Gas



Liquid

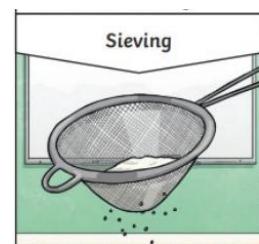


Solid

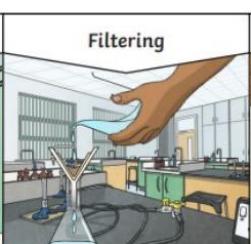
Examples
Steam (water vapour)
Hydrogen
Carbon Dioxide
Oxygen

Examples
Water
Milk
Washing up liquid
Juice

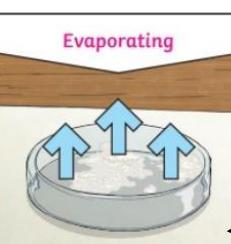
Examples
Ice
Wood
Glass
Diamond



Smaller **materials** are able to fall through the holes in the sieve, separating them from larger particles.



The **solid** particles will get caught in the filter paper but the **liquid** will be able to get through.



The **liquid** changes into a **gas**, leaving the **solid** particles behind.

Reversible changes, such as mixing and dissolving solids and liquids together, can be reversed by: sieving, filtering and evaporating.

Key Words

Reversible Change – when a material changes form but can easily be changed back to its original state. For example: ice can change to water and then it can be changed back to ice.

Irreversible Change – is when a material is changed permanently and a new material is made. For example: Burning wood creates ash and smoke. Ash and smoke can not be changed back into wood.

Dissolving – when a solid breaks down into tiny, invisible pieces and spreads out in a liquid.

Solutions – the clear liquids you get after dissolving.

Filtering – a method of separating an insoluble solid from a liquid.

Evaporating – when a liquid turns into a gas or vapour. It can then return to its original liquid state.