









Key learning

Some changes to materials such as dissolving, mixing and changes of state are reversible, but some changes such as burning wood, rusting and mixing vinegar with bicarbonate of soda result in the formation of new materials and these are not reversible.

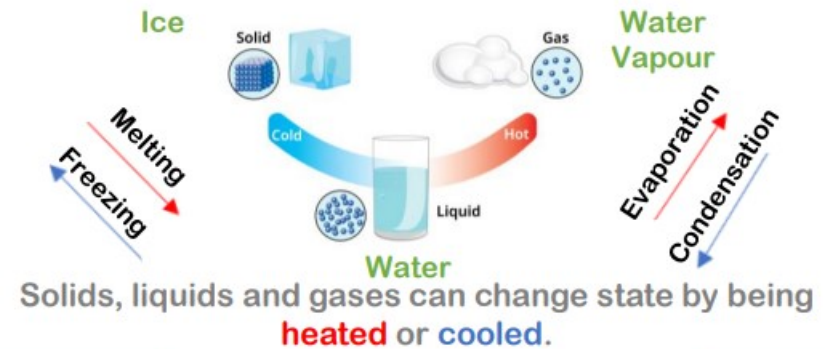
	solute
	solvent
	reversible
	evaporate
	chemical change
	effervescence
	fair test
	corrosion
	combustion
	extinguish
	reaction
	carbon dioxide

Evaporation



If a solid has **dissolved** in water (for example in a salt solution), **heating** it causes the water to **EVAPORATE**, leaving the solid (salt) behind.


Changes of State



Irreversible Changes

These are **CHEMICAL** changes – they **cannot** be reversed as a new material has been made.

Reversible Changes


liquid chocolate
– cool –
solid chocolate


solid lolly
– heat –
liquid lolly


mixture of rice
and flour
– sieve –
both separated


dissolved sugar
– evaporation (heat) –
solid sugar

These are **PHYSICAL** changes – they **can** be reversed as no permanent change has been made.