Year 5 - Changes of Materials - Half Term 1

Reversible Changes

liquid chocolate
– cool –
solid cholate

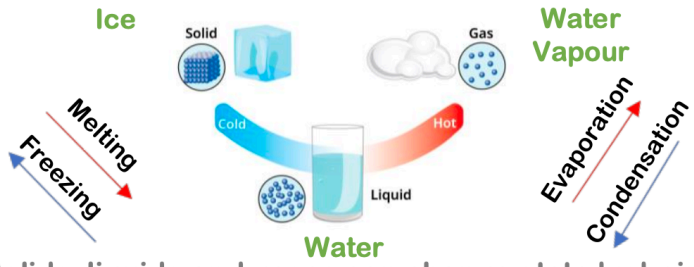
solid lolly
– heat –
liquid lolly

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.

Changes of State



Solids, liquids and gases can change state by being heated or cooled.

Irreversible Changes

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

Evaporation

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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.

Key Vocabulary

solute	a substance that can be dissolved in liquid
solvent	a substance that can dissolve in a solute
reversible	a change to a substance that can be undone or reversed
evaporate	the process where a liquid changes to a gas
chemical change	a type of change in which a new substance is formed
effervescence	fizzing or bubbling
fair test	an experiment that only changes one variable
corrosion	the reaction of a metal with oxygen
combustion	an irreversible change where a fuel uses oxygen to burn and releases energy
extinguish	to put out a fire
reaction	process in which substances are converted into different substances
carbon dioxide	gas which makes up around 0.04% of our atmosphere

To know statements	✔ ✘
I know how to use evaporation to recover the solute from a solution.	
I know about and can describe some reversible changes.	
I know about chemical reactions and can describe how we know new materials are made.	
I know about rusting reactions.	
I know about burning reactions.	
I know about chemical reactions – acids and bicarbonate of soda.	

What can you remember from previous units?

What are the three states of matter?
How do materials change state when they are heated or cooled?
How do different particles behave in the three states?
What is evaporation and condensation?

Anything else you have learnt? What have you enjoyed?