Carr Head Primary School – Knowledge Organiser

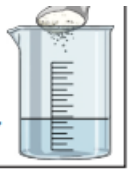
Science	Changes of Materials	Year 5	Autumn 2

melting	The process of heating a solid until it changes into a liquid.
freezing	When a liquid cools and turns into a solid.
evaporating	When a liquid turns into a gas or vapour.
condensing	When a gas, such as water vapour, cools and turns into a liquid.

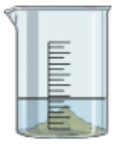
Dissolving

A solution is made when solid particles are mixed with liquid particles. Materials that will dissolve are known as soluble. Materials that won't dissolve are known as insoluble. A suspension is when the particles don't dissolve.

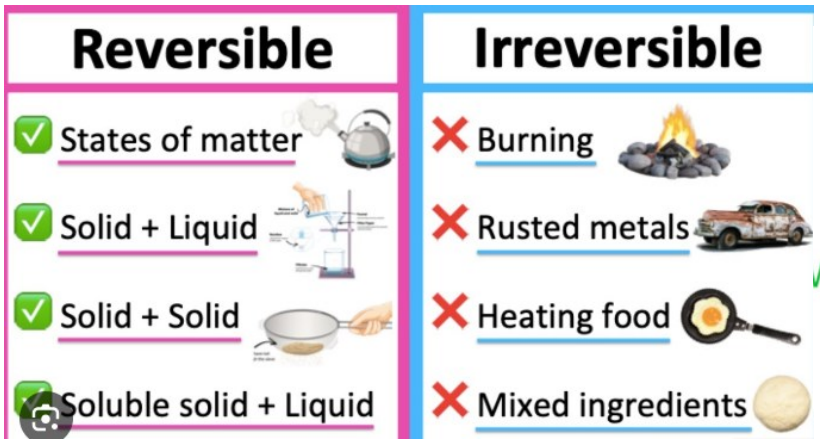
Sugar is a soluble material.

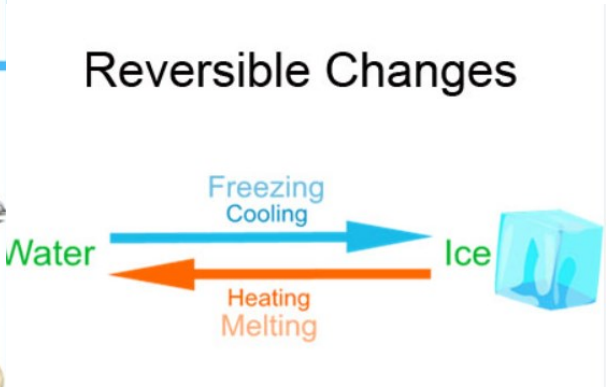


Sand is an insoluble material.

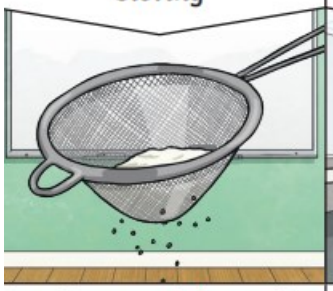
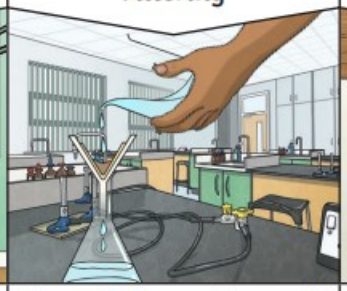


Quiz
What does insoluble mean?
How can reversible changes be changed back?
Name 2 reversible changes.
What does evaporating mean?





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

Sieving	Filtering	Evaporating
		
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.

Some changes are reversible (can be changed back) whilst others are irreversible (cannot be reversed).

A new material is always formed after an irreversible change .