

Science	Changes of Materials	Year 5	Autumn 2
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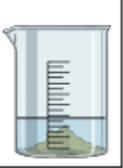
melting	The process of heating a solid until it changes into a liquid .
freezing	When a liquid cools and turns into a solid .
evaporating	When a liquid turns into a gas or vapour.
condensing	When a gas , such as water vapour, cools and turns into a liquid .

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**.

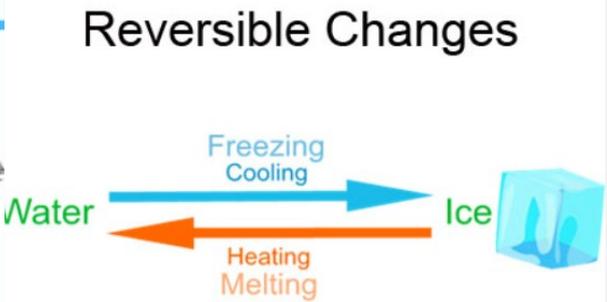


Sand is an insoluble **material**.

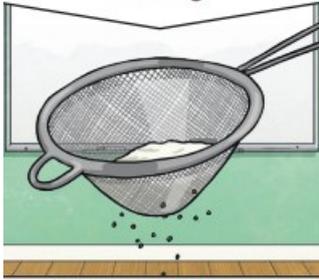
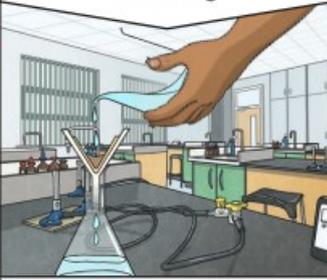
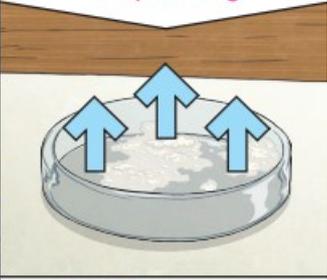


Quiz
What does insoluble mean?
How can reversible changes be changed back?
Name 2 reversible changes.
What does evaporating mean?

Reversible	Irreversible
<ul style="list-style-type: none"> ✓ <u>States of matter</u>  ✓ <u>Solid + Liquid</u>  ✓ <u>Solid + Solid</u>  ✓ <u>Soluble solid + Liquid</u>  	<ul style="list-style-type: none"> ✗ <u>Burning</u>  ✗ <u>Rusted metals</u>  ✗ <u>Heating food</u>  ✗ <u>Mixed ingredients</u> 



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

Sieving	Filtering	Evaporating
 <p>Smaller materials are able to fall through the holes in the sieve, separating them from larger particles.</p>	 <p>The solid particles will get caught in the filter paper but the liquid will be able to get through.</p>	 <p>The liquid changes into a gas, leaving the solid particles behind.</p>

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 .