

## Me In My World

Science	
materials	The substance that something is made out of, e.g. wood, plastic, metal.
solids	One of the three states of matter. Solid particles are very close together, meaning solids, such as wood and glass, hold their shape.
liquids	The state of matter can flow and take the shape of the container because the particles are more loosely packed than solids and can move around each other. Examples of liquids include water and milk.
gases	One of the three states of matter. Gas particles are further apart than solid or liquid particles and they are free to move around. Examples of gases are oxygen and helium.
melting	The process of heating a solid until it changes into 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.
conductor	A material that heat or electricity can easily travel through.
insulator	A material that does not let heat or electricity travel through them.
transparency	A transparent objects lets light through so the object can be looked through, for example glass or some plastics.

materials	liquids
gases	melting
freezing	evaporating
condensing	transparency

I will learn

I can compare and group materials based on their properties (e.g. hardness, solubility, transparency, conductivity, [electrical & thermal], and response to magnets).

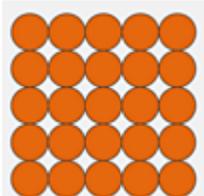
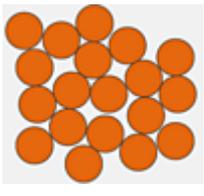
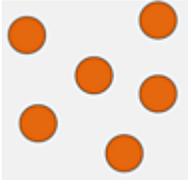
I should already know

I can compare and group materials together, according to whether they are solids, liquids or gases.

Thinking Deeper Challenge

Different materials are used for particular jobs based on their properties: electrical conductivity, flexibility, hardness, insulators, magnetism, solubility, thermal conductivity, transparency.

## Three States of Matter

Solid particles	Liquid particles	Gas particles
		

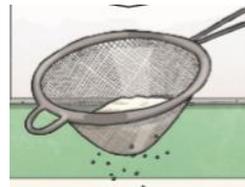
## Changes of State

Common changes of state include melting, freezing, sublimation, deposition, condensation, and vaporization.



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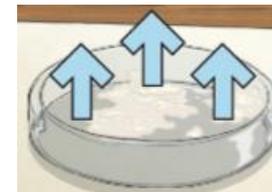
**Reversible changes** such as mixing and dissolving solids and liquids together can be reversed by;



sieving



filtering



evaporating

**Irreversible changes** often result in a new product being made from the old materials (reactants). For example, burning wood produces ash.

## Dissolving

A solution is made when solid particles are mixed with liquid particles. Materials that will dissolve are known as **soluble**, for example sugar. Materials that won't are known as **insoluble**.