


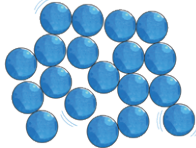
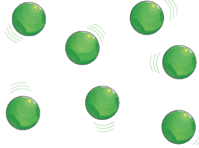
Key Vocabulary

states of matter	Materials can exist in any of three states: solids , liquids or gases . Some materials can change from one state to another and back again.
solid	Solids are materials that keep their shape unless a force is applied to them. They can be hard, soft or even squashy. Solids take up the same amount of space no matter what has happened to them.
liquid	Liquids take the shape of their container. They can change shape but do not change the amount of space they take up. They can flow or be poured.
gas	Gases can spread out to completely fill the container or room they are in. They do not have any fixed shape but they do have a mass.
particle	A particle is a small piece of matter that cannot be seen with the naked eye.
melt	When a material melts , it changes from a solid into a liquid .
freeze	When a material freezes , it changes from a liquid into a solid .
condense	When a material condenses , it changes from a gas into a liquid .

States of Matter

'Matter' is the scientific word used to describe anything that takes up space. Matter exists in any of three different states.

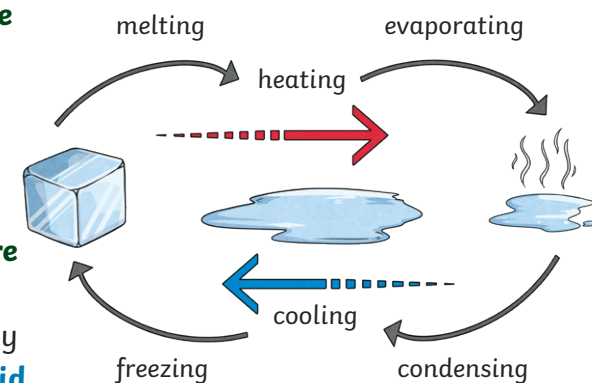


Solids	Liquids	Gases
		
The particles are close together in clear formations. The particles vibrate on the spot.	The particles are quite close together but move around each other much more easily.	The particles move quickly in all directions, filling the space. There is much more space between the particles .

Changing State

Increasing the **temperature** of a **solid** can cause it to **melt** into a **liquid** and eventually **evaporate** the **liquid** into a **gas**.

Decreasing the **temperature** of a **gas** can **condense** it into a **liquid** and eventually **freeze** the **liquid** into a **solid**.



Key Vocabulary

evaporate	When a material evaporates , it changes from a liquid into a gas . This is a slower process than boiling. It only occurs on the top of the liquid and does not produce bubbles.
temperature	Temperature is a measurement of how hot or cold something or somewhere is.
thermometer	A thermometer is a piece of scientific equipment used for measuring temperature . It measures in °C or °F.
water vapour	Water vapour is water in its gaseous state.
precipitation	Precipitation is water that falls back to land from the atmosphere as rain, sleet, snow or hail.

Melting Point

This is the **temperature** at which a **solid** turns into a **liquid**.



The Water Cycle

The water cycle is the movement of water within the Earth's atmosphere and the way that it is stored in its various **states of matter**.

- evaporation** – When the surface of the water is heated, the water will begin to change from a **liquid** to a **gas** through **evaporation**.
- condensation** – As the **water vapour** rises, the conditions become much cooler. The **water vapour** begins to change back into a **liquid**, forming clouds.
- precipitation** – Once the **water vapour** has condensed into **liquid** water, it will fall back to the ground through **precipitation**.
- accumulation** – When the water reaches the ground through **precipitation**, it collects in rivers and streams (run-off) and underground (groundwater) and is transported back to larger bodies of water such as lakes, seas or oceans.

