

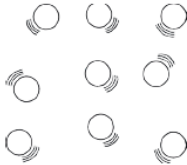

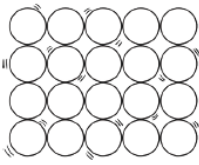


Characteristics of states of matter

Solids keep their shape and volume.

Liquids take the shape of their container but keep the same volume.

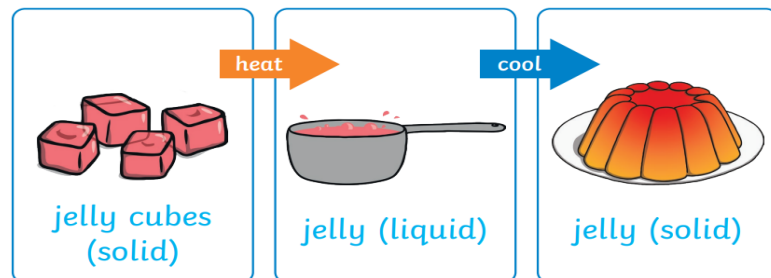
Gases spread out to fill all the space available.

Gases	Liquids	Solids
		
These particles are spread out and can move quickly in all directions.	These particles are close together but can move around easily.	These particles are tightly packed together and can hardly move.

Changes to states of matter

Materials can change state when they are heated (melt, evaporate) or cooled (freeze, condense).

Different materials change state at different temperatures (measured in °C).



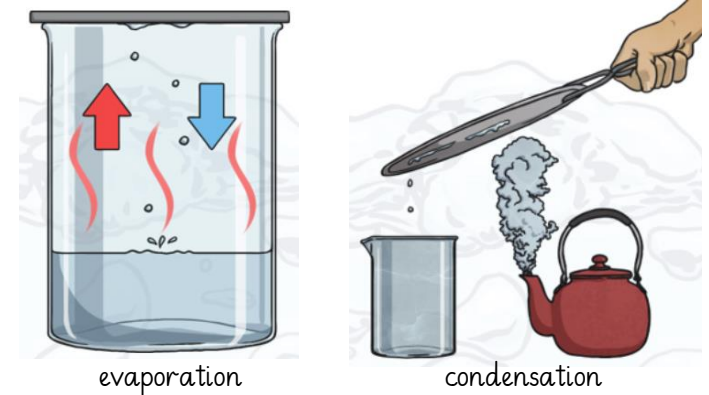
Vocabulary

particles	These are very small pieces of matter that everything is made from. The way particles are arranged and move explains whether a substance is a solid, liquid, or gas.
states of matter	whether something is a solid, a liquid or a gas
water vapour	water when it is a gas
precipitation	This is liquid or solid particles that fall from a cloud as rain, sleet, hail or snow. These are all forms of precipitation.
water cycle	These are the changes that happen to water when it evaporates, forms clouds and rain. It, then, ends up back in the sea.

Evaporation and condensation

Evaporation: Liquid changes into a gas when heated. For example, water turns into water vapour when boiled.

Condensation: Gas cools and changes back into a liquid. For example, water vapour returns to water when it touches a cold surface, like a lid.



The water cycle

Evaporation turns water into water vapour.

Condensation forms clouds.

Water then falls back as rain, snow or hail (precipitation).

