

Science— States of Matter

Key Vocabulary

boil	When a liquid is heated to the point that it becomes a gas.
condensation	When a gas turns into a liquid.
evaporation	When a liquid turns into a gas.
freeze	When a liquid cools and becomes a solid.
gas	A substance that can move around freely.
liquid	Something that can be poured.
melt	When a solid is heated and becomes a liquid.
particles	The tiniest little bit of a material or substance.
precipitation	Water falling from the sky as rain, snow, sleet or hail.
solid	Something that is hard and cannot be poured.

Key Facts

Solids are hard. They can only change shape if pushed or pulled.

Liquids can be poured. They take the shape of the container they are in.

Gases spread out and move around the room in the air.

Materials can change state when heated or cooled.

Water can take the form of all three states: solid – ice, liquid – water, gas – water vapour.

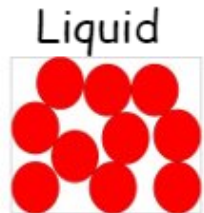
Water boils at 100 degrees Celsius (known as boiling point) and freezes at 0 degrees Celsius (known as freezing point).

The water cycle is the process of water evaporating to become water vapour (clouds in the sky), then condensation occurs when the water vapour turns back to water and falls from the sky as precipitation (rain). The water gathers on the ground in puddles and lakes, then evaporates again.

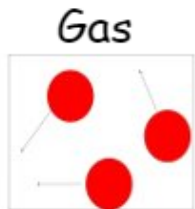
Particle diagrams



The particles in a solid are very closely packed together. They cannot move.

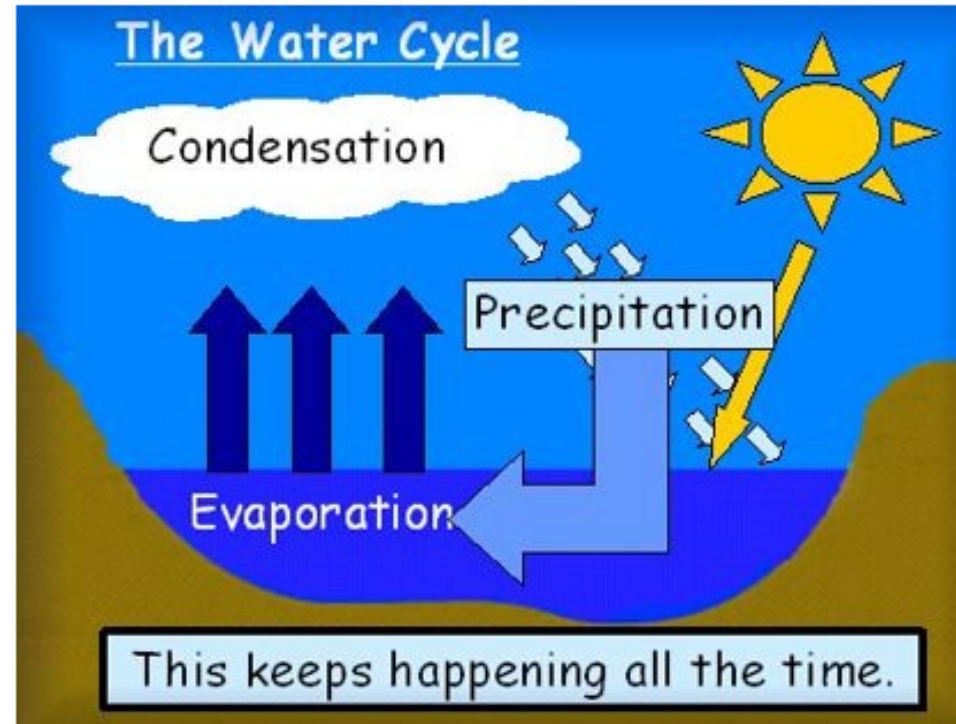


The particles in a liquid are able to move, staying close to each other. They take the shape of the container they're in.



The particles in a gas are able to move freely and spread out to fill a space..

Water Cycle diagram



Tier 2

Vocabulary

contrast	Explain how things are different to each other.
equal	When two things are the same as each other or have the same value.
interpret	To explain what you think something is or why you think something happened using evidence from the past.
structure	The way in which something is built or organised.