

Key Vocabulary

Boiling point – the temperature at which a liquid boils.
Condensation – when a gas turns into a liquid.
Cool – to lower the heat.
Evaporation – when a liquid turns into a gas.
Freeze – when a liquid becomes a solid.

Gas – when particles do not have a fixed state and can move freely.
Heat – to increase the heat.
Liquid – when particles are close together but can still move freely.
Melt – when a solid becomes a liquid.
Solid – when particles are close together and cannot move.

Temperature – how hot or cold something is measured in degrees Celsius.
Thermometer – a device for measuring temperature
Water cycle – describes the continuous movement of water on, above and below the surface of the Earth.
Water vapour – water once turned into a gas.

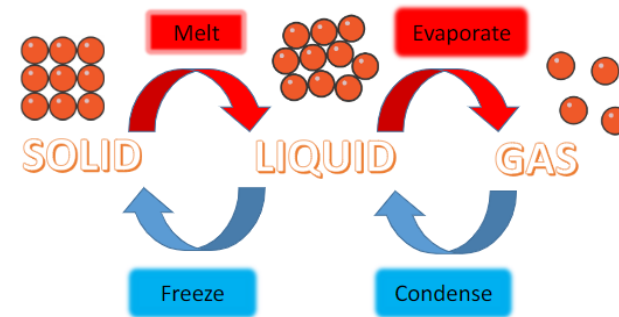
The 3 States of Matter

There are three states of matter.

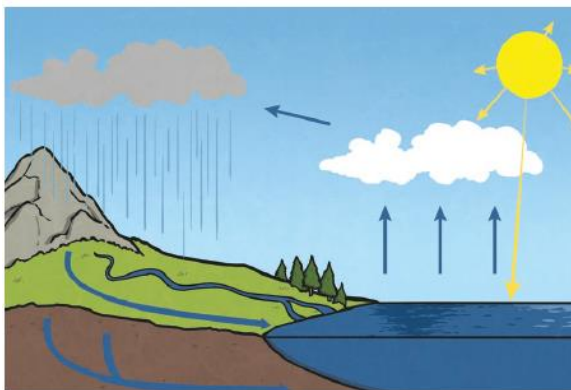
| Solid | Liquid | Gas |
|--|--|--|
| | | |
| Particles in a solid are close together and cannot move. They can only vibrate. | Particles in a liquid are close together but can move around each other easily. | Particles in a gas are spread out and can move around very quickly in all directions. |

Changing States

When water and other **liquids** reach a certain temperature, they change state into a **solid** or a gas. The temperature that these changes happen at are called the **melting**, **boiling** and **freezing** point.



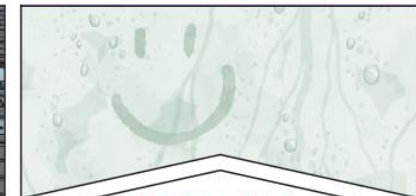
The Water Cycle



1. Water from lakes, puddles, rivers and seas is **evaporated** by the sun's heat, turning it into **water vapour**.
2. This **water vapour** rises, then cools down to form water droplets in clouds (**condensation**).
3. When the droplets get too heavy, they fall back to the earth as rain, sleet, hail or snow (**precipitation**).



Evaporation occurs when water turns into **water vapour**. This happens very quickly when the water is hot, like in a kettle, but it can also happen slowly, like a puddle **evaporating** in the warm air.



Condensation is when **water vapour** is cooled down and turns into water. You can see this when droplets of water form on a window. The **water vapour** in the air cools when it touches the cold surface.

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