



SOLID



LIQUID



GAS

# States of Matter



## Key Objectives

- To work scientifically by setting up fair tests and reporting the findings from enquiries.
- To compare and group materials into solids, liquids and gases.
- To make observations about how matter changes from solid to liquid.
- To recognise and explore the processes of freezing, boiling and melting.
- To explore what happens when a material is evaporating or condensing and identify when it takes place.
- To identify the part played by evaporation and condensation in the water cycle.

## Key Vocabulary

<b>solid</b>	A substance that stays the same shape. Its particles do not move.
<b>liquid</b>	Liquids will flow as they are made up of loosely packed particles.
<b>gas</b>	Gaseous matter is made up of matter that is so loose it is always moving.
<b>matter</b>	Any solid, liquid or gas that exists in the universe.
<b>freezing</b>	When a liquid turns into a solid
<b>melting</b>	When a solid turns into a liquid
<b>condensation</b>	When water vapour that is around us changes from a gas back to liquid.
<b>evaporation</b>	When liquid changes into gas, usually when it heats up.

## Stages of the water cycle

1. The sun heats up rivers, lakes and the sea.
2. Water evaporates into the air. This is called water vapour.
3. The water vapour rises, cools and condenses to water in the form of clouds.
4. The droplets in the clouds become too heavy and fall as rain, snow or hail.
5. The rain, snow or hail is then collected in rivers that run off to the sea.
6. The cycle starts again.

## Sticky Facts

- Water can exist in three forms: liquid (water), solid (ice) or gas (water vapour).
  - Not all solids are hard.