



# Science – States of Matter Spring 1 – Years 3 and 4

## The Water Cycle



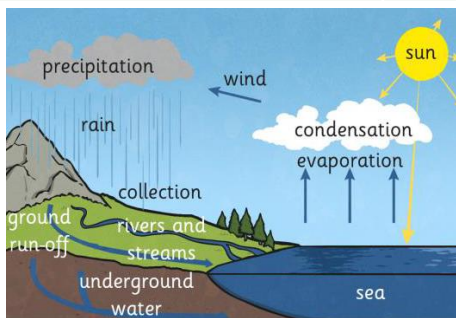
The water cycle shows how water moves around our planet and atmosphere.

It is a continuous cycle.

Water evaporates from the sea and condenses into clouds.

Then it falls back to the ground as rain or snow - this is called precipitation.

It moves through rivers and underground to get back to the sea.

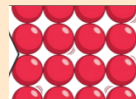


## Solids, Liquids and Gases



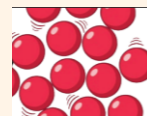
Solid

Particles in solids are close together and vibrate on the spot. They do not change shape on their own.



Liquid

In a liquid, particles have some space to move around. They can change their shapes but take up the same amount of space.



Gas

The particles in a gas are spread out and they move around. Gases fill the space they are in.



## Working as a Scientist

We can explore the properties of gases by accurately weighing fizzy drinks to see what happens when the bubbles are released.



We can carry out a fair test by making sure we only change one variable in our investigation.

## Key Vocabulary

freezing

When a liquid turns into a solid. For example, water turns into ice.

melting

When a solid becomes a liquid. This happens to chocolate at room temperature.

evaporation

When a liquid becomes a gas. For example, water turning into steam.

condensation

When gases turn into liquids. We see this when clouds form.

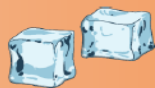
fair test

This is when only one variable is changed in an experiment.

variable

A variable is something that could be changed in an investigation.

Materials can be changed when they are heated or cooled:



At low temperatures, liquids can freeze into solids.



Solids can melt into liquids at high temperatures.



Liquids can evaporate into gases faster at higher temperatures.

