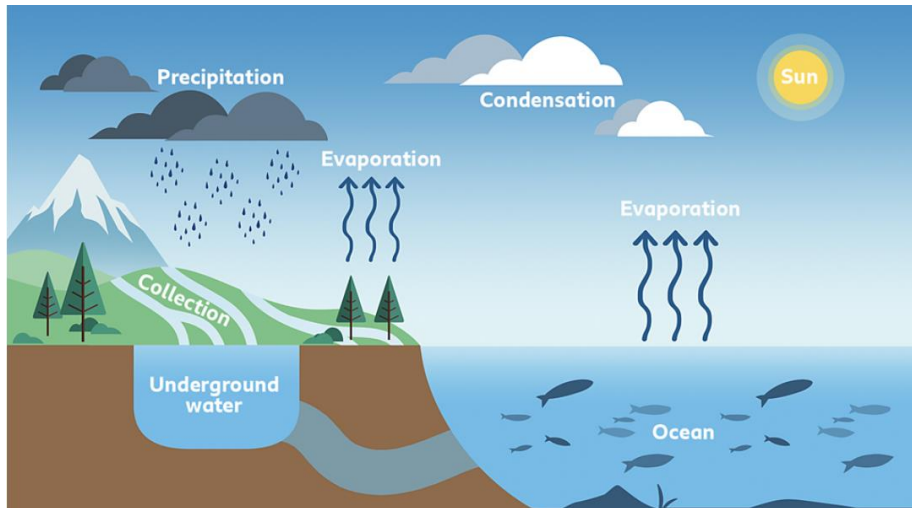


States of Matter The Water Cycle

Key knowledge

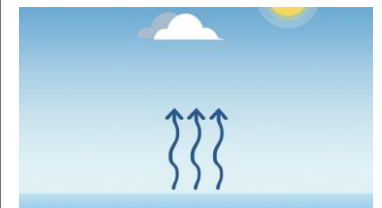


The water cycle is how water moves around our planet.

It is a process that shows how water changes from one form to another and moves between the land, the sea and the air.

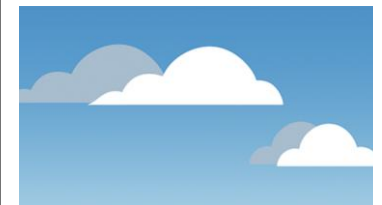
1. Water evaporates into the air (liquid to gas)

- The Sun heats up water in the sea, lakes, rivers and on land.
- The warm water turns into a gas which we call water vapour. This process is called evaporation.



2. Water vapour condenses to form clouds (gas to liquid)

- As the water vapour rises, it gets colder and condenses.
- This makes tiny droplets of liquid water, which is what clouds are made from.
- The clouds are moved by the wind.



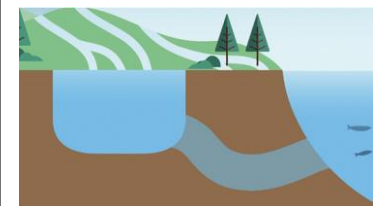
3. Water falls as precipitation (sometimes liquid to solid)

- As the droplets of water in the clouds get larger, they grow heavier.
- Eventually they fall, usually as rain.
- If the air is very cold, the water freezes as it falls and we call this hail or snow.
- Rain, snow and hail are all examples of precipitation.



4. The water returns to the sea

- Water that falls on land is collected by streams and rivers. It then travels back to the sea.
- The water cycle starts again!



Key vocabulary

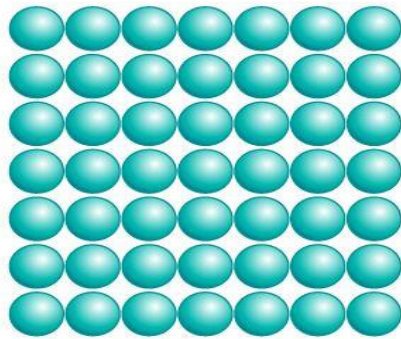
solid	A state of matter where the particles are held tightly together in a fixed structure, giving the solid a fixed shape and a fixed volume. .
liquid	A substance made of particles that are close together but can slide past each other, allowing it to flow and take the shape of its container but still have a fixed amount of space (volume).
gas	A state of matter where particles are far apart and move quickly in all directions, filling any container they're in.
particles	The tiny, invisible building blocks of everything around us.
evaporation	The process where the sun's heat turns liquid water into an invisible gas called water vapour, which then rises into the air.
condensation	The process where water vapour (gas) cools down and turns back into tiny droplets of liquid water, forming clouds.
precipitation	When water falls from the clouds to the Earth's surface.

States of Matter – Solids, liquids and gases.

Key knowledge

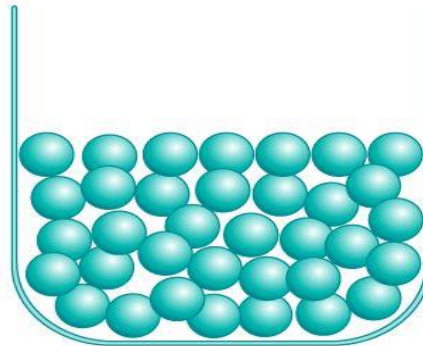
Physical states

increasing energy



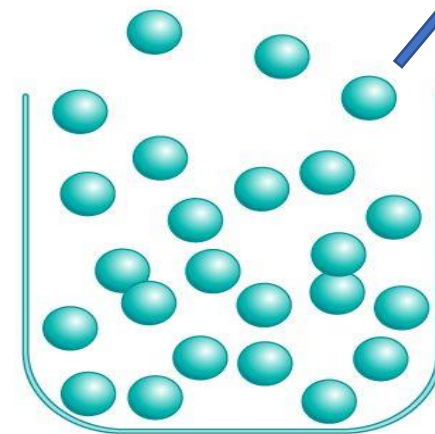
Solid

The molecules that make up a solid are arranged in regular, repeating patterns. They are held firmly in place but can vibrate within a limited area.



Liquid

The molecules that make up a liquid flow easily around one another. They are kept from flying apart by attractive forces between them. Liquids assume the shape of their containers.



Gas

The molecules that make up a gas fly in all directions at great speeds. They are so far apart that the attractive forces between them are insignificant.