






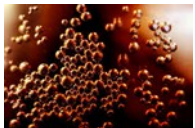


Knowledge Organiser Science Year 4 States of Matter

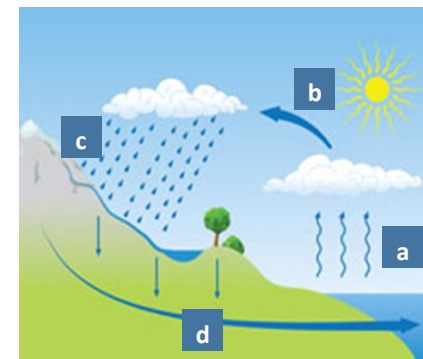
Key Vocabulary

change of state	When a material changes from one state to another.
gas	Matter in a state in which it will expand freely to fill the whole of a container, having no fixed shape (unlike a solid) and no fixed volume (unlike a liquid).
liquid	A substance that flows freely but is of constant volume, having a consistency like that of water or oil.
solid	A substance that keeps its size and shape: firm and stable in shape
molten	Liquefied by heat.
evaporate	Turn from liquid into vapour.
evaporation	The change from a liquid to a gas at the surface of the liquid.
condensation	The process when a gas changes into a liquid, caused by cooling. the change from a gas to a liquid, caused by cooling.
temperature	The measure of how hot or cold something is. It is measured in degrees Celsius with a thermometer

Solids, Liquids and Gases

Solid	Liquid	Gas
 Ice  Sugar	 Water  Honey	 Water vapour  Bubbles in cola
A solid keeps its shape and has a fixed volume.	A liquid has a fixed volume but changes in shape to fit the container. It can be poured.	A gas fills all the available space; it has no fixed shape or volume.

The Water Cycle



- a** **Water evaporates into the air**
The sun heats up water at the surface of seas, rivers, lakes and turns it into water vapour. The water vapour rises into the air.
- b** **Water vapour condenses into clouds**
Water vapour in the air cools and changes back into tiny drops of liquid water, forming clouds.
- c** **Water falls as rain snow, sleet etc**
When too much water has condensed the water droplets in the clouds get too heavy and water falls back down to Earth in the form of rain, snow, sleet etc. This is called precipitation.
- d** **Water returns to the sea.**
Rainwater runs over the land and collects in lakes or rivers which take it back to the sea.
The cycle starts all over again