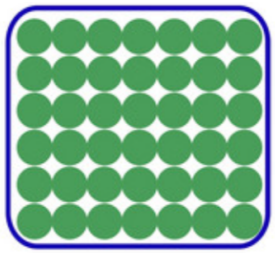
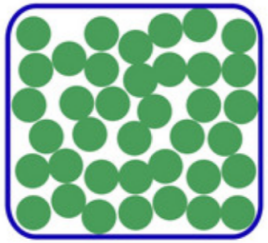
Year 4 - States of Matter

Chemistry

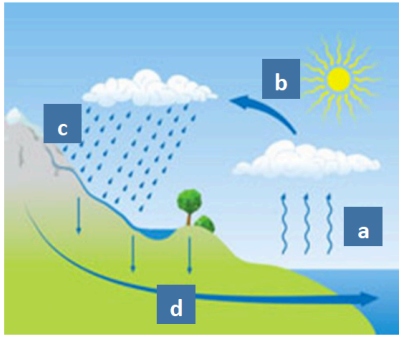
Key vocabulary

change of state	When a material changes from one state to another.
melting	The change of state from solid to liquid.
freezing	The change of state from liquid to solid. When a liquid becomes cold enough to turn solid, it freezes. The freezing point of water is 0°C.
melting point	The temperature at which a solid becomes a liquid. The melting point of water is 0°C.
boiling point	The temperature at which a liquid turns into a gas. Water boils when it is heated to 100°C.
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.
water cycle	The never-ending process of water moving from the oceans, up into the atmosphere, and back to the Earth and oceans.
temperature	The measure of how hot or cold something is. It is measured in degrees Celsius (°C) with a thermometer.
precipitation	Water falling to the ground from a cloud. It can be in the form of rain, sleet, hail or snow.
runoff	When water travels over the top of the ground and back into a stream, river or sea.

The 3 States of Matter

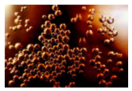
Solid	Liquid	Gas
A solid keeps its shape and has a fixed volume.	A liquid has a fixed volume but changes in shape to fit the shape of the container. It can be poured.	A gas fills all the available space and it has no fixed shape or volume.
		

The Water Cycle



A Evaporation	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 Consensation	Water vapour in the air cools and changes back into tiny drops of liquid water, forming clouds.
C Precipitation	When too much water has condensed the water droplets in the clouds get too heavy and the water falls back down to Earth in the form of rain, snow, sleet etc.
D Collection/Runoff	Rainwater runs over the land and collects in lakes or rivers which then take it back to sea. The cycle starts all over again!

The 3 States of Matter

Solid	Liquid	Gas
 Ice  Sugar	 Water  Honey	 Water vapour  Bubbles in cola