



# Science

## States of Matter & The Water Cycle

## Year 4

Subject Specific Vocabulary		Stages of the water cycle		Key Knowledge
<b>particles</b>	Tiny bits of matter which make up everything in the universe.	<b>1</b>	The sun heats up rivers, lakes and the sea.	A solid keeps its shape and has a fixed volume.  A liquid has a fixed volume but changes in shape to fit the container. A liquid can be poured.
<b>condensation</b>	When water vapour that is around us changes from a gas back to water.	<b>2</b>	Water evaporates into the air. This is called water vapour.	
<b>precipitation</b>	Any watery substance such as rain, water, snow, hail or sleet that falls to Earth.	<b>3</b>	The water vapour rises, cools and turns back to water in the form of clouds.	Melting is a state change from solid to liquid. The melting point for ice is 0°C.
<b>evaporation</b>	When liquid changes into gas, usually when it heats up.	<b>4</b>	The droplets in the clouds become too heavy and fall as rain, snow or hail.	Freezing is a state change from liquid to solid. The freezing point of water is 0°C.  Boiling is a change of state from liquid to gas that happens when a liquid is heated to a specific temperature. For water, the boiling point is 100°C.
<b>temperature</b>	A measure of how warm or cold an object is.	<b>5</b>	The rain, snow or hail is then collected in rivers, lakes and the sea.	
<b>freezing</b>	When a liquid is cold enough that it turns to a solid.			
<b>melting</b>	When a solid becomes a liquid through the process of heating.	<b>6</b>	The cycle starts again.	Evaporation is the same state change as boiling (liquid to gas), but it happens slowly at lower temperatures.
<b>solid</b>	A substance that stays the same shape. Its particles do not move.			
<b>liquid</b>	Liquids will flow, it is made up of loosely packed particles.	Condensation is the change back from a gas to a liquid caused by cooling.		
<b>gas</b>	Gaseous matter is made up of matter that is so loose that it is always moving.	A gas fills all available space; it has no fixed shape.		

