

# Water Cycle

## Location

Ground floor, Our World exhibition

## In a nutshell

Track the journey of water as it moves from sea to clouds and back again.

Water moves around our planet, as it does so it carries rock and life, and acts as a greenhouse gas in the atmosphere.

## What to do

Turning the cog brings the water cycle into action. The sun evaporates the water and it is collected in the clouds, when there is too much water in the clouds it starts to rain. This can be used to explain the different parts of the water cycle.

## Time Required

KS1 & KS2 2 minutes per student.

## What's happening?

The water cycle is the process by which water travels from the Earth's surface to the atmosphere and then back down to the ground again. Without the water cycle water would not move around the world and nothing would grow.

The sun heats water which then evaporates as water vapour up into the air, water also is released into the air by plants via transpiration. As the water vapour rises it starts to cool and condenses forming the clouds we see in the sky. The clouds are blown over land and when the droplets become larger precipitation occurs which we experience as rain, sleet or snow. This precipitation returns the water to the ground where it either returns back to rivers and oceans as surface run off, is infiltrated into the ground to be absorbed by plants or to flow through back into the surrounding water. Water can also percolate deeper into the ground where it returns to waterways at a much slower rate.



## Curriculum links

Curriculum links	
<b>KS1/2</b>	<p><b>Science - Plants</b></p> <ul style="list-style-type: none"> <li>- <b>(Yr 2)</b> find out and describe how plants need water, light and a suitable temperature to grow and stay healthy</li> </ul> <p><b>Science - Animals, including humans</b></p> <ul style="list-style-type: none"> <li>- <b>(Yr 2)</b> find out about and describe the basic needs of animals, including humans, for survival (water, food and air)</li> </ul> <p><b>Science - States of matter</b></p> <ul style="list-style-type: none"> <li>- <b>(Yr 4)</b> identify the part played by evaporation and condensation in the water cycle and associate the rate of evaporation with temperature</li> </ul> <p><b>English - Spoken language</b></p> <ul style="list-style-type: none"> <li>- give well-structured descriptions, explanations and narratives for different purposes, including for expressing feelings</li> </ul> <p><b>English - Reading – comprehension</b></p> <ul style="list-style-type: none"> <li>- <b>(Yr1)</b> discussing word meanings, linking new meanings to those already known</li> <li>- <b>(Yr2)</b> discussing and clarifying the meanings of words, linking new meanings to known vocabulary</li> </ul> <p><b>Geography - Key stage 1</b></p> <ul style="list-style-type: none"> <li>- identify seasonal and daily weather patterns in the United Kingdom and the location of hot and cold areas of the world in relation to the Equator and the North and South Poles</li> </ul> <p><b>Geography - Key stage 2</b></p> <ul style="list-style-type: none"> <li>- physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle</li> </ul>

## Relates to:

Workshops & Theme Days	Shows	Trails	Other exhibits
<ul style="list-style-type: none"> <li>• Changing materials (KS2)</li> <li>• The Water Cycle (KS2)</li> </ul>	<ul style="list-style-type: none"> <li>• Splash and Bubble (KS1 &amp; KS2 lower)</li> </ul>		<ul style="list-style-type: none"> <li>• Changing world</li> <li>• Convection</li> <li>• Watch water freeze</li> <li>• Weather forecast</li> </ul>

