

Year 3/4 At Water's Edge



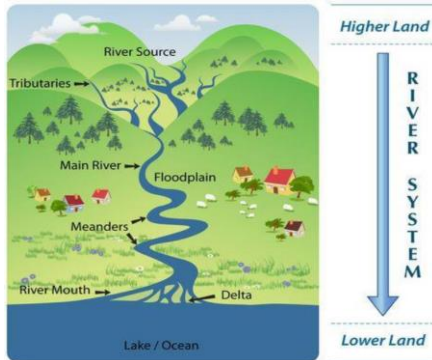
We start this Topic by linking back to Autumn 1 and "The Rolling Stone Age" by explaining that the water we use today is the same water used back then. Although water is essential to life, access to it is not easy for much of the world's populations of plants, animals or humans. We identify where in the world have water shortages and why and how this is increasing in some areas due to global warming, yet in other areas there is now so much rain that flooding destroys crops, buildings and life. We consider how to use and save water responsibly - the UN designates 22nd March each year as World Water Day.

Amazing Facts:

- Did you know... wildlife is returning to the Blackwater River, including the otter which has been absent for over 40 years.
- There is clear evidence for one watermill on the Blackwater, but when the Domesday Book was compiled in 1086 there were four mills in the locality!
- Water freezes at 0 °C / boils at 100 °C

Rivers

A river has an upper course, middle course and lower course.



Flooding is caused by poor drainage around or close to a river.

Blackwater River

The river runs down the centre of the Blackwater Valley, which is maintained as a largely tree-planted open space, with some bog, marsh and water-meadows. It passes Aldershot, Ash, Ash Vale, Frimley, Farnborough, Camberley, Blackwater, Sandhurst and Yateley.

It rises at two springs in Rowhill Nature Reserve between Aldershot, Hampshire and Farnham, Surrey. The river runs for approximately 20 miles from the source of the River Blackwater at Rowhill Nature Reserve near Aldershot in the south, northwards to Swallowfield where it joins the River Whitewater and then the Loddon. The Loddon eventually flows into the River Thames near Reading.

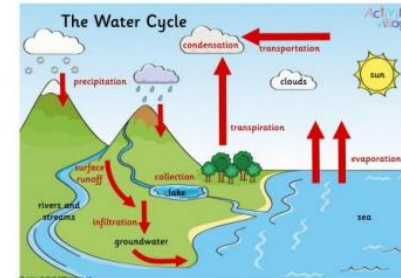
A cycle route runs alongside the River Blackwater for most of its length.

After 20 miles (32 km) the Blackwater is joined by the "Whitewater" near Eversley. The river gives its name to the town of Blackwater, extending back from the bank facing Camberley.

The Water Cycle

The Water Cycle is the way in which water moves around the Earth. It never stops!
The water on the Earth is the same water that the Cavemen drank - it is constantly reused in the water cycle!

Water Cycle



Evaporation	When the heat from the sun warms the water, the liquid turn into a vapour (gas) and rises because it is lighter.
Condensation	The water vapour is lifted into the sky. As you go higher, the air gets colder and cools down the gas. This causes the particles to condense (come together) and form microscopic droplets of water.
Precipitation	As soon as the water droplets reach a certain size, their weight is too great to stay in the air and they fall down to the ground. This is called precipitation. If the air is very cold, the water falls as ice or sleet. Otherwise it galls as rain.
Collection	Wherever the water lands, this is called the 'collection' stage of the water cycle. Rain and snow may return to the Earth is rivers or lakes, on the ground or on houses and roads, where it soaks down towards the rivers. Eventually, most of this water flows into the seas. The water cycle can now start again!

Glossary

- Channel** – the path a river takes.
- Confluence** – Where two rivers meet.
- Delta** – What is formed when the river deposits materials (sediment) at the mouth of a river.
- Meander** – bend in the river
- Mouth** – where the river flows into another body of water: the sea or a lake.
- River** – a flowing, moving stream of water.
- Reservoir** – man-made lake created by flooding the land.
- Sea** – huge body of salt water.
- Source** – where a river begins its journey, usually on high ground or in mountains. A river can have more than one source.
- Stream** – small, fast flow of water.
- Tributaries** – rivers that join up with other rivers.
- Water meadows** – piece of grassland that is periodically flooded by a stream or river.