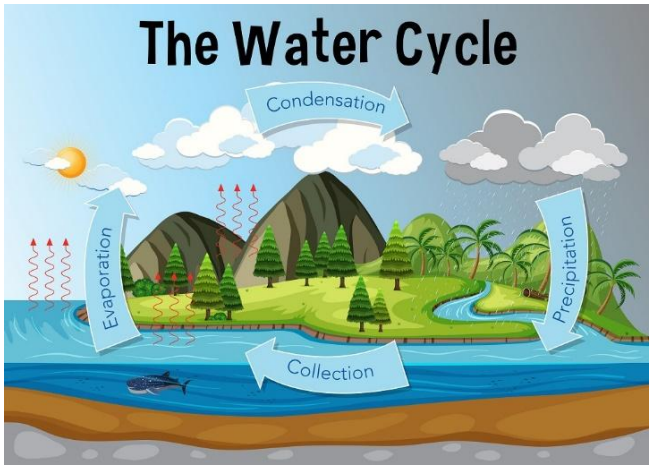
Rivers & Coasts

Key Question: How does water shape the world we live in?

WINDHILL PRIMARY SCHOOL

UKS2 - Summer

Water Cycle



The water cycle is the journey water takes as it moves from the land to the sky and back again. It follows a cycle of evaporation, condensation, precipitation and collection.

Additional vocabulary:

Plant uptake: The ground water absorbed by plant life.

Transpiration: The evaporation of water from plants.

Flooding

When the ground has become **saturated** and surface run off water can no longer filter into a river as the riverbanks have 'burst', flooding occurs across the **floodplains.**

Flooding generally has negative effects for many countries as it damages and destroys home & lively hoods. However, flooding can have positive effects in regions that require flooding for fertilising the land.

Water cycle - Key vocabulary:

Evaporation – This is the process by which water changes from a liquid to a gas. The change of state is due to an increase in temperature.

Condensation – The process of when water vapour in the atmosphere cools and changes into a liquid. This is the result of hot air becoming cool.

Precipitation – Water that falls from the clouds towards the ground e.g. rail, hail, sleet of snow.

Collection – Precipitation is collected in bodies of water, such as rivers, lakes and oceans.

Runoff – When precipitation that did not get absorbed into the soil and makes its way from the surface into places where water collects.

Rivers & Coast - Key vocabulary:

Erosion – The wearing away of rock, stones and soil by rivers, waves, wind or glaciers.

Source – Where the river/streams begin. Usually on high lands.

Tributary – A stream or river that flows into a larger river or lake.

Confluency – The point at which two rivers or streams join.

Meander – A winding curve or bend in a river. Typically found in the middle to lower course.

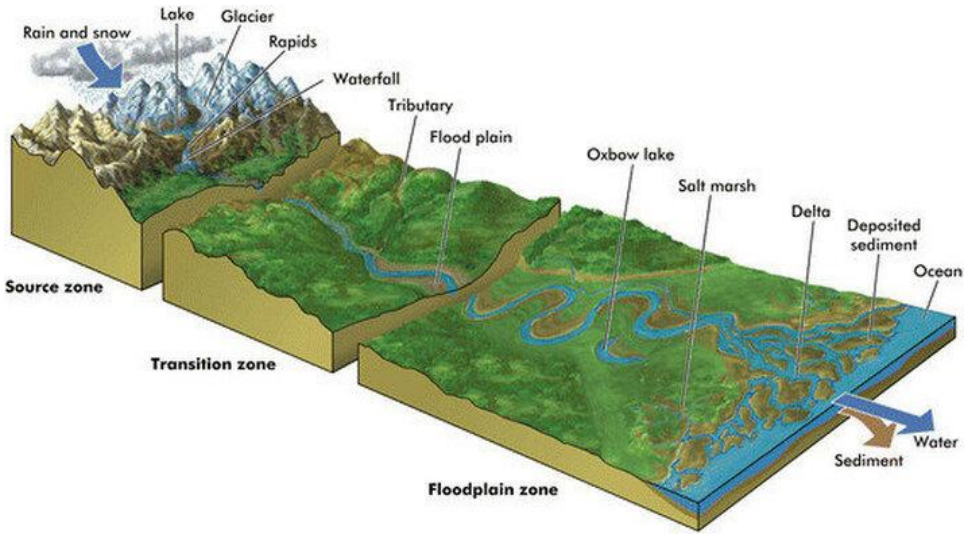
Floodplain – Flat land surrounding the river - close to the river banks. Usually found in the lower course of the river.

Delta – An area of low flatland where a river divides into several smaller rivers before flowing into the sea.

Estuary – Occurs near or at the mouth of a river, where the tide meets the current and the fresh and salt waters mix.

Mouth – Place where a river enters a lake, larger river or ocean.

The course of a river



The course of a river

Rivers are split into three sections: Upper Course, Middle Course & Lower Course.

Upper Course: Rain falling on high ground collects in channels and flows downwards forming a stream. Streams run downhill and join other streams, increasing in size and speed, forming a river. The river here flows quickly and the channel has steep sides and runs through valleys. Features include - waterfalls and rapids.

Middle Course: Fast flowing water causes erosion making the river deeper and wider. Features include - meanders.

Lower Course: Rivers flow with less force due to being on flat land. The river deposits the eroded material that it has carried. Riverbanks have shallower sides. Features include - floodplains, deltas and estuaries.

Key facts/figures

Longest rivers in UK

- Severn (220 miles)
- Thames (215 miles)
- Trent (185 miles)
- Great Ouse (143 miles)
- Wye (134 miles)
- Avon (95 miles)

Longest rivers in the world

- Nile (4123 miles)
- Amazon (3977 miles)
- Congo (2920 miles)
- Mississippi (2348 miles)
- Ob (2268 miles)

Coasts

There are many types of coast lines: beaches, cliffs and salt marshes.

Waves change the shape of coasts through erosion – water breaks away rock and carries it on to land again, creating new formations.

The pull of the Moon's gravity on Earth makes the oceans bulge slightly which creates tides.

There are several ways to protect coastlines against erosion such as placing large rocks at the base of cliffs or using groynes.