







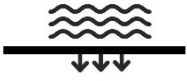










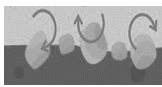




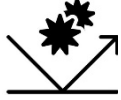

















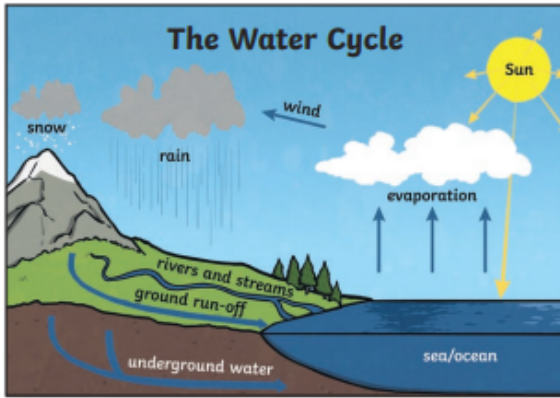


Theme	Lesson Titles / Enquiry Questions	Learning Outcomes
Rivers	L1 - Water Cycle How does water travel around the world?	To use key words to accurately label a diagram of the water cycle. To explain how rain is formed using keywords. To describe, using keywords at least three routes around the water cycle.
	L2 - Drainage Basin How does water travel from source to mouth?	To use key words to accurately label a diagram of the water cycle. To explain how the river channel changes downstream. To describe, using keywords how a water droplet travels from source to mouth.
	L3 - River Processes How powerful is water?	To recall the stages of the water cycle including key terms. To recall key terms related to glaciation in previous chapter. To apply such key terms and build upon these linking to river processes.
	L4 - Waterfalls What landforms do we find in the upper course of a river?	To describe the features of a waterfall. To explain how a waterfall forms using key terms.
	L5 - Meanders What landforms do we find in the middle course?	To describe the main features of a rivers course. To use maps to identify key features of a river. To describe the features of a meander and oxbow lake. To explain how a meander and oxbow lake forms.
	L6 - Causes of River Flooding Why do rivers flood?	To recall key terms. To explain the various reasons why rivers flood.
	L7 - Flood Management Can we stop rivers from flooding?	To identify flood management strategies. To describe and explain flood management strategies. To analyse the suitability of flood management strategies for a case study location.
	L8 - River Severn Case Study Why did the river Severn flood in 2020?	To identify where the river Severn is located To describe and explain the causes of flooding along the river Severn. To analyse the impacts of flooding along the river Severn.
Homework	L1 - Reading and highlighting answers to 7 key questions found in the text - Water Cycle L3 - Seneca Learning 8.1.1, 8.1.2 and 8.1.3 - Geography KS3 L5 - Seneca Learning 8.1.4 - Geography KS3 L7 - Seneca Learning 8.2.1, 8.2.2 - Geography KS3	

Evaporation	Condensation	Precipitation	Transpiration	Groundwater Flow	Overland Flow
					
Liquid water turning into a gas (water vapour)	Water vapour turning into liquid again once it cools.	The falling of moisture from the clouds.	The release of water from plants.	Water that flows beneath the ground	Water that flows over the surface.
Interception	Saturation	Infiltration	Drainage Basin	Watershed	River Channel
					
The stopping / slowing of water reaching the river.	When the ground becomes completely soaked with water.	The soaking of water into the ground.	An area of land that water flows into a single point.	The boundary between two drainage basins.	The main part of the river.
Source	Mouth	Tributary	Confluence	Erosion	Transportation
					
The start of the river	Where the river meets the sea	A stream / smaller river than eventually meets a larger river.	The meeting point of two streams / rivers.	When land is worn away and transported away.	The movement of sediment by the river.
Deposition	Traction	Saltation	Suspension	Solution	Hydraulic Action
					
When a river no longer has enough energy to move material it drops (stops moving)	When large boulders roll along the river bed.	When pebbles, skip and bounce along the river bed.	When smaller sediment such as sand float as the river moves.	When sediment such as clay is dissolved in the river and carried as it flows.	When the force of fast-flowing water hits the bed and banks and forces water and air into cracks in the bedrock.

Abrasion	Attrition	Solution	River Banks	Resistance	Plunge Pool
					
The wearing away of the banks of the river as rocks collide with it.	The breaking down of rocks into smaller pieces as a result of colliding with each other.	When sediment such as clay is dissolved in the river and carried as it flows.	The sides of a river	How much a rock can withstand erosion.	The deepest part of a waterfall.
Retreat	Undercuts	Gorge	Meander	Oxbow Lake	Permeable
					
The moving back of a waterfall.	When the base of the river is eroded by water which causes it to collapse.	A steep sided valley left behind as a waterfall retreats.	A bend in a river.	A curved lake formed when the river cuts across	Allows water to soak through.
Impermeable	Dam	Pollution	Sustainable	Embankment	Overflow Channel
					
Does not allow water to soak through.	A man made structure used to hold back the flow of water.	When harmful substances are added to the environment.	Meeting the needs of current generations without compromising future generations.	The man made barriers on the sides of a river.	A man made structure which allows the river to overflow into another river channel.

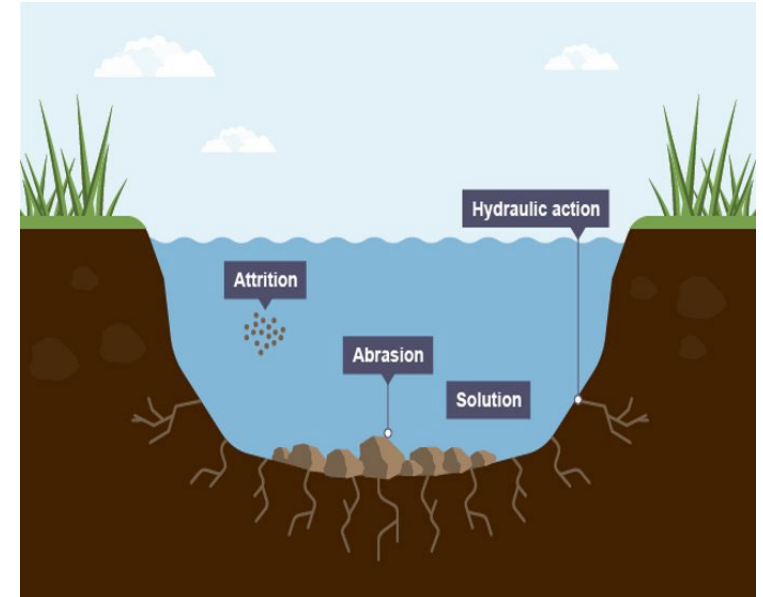


Some rivers join up with other rivers (**tributaries**). The point where they meet is called a **confluence**.

The **source** of most rivers is on high ground or in the mountains.



Rivers in England, at their **mouth**, will flow into either the: North Sea, Irish Sea, English **Channel** or Atlantic Ocean.



The Course of a River

The 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.

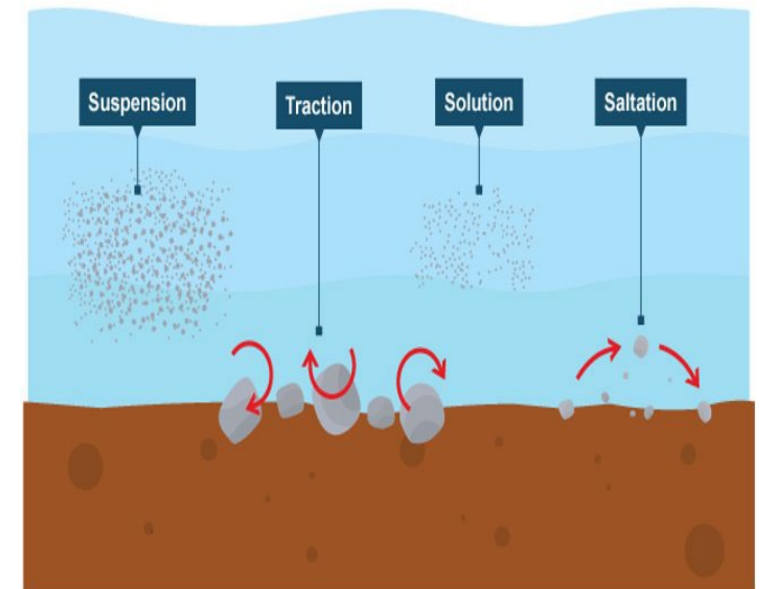
The Middle Course

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



The 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.



Meander - a curve in the river



Eroded materials are carried by the river and released, building up the land on the inside of the bend where the water flows more slowly.

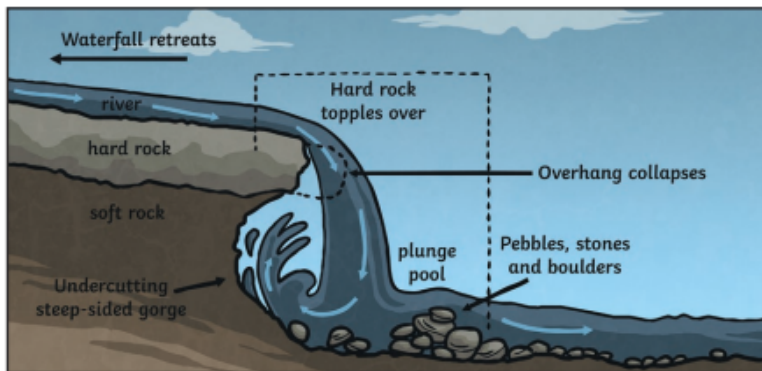
Oxbow lakes - a U-shaped lake



As meanders grow, two meanders can merge together through **erosion**. The water takes this newer, shorter course. The river **deposits** eroded materials which block off the old part of the river forming an oxbow lake.

How Do We Use Rivers?

Leisure e.g. fishing	+	Controlled population of fish
	-	May leave litter and pollute the water
Industry e.g. factories	+	Sections of rivers maintained
	-	Chemicals pollute the water and habitats
Tourism e.g. walking routes	+	Conservation and education about local wildlife
	-	Too many people near wildlife habitats



Dams

Dams are built to hold water back, usually in a reservoir.

Dams might be built to:

- control the flow of a river to prevent flooding.
- generate power



Hydroelectric Power

1. Water is held behind a **dam**.
2. When needed, some of the water is released and flows through a pipe (penstock).
3. The falling water turns a water wheel (turbine) which is linked to a generator which produces electricity.
4. The water continues into the river on the other side of the **dam**.

