Year 7 Rivers

Game Changer – 'I can identify and explain the physical features of our landscape that have been created by rivers and how we interact with them."

This unit focuses on the work of rivers, their effect on the landscape and the impact floods can have on our lives. The unit aims to develop understanding of the interactions between the physical & human environment.

The Hydrological cycle	The continuous movement of water between the land, the sea and air.
Drainage basin	The area drained by a river.
Long Profile	The long profile shows how a river's gradient changes as it flows from its source to its mouth.
Erosion	The process where material is broken down by the river and it's load.
Transportation	A process where the river moves, or transports materials (it's load) from one place to another.
Deposition	Sediment/material that it is carried by the river is dropped. This often happens on the inside of meanders, because the water is flowing slowly.
Flood	When a river has too much water in its channel. The water breaks through the river banks and spreads over the surrounding land.

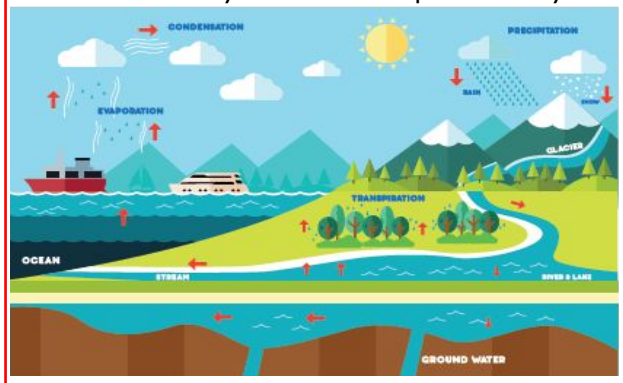
Find out more:

BBC Bitesize

Geography in the News

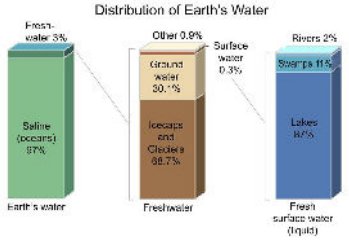
Hydrological Cycle

The water cycle is also known as the **hydrological cycle**. It is called a cycle because water continuously moves around the system. Rivers are part of this cycle.



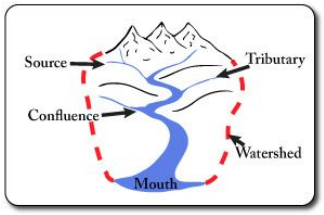
Stores & Transfers

The major stores of water are the **ocean**, ice caps, land and the atmosphere. The movement of water between these stores is called transfers .

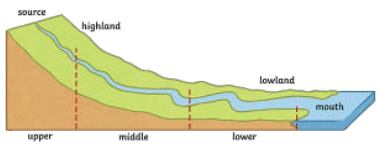


River (Drainage) Basin

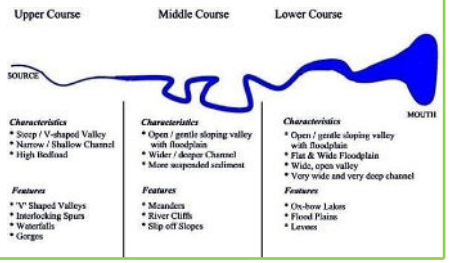
A river basin or drainage basin is an area of land drained by a river and its **tributaries**. The edge of the drainage basin is known as the **watershed**. Water collects at the **source** where the river begins. All water flowing through the river will eventually leave the **drainage basin** through its **mouth** and enter the sea or a lake.



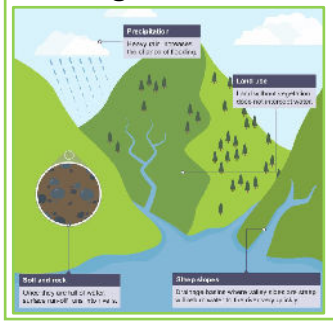
Long Profile & Landforms



The long profile of a river is **a way of displaying the channel slope (gradient) of a river along its entire length**. Therefore, it shows how a river loses height with increasing distance towards the sea.



Physical Causes of Flooding

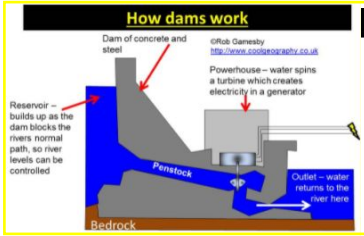


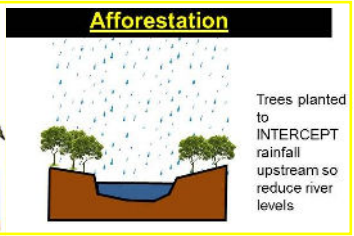
Human Causes of Flooding

Managing Flooding

Hard engineering is the use of artificial structures, using man-made objects to protect from areas from flooding, e.g. dams, flood walls, embankments and flood relief channels.

Soft engineering is a sustainable approach to managing flooding, working with nature, e.g. tree-planting and river restoration.





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