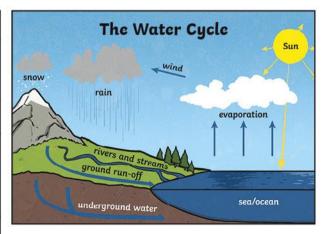
| Key Vocabulary | | |
|----------------------|--|--|
| channel | The course in the ground that a river or water flows through. | |
| dam | A barrier built to hold back water. | |
| deposition / deposit | When rocks and other materials that have been eroded are dropped off further along the river. | |
| discharge | The amount of water flowing along a river per second. | |
| erosion | Rocks and other river materials are picked up by the water and moved to another place along the river. | |
| mouth | The point where a river joins the sea. | |
| source | The place where a river begins. | |
| tidal bore | A strong tide from the coast that pushes the river against the current causing waves along the river. | |
| tributaries | Rivers that join up with another river. | |
| valley | A long ditch in the earth's surface between ranges of hills or mountains. | |

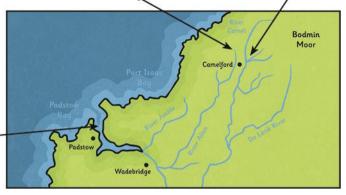


Rivers in England, at their **mouth**, will flow into either the:

North Sea, Irish Sea, English **Channel** or Atlantic Ocean.

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.



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.



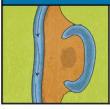


Meander - a curve in the river



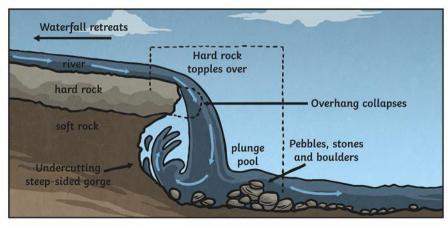
Eroded materials are carried by the river and released, building up the land on the inside of the bend where the water flows more slowly.

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 | |

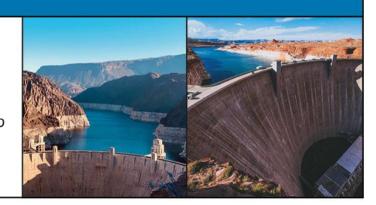


Dams

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.
- The water continues into the river on the other side of the dam.

