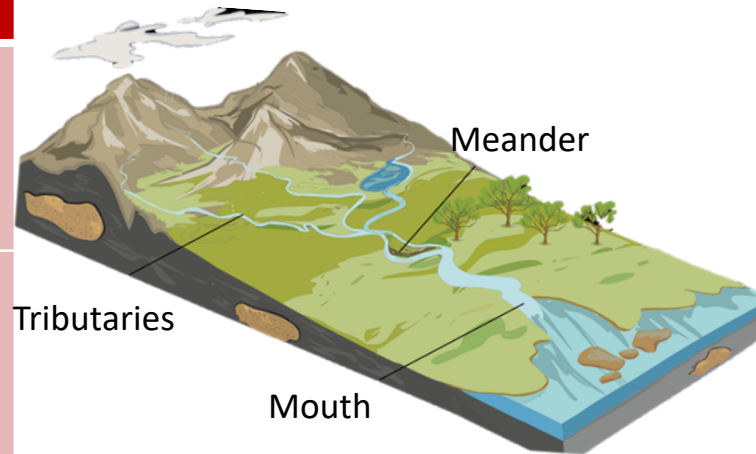


## River erosion

- Water erodes rock in four different ways , attrition, hydraulic action, abrasion and solution.
- When a river is moving fast it has enough energy to carry material such as rocks and pebbles.
- In the **upper course**, rivers erode vertically and cut channels into the land.
- In the **middle** and **lower course**, rivers erode horizontally and become wider.

## Key vocabulary

<b>Source</b>	The place where the river starts its journey.
<b>Mouth</b>	The place where a river meets the sea.
<b>Ox-bow lake</b>	A meander that is cut off from the rest of the river.
<b>Meander</b>	A bend/curve in a river.
<b>Flash floods</b>	Floods that appear suddenly due to fast and heavy rainfall in a short amount of time.
<b>Tributary</b>	A small stream or river that feeds into the larger river.



## River structure and features

The beginning of the river is called the **source**.

The structure of a river includes three main courses: **Upper course, middle course and lower course**.

The end of the river's journey is referred to as the **mouth** – this is where the river meets the sea.

Rivers create: waterfalls, meanders, erosion, ox-bow lakes.

## Coasts

There are many types of coast such as **beaches, cliffs and salt marshes**.

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

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

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



## Flooding and flood defence

A flood happens when the water level rises and water comes on to land that is normally dry. Floods can affect rivers and coasts.

**Flash floods** appear suddenly and therefore the water cannot be absorbed or flow away quickly enough.

We can reduce the risk of flooding by building **dams** in the rivers to control **water flow**.