



## Autumn Year 5/6 Rivers

### Key facts

The River Nile is the longest river in the world. It measures 6,695 kilometres from its source in Burundi, along the White Nile, to its delta on the Mediterranean Sea.

The biggest river in the world, measured by the amount of water that flows down it, is the Amazon.

Being a relatively small island, the UK's rivers are not very long.

The longest river in the UK is the River Severn, (220 miles in length). It begins in Wales and enters the Atlantic Ocean near Bristol in England.

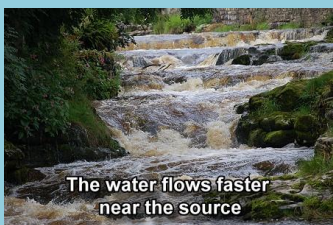
The deepest river in UK is River Thames, which flows through Oxford and London and into the North Sea (length 346km). Navigable to London.

Every river has a 'source', a place where the river begins its journey. Nearly all rivers have an upper, middle, and lower course.



### Vocabulary

<b>Abrasion</b>	form of erosion caused by rubbing of fine particles against an object
<b>Attrition</b>	The wearing away of particles of rock as they bounce along the riverbed or knock against each other and wear away becoming more rounded
<b>Confluence</b>	Where two rivers or streams meet.
<b>Delta</b>	A fan-shaped area of sediment built up at the mouth of a river.
<b>Deposition</b>	drops the sediment or material that it is carrying. This often happens on the inside of meanders because the water is flowing slowly.
<b>Erosion</b>	The wearing away, in this case by water and rocks constantly rubbing
<b>Floodplain</b>	flat land of the river valley close to the river banks - usually found in the lower course of a river. It is a fertile area of land.
<b>Meander</b>	A bend in a river - usually in the middle or lower course.
<b>Oxbow lake</b>	A small arc-shaped lake formed when a meander is sealed off by deposition.
<b>Sediment</b>	material that has been carried by rivers or the sea and then deposited
<b>Tributary</b>	A stream or river that feeds into a larger watercourse.



The water flows faster near the source



Meandering river



Middle Course



The Mouth of the River Thames

Useful links and resources <http://www.primaryhomeworkhelp.co.uk/rivers/UK.htm>

<https://www.bbc.co.uk/teach/class-clips-video/geography-ks1--ks2-rivers/z6qsf4j>

<https://www.3dgeography.co.uk/river-worksheets>



## Autumn Year 5/6 Coasts

### Key facts - Erosional Landforms

**Headlands and bays** – when a coastline is made up of different types of rock, they are called discordant coastlines. The rocks will erode at different speeds. The less resistant rock is eroded faster, forming a bay. The more resistant rock is eroded slowly, forming headlands at either side of the bay.

**Cliffs and wave-cut platforms** – waves cause most erosion at the foot of cliffs creating a wavecut notch. The rock above will eventually collapse and the cliff will retreat, leaving a wave-cut platform in front of the cliff. Headlands are normally made of resistant rock which do not erode easily, but cracks can develop into caves, arches and stacks.

**Caves** – hydraulic power and abrasion enlarge cracks in headlands creating caves.

**Arches** – caves continue to erode until they break through the headland creating arches.

**Stacks** – erosion will continue to weaken the rock supporting the arch until it collapses forming a stack.

**Stumps** – continuing erosion will lead to the collapse of the stack, leaving a stump.

### Key facts - Depositional Landforms

**Beaches** - In sheltered bays, deposition of sediment often leads to the formation of sandy beaches with a gentle slope. If cliffs are being eroded and there are high energy waves, this could lead to the formation of a pebble beach with a steep gradient. The profile of a beach is unlikely to be smooth. At the top end of the beach you may find a storm beach where boulders and shingle have been deposited by the strongest waves in a storm. There may also be a line of shingle and sand below this called a berm – this marks the usual high tide.

**Sand dunes** – wind carries sand deposited by longshore drift up the beach to create sand dunes.

**Spits** – form at sharp bends in the coastline. Longshore drift doesn't turn the corner so it takes the sediment out to sea forming a long, sandy ridge known as a spit. As the ridge extends into more open water, it is affected by waves and wind. This leads to the tip of the spit curving. Eventually, the sheltered area behind the spit can become a mudflat or salt marsh.

**Bars** – sometimes the ridge of sand can go all the way across the bay or river mouth; this is called a bar. A lagoon can develop behind the bar.

Old Harry Rocks  
Dorset



The Needles  
Isle of Wight



Durdle Door  
Dorset



### Vocabulary

Hydraulic power	as the powerful waves smash into the cliff face, air is compressed in the small cracks in the rock. Tiny fragments of rock get blasted away as the process is repeated many times.
Longshore drift	material is moved along the coast
Constructive waves	deposit more material than they erode.
Mechanical weathering	rain and sea water expands when it freezes and turns to ice, then as temperatures rise again, the ice melts. This continual expansion and contraction can put pressure on rocks and break them apart
Chemical weathering	water reacts with minerals in rocks and the structure of the rock is changed
Sliding	material shifts down a slope in a straight line
Slumping	saturated soil and rock move down the slope (with rotation) over impermeable rock
Rock falls	the base of the cliff is eroded, leaving the rock above unsupported. This breaks up and collapses.

Useful links and resources <https://www.bbc.co.uk/bitesize/clips/zc2pvcw>

<https://www.3dgeography.co.uk/coastal-geography-2-topics/earth-matters/water-cycle-and-coasts/>

<https://www.hamilton-trust.org.uk/topics/upper-key-stage-2-topics/earth-matters/water-cycle-and-coasts/>