

Unit Title: From Source to Sea: Where does water come from?

Y4
Spring 1
Geography

End Point - The aim of this unit is for pupils to:

- Know the correct vocabulary to describe a river and understand its different features
- Know and be able to locate the longest rivers in the UK and the World.
- Describe and understand the water cycle

End of unit assessment task:

- To make a labelled, 3D model of the River Tees, incorporating key physical and human landmarks along the route

Links:

Text – Little Black Fish by Samad Behrengi

Geography Wise – Rivers by Leon Gray

Geography – Children will understand the importance of rivers as a valuable resource for trade, transport, settlements and crops

Science – The Water Cycle

Prior Learning:

- Know the four countries of the UK and their capital cities and the surrounding seas
- Know the 4 compass points
- Name and locate Middlesbrough on a map
- Know that humans create settlements, often near natural resources

Key Aspects of the Unit:



Map and atlas work/

Fieldwork and investigation



Location



Physical Features: Understand that physical features are natural features in an environment. Understand that physical features can include: beach, cliff, coast, forest, hill, mountain, sea, ocean, river, soil, valley, vegetation, season and weather and volcanoes.



Human Features: Understand that human features are features in an environment that have been made by people. Understand that human features can include: city, town, village, factory, farm, house, office, port, harbour and shop.



Diversity: To develop a greater understanding of the diversity within our world including culture, biodiversity and economic diversity.



Physical Processes: Impact of nature on the earth e.g. erosion, plate tectonics, water cycle.



Human Processes understand the processes that humans have developed across the globe including travel trade and economics.

Key Knowledge:

- Know that a river is large natural stream of water flowing in a channel to the sea, lake or other river
- Know and name the features of a river
- Know that a river always flows downstream, downhill towards the sea
- Use arrows on a map of the UK rivers to show the direction of water flow
- Introduce children to the fresh water aquatic biome.
- For children to be able to answer the following questions on the freshwater biome:

- What is the biome like?
- Where is this biome found?
- What is its climate?
- Which animals live there?
- Which plants live there?

The freshwater aquatic biome includes ponds, lakes, streams, wetlands and rivers and they are found all around the world. The climate differs depending on where they occur. They are a vital source of drinking water as the water contains little or no salt. The largest lake in the world is the Caspian Sea and the longest river is the River Nile. Freshwater accounts for only 3% of the world's water. Despite this, they are home to more than 100 000 species of plants and animal. Fish, snails, worms, turtles, frogs, marsh birds, alligators, beavers, otters, snakes and many types of insects are just some of the creatures that live in the freshwater biome. Plants such as algae, cattails, waterlilies and aspen and willow trees help keep the water clean by using their root systems to filter pollution and excess nutrients from the water.

- Know how the land use along the River Tees changes from source to sea (eg. Farmland at High Force, industry in Middlesbrough)
- Know the 8 points of the compass

- Understand and use 4-figure grid references

Geographical Skills:

Mapping:

- Draw a map of a small area with features in the correct places
- Make a simple scale drawing
- Recognise and use some Ordnance Survey symbols
- Use large and medium scale OS maps
- Internet map sites

Fieldwork:

- Engage in guided enquiries and suggest own questions for enquiry - Does the turbidity of the water in the River Tees change from source to sea)
- Evaluate own observations and compare them with others
- Use the eight points of a compass to follow and describe routes and identify locations
- Apply age-appropriate Maths knowledge to understanding of geography (e.g. length, distance, mass, capacity/volume, angles, area and scales)

Vocabulary

Continent	A very large area of land that consists of many countries, such as Europe
Delta	A wide, muddy or sandy area where the river meets the sea. The river slows down and drops all the sediment it was carrying.
Environment	Everything around us - the natural world of land, sea, air, plants and animals
Erosion	Damage to river banks, due to a fast flowing river, parts get washed down stream making the river wider in parts
Estuary	Where a river meets the ocean and freshwater and salt water mix. Estuaries are normally wide and flat.
Flood plain	A flat area around a river that often gets flooded when the level of water in a river is high
Landscape	Everything you can see when you look across an area of land including hills, trees, buildings, rivers and plants
Map	A drawing of a particular area such as a city, country or continent
Meander	A river that flows a winding course
Mountain	A very high area of land with steep sides
Ox-bow lake	A lake formed when a bend in the river has been cut off
River	A large, natural stream of fresh water that flows into the sea or a lake
River mouth	The end of a river where it flows into the sea, another river or lake.
Source	The start of a river, this could be a spring on a hillside, a lake, a bog or a marsh. A river can have more than one source.

Spring	A place where water naturally flows out of the ground
Terrain	An area of land or a type of land when you are considering its physical features
Tributary	A smaller river or stream that joins a big river
Weather	The condition of the atmosphere in one area at a particular time, for example, if it is hot, raining or cold.