

Year 5 – Summer

Geography Knowledge Organiser

Unit of work:

Rivers

Links: Y5 Ancient Egypt (Aut1 History-incl. the Gift of the Nile) (Aut Geog-Egypt), Y5 Hist-transatlantic slave trade & Local Liverpool study

Overview - Begin to understand geographical patterns e.g. industry by a river (Mersey); explain the process of erosion & deposition & its effects on rivers & its people; know features of a river & use appropriate vocabulary; name & locate an increasing range of places in the world (incl. globally & topically significant features & events); locate areas of similar environmental regions: desert, rainforest, temperate

Skills required: use a range of sources & select the most appropriate for a task

Observe, record & measure human & physical features using a range of methods (sketch maps, plans, graphs, etc); suggest own ideas for river study; apply independent investigation skills; build upon field work skills; apply to independent River project; carefully select sources of evidence; sift information

MAPS: apply map skills, drawing on prior knowledge; read/use symbols on an OS

FIELDWORK: map; use 4+ figure grid references to locate points on a map



BIRKENHEAD
HIGH SCHOOL ACADEMY
Junior School Vision Statement
G.D.S.T

BE: RESPECTFUL
BE: FORGIVING
BE: KIND

Key Vocabulary:

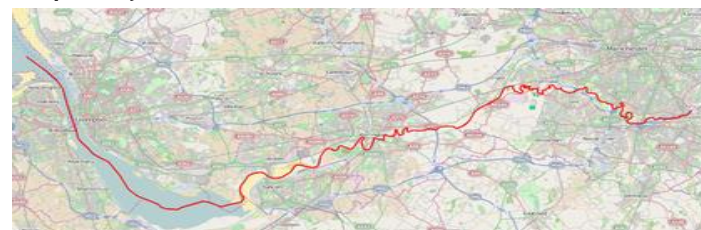
channel	The course in the ground that a river or water flows through.
dam	A barrier built to hold back water.
deposition / deposit	When rocks and other materials that have been eroded are dropped off further along the river.
discharge	The amount of water flowing along a river per second.
erosion	Rocks 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.

Human Geographical Features:

How Do We Use Rivers?

Leisure	+	Controlled population of fish
e.g. fishing	-	May leave litter and pollute the water
Industry	+	Sections of rivers maintained
e.g. factories	-	Chemicals pollute the water and habitats
Tourism e.g. walking routes	+	Conservation and education about local wildlife
	-	Too many people near wildlife habitats

Map / Key Places:



Study of Liverpool and the historical, political and human geographical features of the River Mersey

Physical Geographical Features:

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**.

The Middle Course Fast flowing water causes **erosion** making the river deeper and wider.

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.

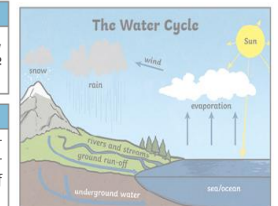
The Water Cycle and the formation/source of rivers

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.



Key facts/statistics:

- Origins of the River Mersey. The word 'Mersey' is probably Old English in origin. ...
- Shape and Size. The River Mersey is 70 miles long, rising in Stockport at the confluence of the Rivers Tame and Goyt.
- Transport on the Mersey. The ferries that cross the River Mersey are Liverpool's, perhaps the world's – most famous river crossing.
- Industry and Pollution. From the 17th Century onwards, industry on the River Mersey expanded at a greater and greater speed.
- The river Nile in Africa is the longest river in the world
- The Ganges, Yangtze and Indus rivers are the most polluted rivers on Earth

Environmentalism and climate change.

Hydroelectric Energy – Water is held behind a **dam**. When needed, some of the water is released and flows through a pipe (penstock). 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**.

River Flooding, Erosion, Pollution and the impact of human behaviour on the planet – what can be done about this by us as custodians of the planet?

Sequence of Lessons	
	Brief summary of lesson content
Lesson 1	What is a river? Why do we need them? How are they formed? Streams, confluences and tributaries
Lesson 2	Water features in the UK. Atlas and map work to identify rivers in the UK with a focus on the Mersey
Lesson 3	Rivers around the world. Which is the longest? Which is the most polluted?
Lesson 4	The different stages of a river – waterfalls, meanders, ox-bow lakes, estuaries
Lesson 5	Water pollution and drinking water – how is our water made safe to drink?
Lesson 6	The environmental impact of human behaviour – climate change, flooding and the future

