

 <p>Lawn Primary School</p> <p>Geography</p>	<p>Year</p>	<p>4</p>	<p>Topic</p>	<p>Rivers</p>
<p>This topic provides cross-curricular links with science where children will learn about and be able to explain the water cycle clearly as well as offering many opportunities for field work and getting out into the local area.</p> <p>Children will learn about the key features of a river, how rivers are formed and how we can make sure we are prepared to tackle flooding in Derby. Children will use technology, such as Google Earth, and maps to locate the longest rivers in the UK and the world as well as follow the journey of a river from source to mouth, drawing upon their previous knowledge of compass points to be able to explain the direction in which a river flows.</p>				

<p>Prior Learning</p>	<p>Future Learning</p>
<p><u>Locational and Place knowledge:</u></p> <ul style="list-style-type: none"> -Know the names of 4 countries from the southern hemisphere and 4 countries from the northern hemisphere (Y3) -Know the names of and locate the seven continents of the world (Y2) -Know the names of and locate at least eight European countries. (Y3) -Know the names of a number of European capitals. (Y3) <p><u>Human and Physical Geography:</u></p> <p>N/A</p> <p><u>Skills and fieldwork:</u></p> <ul style="list-style-type: none"> -Know and name the eight points of a compass (Y3) -Use maps to locate European countries and capitals. 	<p><u>Locational and Place knowledge:</u></p> <ul style="list-style-type: none"> -Know the names of and locate a number of South or North American countries. -Know where the Equator, Tropic of Cancer, Tropic of Capricorn and the Greenwich Meridian are on a world map. <p><u>Human and Physical Geography:</u></p> <p>N/A</p> <p><u>Skills and fieldwork:</u></p> <ul style="list-style-type: none"> -Use maps and globes to locate the equator, Tropics of Cancer and Capricorn and the Greenwich Meridian.

<p>National Curriculum Links</p>
<p><u>Locational knowledge:</u></p> <ul style="list-style-type: none"> -Know, name and locate the main rivers in the UK. <p><u>Place knowledge</u></p> <p>N/A</p>

Human and physical geography

- Know and label the main features of a river.
- Know the name of and locate a number of the world's longest rivers.
- Explain the features of the water cycle.
- Know why most cities are located by a river.

Skills and fieldwork:

N/A

Key Vocabulary

Rivers, the water cycle, evaporation, condensation, precipitation, upper course, middle course, lower course, source, groundwater, springs, floodplain, tributary, confluence, meanders, oxbow lake, mouth, delta, pluvial flooding, fluvial flooding, plumbing.

Recommended Texts & Web Links

<https://www.dkfindout.com/uk/earth/rivers/from-source-to-mouth/>, The Wind in the Willows by Kenneth Grahame; Why Water's Worth It by Lori Harrison; Water Cycles by DK; Song of the River by Joy Cowley & Kimberly Andrews; A River by Marc Martin; The Rhythm of the Rain by Grahame Baker-Smith; Amazing Rivers by Julie Vosburgh Agnone & Kerry Hyndman; The River Singers by Tom Moorhouse; Amazon River by Sangma Francis & Romolo D'Hipolito; Water by Melissa Stuart; Flood by Alvaro F. Villa.

What pupils need to know or do to be secure

Key Learning

What is the water cycle?

- Explain the features of the water cycle (this could be covered as a cross-curricular science and geography lesson linking to the science topic 'States of Matter').
- Children will learn about the process of the water cycle (links with Y4 science topic) and will be able to explain each stage: rises up as evaporation, forms a cloud of condensation, comes down as precipitation.

Activities / Application of knowledge / Possible Evidence

Children could draw/act out the story of a water droplet on its journey through the water cycle.

Make a water cycle in a sandwich bag using blue food colouring.

Where are the main rivers in the UK?

-Know, name and locate the main rivers in the UK (Thames, Derwent, Severn, Trent, Wye, Great Ouse)

-Children will use maps and Google Earth to find some rivers in the UK (above) and will be able to say which country and county they are in.

-Children will be able to draw and/or label these rivers on a blank map of the UK.

-Children will recap knowledge of compass points from Y3 - describing the directions in which the rivers flow.

Where are the northern-most points of the rivers? Where are the southern-most points of the rivers? Which seas or oceans do the rivers eventually join?

What are the features of a river?

-Know and label the main features of a river.

-Children will be taught the features of a river and will know and understand the following terms: upper course, middle course, lower course, source, groundwater, springs, floodplain, tributary, confluence, meanders, oxbow lake, mouth, delta.

-This lesson provides an opportunity for field work in which the children will visit the River Derwent, starting in the village of Darley Abbey and walking along the river until they get to town.

Why are rivers important to cities?

-Know why most cities are located by a river.

-Know the name of and locate a number of the world's longest rivers.

-Children will be taught that cities are close to rivers: water transportation and importation, a water supply for the original settlement, water for crops, fishing and food sources.

What is the journey of a river to the sea?

-Children will be able to follow a river on Google Earth or a map from its source to the sea.

-River run from mountains to the sea. They are fast and narrow at their source and gradually get wider and slower towards the mouth. Flowing through steep mountains, the river is powerful enough to erode land away, creating V-shaped valleys and steep-sided gorges.

-As the river flows downhill, the river slows and moves onto flatter areas of land where it becomes wider and deeper, suitable for boats and even large ships.

Use mixed media to create an art piece of a chosen river.

Make a 3D model of a river.

Create a flooding cause and effect graphic organiser.

Recreate a flood. Science investigation to see which material makes the best flood defence.

Create a simple line graph to show the height of water during a flood.

-Finally, the river approaches the mouth (the opening to the sea). At this stage, it is very broad and stops looking like a single river. It often splits into several, smaller shallow channels cutting through an area of muddy or sandy banks along the coastline.

-This lesson could lend itself to using AR/VR following a journey of a river and doing a voiceover to explain the video.

How can we make sure we are flood-ready?

-Children will build upon their knowledge of floods in Y3 and begin to discuss why flood barriers and defences are so important.

-Children will understand that rivers which get too full will burst their banks and affect the land around it as well as affecting humans and animals.

-Children will understand the terms pluvial flooding (caused by rainwater), fluvial flooding (caused by rivers bursting their banks), coastal flooding (caused by high tides and storms) and plumbing issues (broken pipes in houses and other properties). Children will look at different photos and videos and guess which flooding could have caused this.

-Children will do a case study of Boscastle in North Cornwall and will discuss the impact on the community.

Field Work / Enrichment

-Field work: walk along the River Derwent.

-Opportunity to liaise with Derby Rowing Club - canoeing?