

Topic: Geography Locational Knowledge/ Key question	Year group	Term
Rivers What is a river and why is the River Tyne so important? (River Workshop at The Sill)	Year 5	Autumn 10 to 12 sessions

Background knowledge

The enquiry begins with the pupils being introduced to and understanding the features of a typical river channel as it progresses along its course from source to mouth. Having established these general characteristics, the pupils are encouraged and supported to study a local river to ascertain how and why it changes and to what degree it fits the typical model they looked at originally. This provides an opportunity to develop a range of fieldwork skills in the locality of the school and also to apply mapwork and graphical techniques to aid understanding. From this local context the pupils are then introduced to rivers at other scales, firstly within the United Kingdom and then in Europe. Throughout the investigation there is an emphasis on pupils' understanding of physical processes and also how rivers impact the landscape. They also look at the way in which humans interact with rivers for a range of purposes, such as trade and energy generation.

Purpose of the enquiry

The objective of this investigation is to enable pupils to understand the features and processes of a common and very significant feature of physical geography with which they will be familiar. Rivers are commonplace in a wide range of environments and pupils will therefore, already know something about them. For example, from regular news reports and perhaps even direct experience of river floods in their own community. Many settlements in the United Kingdom, no matter what size, will have rivers flowing through or close to them.

The enquiry begins by establishing the key concept that rivers change over their course from source to mouth and develop distinctive physical features as they do so by altering the environment through erosion and deposition. Pupils are supported to apply a wide range of geographical skills that draw upon map work, satellite imagery and GIS resources to consolidate their understanding. Time is also devoted to exploring rivers, in particular their estuaries as important ecosystems and habitats for a wide range of living things. They are then introduced to examples of the many ways in which humans interact with rivers and exploit them economically as a resource, especially as ports for trade. Pupils are also given an opportunity to reflect upon how rivers can invoke emotional and artistic responses in people such as composers and painters who seek to evoke and portray the sounds and images of rivers for others to appreciate.

What should I already know?

Year 2

Geographical enquiry

- To ask and respond to simple closed questions.
- Use information books/pictures as sources of information.
- Investigate their surroundings
- Make observations about where things are e.g. countries, continents.

Map Knowledge

Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries and major cities.

Using Maps

Reading an atlas to locate places.

Direction/Location

Follow simple directions

Year 3

Geographical enquiry

- To ask and respond to simple closed questions.
- Use information books/pictures as sources of information.
- Investigate their surroundings
- Make observations about where things are e.g. countries, continents.

Map Knowledge

Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries and major cities.

Using Maps

Maps, atlases, globes and digital/computer mapping

Eight points of compass

Map symbols and key

Direction/Location

Follow simple directions

National Curriculum Objectives / Key Skills	The Journey
<p>Pupils will be taught:</p> <p>Locational knowledge</p> <ul style="list-style-type: none"> • Locate the world's countries, using maps to focus on Europe (including the location of Russia) and North and South America, concentrating on their environmental regions, key physical and human characteristics, countries and major cities. • Name and locate counties and cities of the United Kingdom, geographical regions and their identifying human and physical characteristics, key topographical features (including hills, mountains, coasts and rivers), and land-use patterns; and understand how some of these aspects have changed over time. <p>Human and physical geography</p> <p>Describe and understand key aspects of:</p> <ul style="list-style-type: none"> • Physical geography, including: climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle. • Human geography, including: types of settlement and land use, economic activity including trade links, and the distribution of natural resources including energy, food, minerals and water. <p>Geographical skills and fieldwork</p> <ul style="list-style-type: none"> • Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied. • Use the eight points of a compass, four and six-figure grid references, symbols and key (including the use of Ordnance Survey 	<p>1: To know how the course of the River Axe changes from source to mouth.</p> <p>2: To know how the course of my local river changes from source to mouth (digi-maps).</p> <p>3: To know why river estuaries are such important places for wildlife.</p> <p>4: To know why rivers are such an important part of the water cycle.</p> <p>5: To know how the Isle of Dogs has changed since the reign of Henry VIII.</p> <p>6: To know why river flooding is such a problem in Bangladesh.</p> <p>7: To know how Bedřich Smetana used music to describe the course of his beloved national river.</p> <p>8: To know what happened to the River Thames during the Little Ice Age.</p>

maps) to build their knowledge of the United Kingdom and the wider world.

- Use fieldwork to observe, measure, record and present the human and physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.

Big question and key skills

Key Question: What is a river and why is the River Tyne so important?

Geographical enquiry

- Children encouraged to ask simple geographical questions.
- Use books, stories, maps, pictures/photos and internet as sources of information.
- Investigate their surroundings
- Make simple comparisons between features of different places.

Map Knowledge

Locate and name on UK map major features e.g. Newcastle, River Tyne, West Denton, North Sea.

Drawing maps

Draw a map of a real or imaginary place. (e.g. add detail to a sketch map from aerial photograph)

Direction/Location

Follow directions (as Year 1 and including NSEW)

Representation

To understand the need for a key.

Use class agreed symbols to make a simple key.

Outcomes

An overview of what children will know / can do

Working towards: I can locate some rivers around the world. I know how rivers are formed, with support. I can identify some features of a river. I can track the journey of a river from source to sea, with support. I know how rivers are used. I know how rivers are formed through erosion and deposition, with support. I know the impact human activities have on a river, with support. I can identify the cause of river pollution (River Tyne). I can identify how to reduce river pollution. I know how the water cycle works, with support. I can make my own water cycle, with support.

Expected: I can locate rivers around the world. I know how rivers are formed. I can identify some features of a river. I can track the journey of a river from source to sea. I can discuss how rivers are used. I know how rivers are formed through erosion and deposition. I know the impact human activities have on a river. To investigate the Mississippi river and the impact it has when flooding occurs, with support. I can investigate the cause of river pollution (River Tyne). I can investigate how to reduce river pollution. I know how the water cycle works. I can make my own water cycle.

Exceeding: I can locate rivers around the world and identify the largest rivers in the world. I know and can explain how rivers are formed. I can identify features of a river. I can track the journey of a river from source to sea and explain the different stages. I can discuss how rivers are used. I know how rivers are formed through erosion and deposition and give an explanation. I know the impact human activities have on a river. To investigate the Mississippi river and the impact it has when flooding occurs. I can investigate the cause of river pollution (River Tyne). I can investigate how to reduce river pollution and discuss how to reduce this. I know how the water cycle works. I can make my own water cycle and explain each stage.

Key Vocabulary

Key vocabulary / spellings.

Weather; Climate; Temperature; Temperate;
North Pole; Equator; Location; Distribution;
Country; Prevailing; Wind; Ocean; Tropic of
Cancer; Tropic of Capricorn; Polar;
Continental; Mediterranean; Tropical;
Equatorial; Drought; Annual; Winter;
Summer; Mild; Season; Northern
Hemisphere; Southern Hemisphere;
Meteorological; Climate station; Average;
Coniferous; Tropical; Rainforest; Savanna;
Hot desert; Ice cap; Tundra; Mountain;
Environment; Grassland; Shrubs; Trees;
Animals; Herbivores; Landscape; Lichens;
Moss; Deciduous; Forest; Evergreen;
Predators; Humid; Oxygen; Drought;
Carnivore; Biome; South America; River;
Amazon Basin; Amazonia; Nile; Andes;
Tributary; Source; Mouth; Humid;
Convection; Condensation; Cloud; City;
Inhabited; Polar; Sahara;

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Text linked to topic

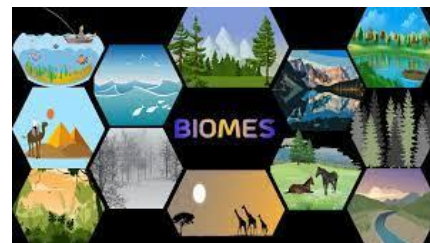
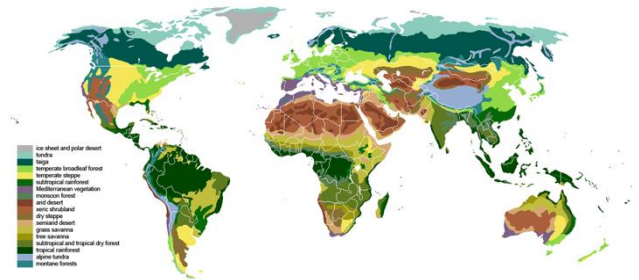
The Four-Desert Challenge-
Rob Alcraft.



Spotlight on Brazil-
Charlotte
Coleman-Smith



Timeline / Diagrams



Key people / places

United Kingdom
Amazon Rainforest
Africa
Sahara desert

Assessment questions / outcomes

- Can you name 2 rivers in the world and where they are located?
- Explain how rivers are formed.
- Can you name 2 key features of a river?
- How are rivers used?
- What is erosion and deposition?
- How can humans effect rivers?
- Where is the Mississippi river and what happens when it floods?
- What is river pollution?
- How can river pollution be reduced?
- What is the water cycle?
- Describe how water flows from source to sea.