Subject: Geography LKS2 Unit 4 Year B

Rivers

Enquiry Question: Where does our water come from?

NC/PoS:

Locational 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
- 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
- identify the position and significance of latitude, longitude, Equator, Northern Hemisphere, Southern Hemisphere, the Tropics of Cancer and Capricorn, Arctic and Antarctic Circle, the Prime/Greenwich Meridian and time zones (including day and night)

Place knowledge

 understand geographical similarities and differences through the study of human and physical geography of a region of the United Kingdom, a region in a European country, and a region within North or South America

Human and physical geography

- describe and understand key aspects of:
- 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

Geographical skills and fieldwork

- 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 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.

Prior Learning (what pupils already know and can do)

Children will know that a river is a flowing, moving stream of water. Children will know of some UK rivers e.g. River Mersey, River Thames. Children will know of the Amazon River in Brazil. Children will know of some world rivers e.g. Volga, Danube. Children will know the UK seas and world oceans.

End Points (what pupils MUST know and remember)

Know and explain the features of the water cycle

Know and label the main features of a river – upper course, middle course, lower course. Use an index in an atlas to find rivers.

Know the name and location of the UK's longest rivers – Severn, Thames, Trent, Great Ouse, Wye.

Know the name and location of the world's longest rivers - Nile, Amazon, Yangtze, Mississippi, Yenisei.

Know the source, mouth, course, length, discharge and some tributaries of each river named

Medium Term Plan: Supporting Implementation of LTP/Progression Grid

Know what rivers are used for and the potential impact on their location.

Key Vocabulary

river, water cycle, evaporation, condensation, precipitation, surface run off, transpiration, vapour, condenses, closed cycle, source, high land, low land, upper course, middle course, lower course, tributaries, confluence, valley, channel, waterfall, rapids, gorge, meander, tributary, confluence, flood plain, levee, delta, estuary, mouth, leisure, industry, conservation, dam, reservoir, hydroelectric power, renewable energy

Session 1:

Where does our water come from?

Using images and diagrams discuss the water cycle and its importance.

Inform children that the water cycle is a continuous cycle; it has been happening since the start of time and will continue. It is a closed cycle; there is no more or less water now than at the start.

Vocabulary: river, water cycle, evaporation, condensation, precipitation, surface run off, transpiration, vapour, condenses, closed cycle

Session 2:

What are the features of a river?

Using images of the upper, middle and lower course discuss the features of a river.

Show children the images of a river's upper course. How would you describe the river here? (Fast flowing, narrow channel, steep sides, steep valleys, with interlocking spurs.) What kinds of features can you spot? (Waterfalls, rapids, gorges.)

Show children the images of a river's middle course. How would you describe the river here? (Slower flowing, wider channel, less steep sides, wider valley.) What kinds of features can you spot? (Meanders/loops, tributaries, confluences.)

Show children the images of a river's lower course. How would you describe the river here? (Slower flowing, deep, wide channel, less steep sides, wider valley.) What kinds of features can you spot? (Flood plains, levees, delta, estuary.)

Vocabulary: source, high land, low land, upper course, middle course, lower course, tributaries, confluence, valley, channel, waterfall, rapids, gorge, meander, tributary, confluence, flood plain, levee, delta, estuary, mouth, erosion, deposition

Session 3:

Fieldwork

River Study – The River Mersey

Projections - Using the data you collect, draw sketches of how the river would have looked in the past. Make predictions about what it might look like in the future. Annotate

Flood management - Tie your data into the issue of flooding, suggest possible management strategies based on your findings about the channel, discharge and velocity.

https://check-for-flooding.service.gov.uk/station/5085

Session 4:

Where are the longest UK rivers located?

Medium Term Plan: Supporting Implementation of LTP/Progression Grid

How many rivers in England can you name? Which is the longest? Which rivers flow near to our school? Use a map of England to shows some of the major rivers. Can you name the sea that each flows into? (Identify the North Sea, Irish Sea, English Channel and Atlantic Ocean). The point where a river joins the sea is called its mouth – what is the name for the place where a river begins? (source) What do you notice about where most rivers seem to start? (In the middle of the country – from higher ground) Can you find the source and the mouth of the River Thames in your atlas? Do all rivers flow into the sea? (No – some join up with other rivers)

Use atlases to identify the UKs longest rivers and identify the source and mouth for each. *Severn, Thames, Trent, Great Ouse, Wye.*

Where are the world's longest rivers located?

Children use an atlas to find each of the world's longest rivers and identify the country/countries it flows through and the sea it eventually flows into. Find the source, mouth, course, length, discharge and some tributaries of each river named *Nile, Amazon, Yangtze, Mississippi, Yenisei*

Zone in on The Amazon.

Vocabulary: source, high land, low land, upper course, middle course, lower course, tributaries, confluence, valley, channel, waterfall, rapids, gorge, meander, tributary, confluence, flood plain, levee, delta, estuary, mouth, erosion, deposition

Session 5:

What are rivers used for?

Identify the importance of rivers and their uses. Include examples of leisure, industry and conservation. Look at the advantages and disadvantages.

Vocabulary: leisure, industry, conservation

Session 5:

What effects can rivers have on a location?

Look at the effects of flooding from rivers. Link to flooding in the local area (Sankey Bridges) What was the cause and extent of damage and lasting effects? Look at other images of flooding and use of dams. What are the reasons for wanting to block the flow of a river – stop flooding/generate power. Look Hoover Dam as an example and Brazil provides 55% of hydroelectricity. South America is the leading hydropower producing region of the world. Brazil has 4/10 largest dams in the world.

Vocabulary: dam, reservoir, hydroelectric power, renewable energy

Future learning this content supports:

The content of this unit will support learning on physical and human geography in other locations around the world.