

Year 4 Geography Spring Plan - Rivers

Unit Rationale	
This unit aims to provide children with an understanding of physical geography by looking at river formation and the processes involved. This will include field work, diagram drawing and applying knowledge to a global setting. Children will also explore the interplay between human and physical geography by considering how people use rivers and the impact of flooding	
National Curriculum Objectives:	Cross Curricular Links:
<p>Locational knowledge locate the world's countries, using maps to focus on Europe and South America, concentrating on key physical and human characteristics identifying human and physical characteristics, key topographical features (rivers) and understand how some of these aspects have changed over time</p> <p>Place knowledge understand geographical similarities and differences</p> <p>Human and physical geography Describe and understand key aspects of: <ul style="list-style-type: none"> - physical geography, including: rivers and the water cycle - human geography, including: land use and the distribution of natural resources including water </p> <p>Geographical skills and fieldwork use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied use fieldwork to observe, measure, record and present the physical features in the local area using a range of methods, including sketch maps, plans and graphs, and digital technologies.</p>	<p>Year 2 - Explorers (link to trade) Year 3 - Iron Age to Bronze Age (link to trade and settlement) Year 3 - Shang Dynasty (Yellow River) Year 4 - Water cycle (Science)</p>
Trips/Visits:	Modern Day Links:
Fieldwork to a local river	Climate change and increased flooding
Prior Learning:	Substantive Knowledge:
Year 2 - Oceans and Seas Year 4 - Water, Weather and Climate	Rivers are a natural feature which is a moving body of water that drains the land. It flows from its source on high ground, across land and then into another body of water (lake, sea, ocean, another river). It creates landscapes by erosion, deposition and transportation. https://www.bbc.co.uk/bitesize/topics/z849q6f/articles/zx4j2v4
Big ideas/Disciplinary Knowledge	What next?
<ul style="list-style-type: none"> • Place - where are the rivers in the world? • Space - where would rivers be located and why? • Scale - how large is a local river compared to the Amazon? 	Year 5 - Natural Resources (water) Year 6 - Energy and Sustainability (hydropower and

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| <ul style="list-style-type: none">• Physical processes - how rivers are formed including erosion, deposition and transportation• Environmental impact and sustainable development - climate change and flooding | |
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Lesson	WALT	What should the children remember?	Lesson plan and outcome	Key Vocabulary	Key Questions
Lesson 1	Explain what a river is and identify landforms created by rivers.	Oceans and Seas	<p>Quiz: odd one out (three pictures of rivers and one of a sea)</p> <p>AfL: what is a river? Collate information about what chn already know about rivers and display them on the working wall.</p> <p>Show video of the journey of the river. https://www.bbc.co.uk/bitesize/topics/z849q6f/articles/zx4j2v4 (scroll down to what do rivers look like video)</p> <p>Stop at each section for children to see what the parts of the river look like. e.g. source (upstream) > waterfall > main river (floodplain and meanders) > mouth (downstream)</p> <p>Model drawing the journey of the river including labels from a given list. Chn to create their own. Ensure it is a diagram and not a piece of art.</p> <p>Task: chn create their own diagram of the journey of a river</p>	Upstream Downstream Source Main River Mouth Diagram	<p>What does the river look like at the source?</p> <p>What does the river look like in the middle?</p> <p>What does the river look like at the mouth?</p> <p>Why might it look different?</p>
Lesson 2	Explore the impact that rivers have on the land through erosion, transportation and deposition.	Need to recall journey of a river to identify main river section	<p>Quiz: could you tell your partner what the journey of a river is? https://www.youtube.com/watch?v=llK3bgjiEEk</p> <p>Explain that we are looking at the main river and some of the features associated with rivers.</p> <p><i>Rivers usually begin in upland areas, when rain falls on high ground and begins to flow downhill. They always flow downhill because of gravity. They then flow and bend (meander) as they cross the land or go around objects such as hills or large rocks. They flow until they reach another body of water. As rivers flow, they erode (or wear away) the land. Over a long period of time rivers create valleys, or gorges and canyons if the river is strong enough to erode rock. They</i></p>	Downhill Meander Valley Erosion Transportation Deposition	

			<p>take the sediment (bits of soil and rock) and carry it along with them.</p> <p>Explain that we are going to look at how a meander is formed. Show chn a diagram of a meander. As the river flows down the hill, it tries to find the easiest route so it avoids obstacles. This means it twists and turns and these are called meanders.</p> <p>Task: chn to draw/create the route of a river on a landscape and explain why they think the river would flow that way.</p>		
Lesson 3	<p>Use field work to study a local river.</p> <p>Field work (photosheet)</p>	<p>Need to name the three stages of the river and its features to link it with a real river</p> <p>Progression of maps skills from KS1</p>	<p><i>Trip to a local river. Complete a risk assessment before completing the local river trip and chn should wear wellington boots where possible.</i></p> <p>While at the river children are expected to:</p> <ol style="list-style-type: none"> 1. Observe the river (how fast is it moving? How wide is it? Is there any wildlife? What is it used for?) 2. Measure the river (how wide is it? How deep is it? Is it the same everywhere?) 3. Sketch the river (what can you see? how can you simplify the picture? can you add labels?) <p>Equipment:</p> <ul style="list-style-type: none"> • wellington boots • tape measure • meter stick • clipboards • pencils • paper 	<p>Diagram</p> <p>Measure</p> <p>Sketch</p> <p>Label</p> <p>Observation</p>	<p>Do you think all rivers look the same? Why?</p> <p>Do you think we are near the source or the mouth of the river? Why?</p>
Lesson 4	<p>Locate significant rivers around the world.</p> <p>Digimap (photosheet)</p>	<p>Need to be able to describe the source and mouth of a river</p> <p>Location of Oceans and Seas their connectivity</p>	<p>Quiz: Label the oceans and seas in your pairs.</p> <p>Activate prior learning: remind chn they learnt about oceans and seas in Year 2. All rivers flow into another body of water so they can identify those in the lesson.</p> <p>Model how to use Digimap. Ask chn to find four rivers: Nile (Africa)</p>		

		to rivers (mouth of the river joins ocean/sea/lake)	<p>Amazon (South America) Colorado (North America) Volga (Europe)</p> <p>Answer the following questions for each river:</p> <ol style="list-style-type: none"> 1. Which continent is it in? 2. What countries does it flow through? 3. Where is the source? 4. Where is the mouth? 5. What ocean/sea does it flow into? 6. How long is the river? 		
Lesson 5	<p>Evaluate why rivers are important to people.</p> <p>Chromebooks (photosheet)</p>	<p>Need to know what the main river looks like</p> <p>Consider the interconnectivity between people and landscapes (Year 2)</p> <p>Understand why people settle somewhere (Year 2)</p>	<p>Quiz: Match the rivers to the continents. Can you name the rest of the continents?</p> <p>AfL: Someone is selling this plot of land near a river for a new town. Why would this be a good place to live? Ideas: transport, drinking water, food source, agriculture, tourism and leisure</p> <p>Case study: Amazon Rainforest Locate the Amazon rainforest on a map and discuss the scale (e.g. it covers seven countries and is 2-6 miles wide that's two hours to walk across the river).</p> <p>Split the class into three groups. Use chromebooks to research how the Amazon River is used for farming, transport and tourism. Each table presents their findings at the end of the lesson and create a class photo sheet.</p>	<p>Agriculture Transportation (trade) Tourism</p>	
Lesson 6	<p>Explore what happens when a river floods.</p> <p>Oracy lesson (photosheet)</p>	<p>Need to know what flooding is</p>	<p>Quiz: Get on your soap box! Look at the picture and prepare a 30 second pitch about why it would be a good place to live.</p> <p>TTYP: what is a flood? When a river bursts its banks (sides) and the water spreads on the surrounding area (floodplain).</p> <p>Why do rivers flood?</p>	<p>Flood Floodplain Fertile</p>	

			<p>There can be natural and human reasons for flooding. Ask chn why the following things may lead to flooding. Could they rank them in order of most likely to least likely for causing a flood and explain why? Did everyone have the same answer? Rainfall, snow melt, steep slopes, deforestation, urbanisation</p> <p>What impact could this have? The sediment that rivers carry is full of nutrients which help plants to grow. When flood happen, they can spread the floodplain with nutrients making it fertile which is good for farming. However, is floods are powerful enough they can destroy farmland and buildings, people can lose their lives and it costs lots of money to rebuild.</p> <p>Plan a oral newspaper report about a floss in Devon in 2023. https://www.telegraph.co.uk/news/2023/05/10/somerset-flash-floods-mudslides-major-incident-uk-weather/</p>		
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