



Portfields Primary School Medium Term Plan

Year Group – 4

Subject - **Geography**

Topic – **Rivers and the Water Cycle**

Term – **Spring 1**



G	Key Questions	Substantive Knowledge	Key Vocabulary	Real-Life Links	
<p>- 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> <p>- Describe and understand key aspects of physical geography, including climate zones, biomes and vegetation belts, rivers, mountains, volcanoes and earthquakes, and the water cycle.</p> <p>- Use maps, atlases, globes and digital/computer mapping to locate countries and describe features studied.</p> <p>- 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.</p>	<ul style="list-style-type: none"> ● Where does all the rain go? ● Where does all the rainfall come from? ● What can we learn about the River Thames? ● How and where do people use and change rivers? ● How do rivers wear away mountains? 	<ul style="list-style-type: none"> ● Can describe a river and mountain environment in the UK, using appropriate geographical vocabulary. ● Can use simple geographical vocabulary to describe significant physical features of rivers and talk about how they change. ● Can describe a river and mountain environment in the UK, using appropriate geographical vocabulary. ● Can describe the water cycle in sequence, using appropriate vocabulary, and name some of the processes associated with rivers and mountains. 	City State Country Continent Region Ocean River Stream Valley Mountain Hill Urban Rural Village Town Capital	Rivers in the local area. River Thames in London.	
	Technical Questions				Disciplinary Knowledge
	<p>Where does rainfall go? <i>It either seeps into the ground or becomes runoff, which flows into rivers and lakes</i></p> <p>How and why do rain fall from clouds? <i>When these droplets grow, they eventually become too heavy to stay suspended in the sky and fall to the ground as rain.</i></p> <p>How do people use rivers? <i>For example, wildlife protection. creating electricity through the use of hydroelectric power, sport and recreation activities, such as fishing and canoeing.</i></p>				<p>What are some of the world's major rivers? <i>Amazon, Nile, Congo, Danube, Mississippi, Yangtze.</i></p> <p>What are some of the world's major mountains? <i>Mount Everest, Mount Kilimanjaro, Himalayas, Denali</i></p> <p>How has water helped to make mountain ranges the shapes they are today? <i>By removing an enormous amount of material from the surface, water can create a pressure gradient in the Earth's crust, causing rocks to "flow" and eventually push mountains upwards.</i></p>
Orange paper questions		<ul style="list-style-type: none"> - In a group, can carry out fieldwork in the local area selecting appropriate techniques (e.g. to create a river in the playground using natural materials, use a watering can to form the river, 	Water cycle Infiltration Percolation Estuary Terrain Tributary Confluence Meander Evaporation Condensation Transpiration Water vapour Hydrological cycle Estuary Gradient Hydro-electric power Irrigation	A stream often provides a safer environment for making observations and measurements than a river. You might also provide an opportunity for the children to visit a river flowing through an urban environment to see human use and intervention	
<ol style="list-style-type: none"> 1. What develops from the source of a river? Streams 2. What does water evaporate into? Water vapour 3. What is the process called when water falls back down to the earth? Precipitation 4. What is a lock on a river? A chamber with gates at either end. By emptying or filling that chamber with water, your boat can move up or down onto a new section of the waterway. 5. What is the famous river that runs from Gloucestershire to the North Sea called? River Thames. 6. Name two ways people use rivers. Accept any of the following: wildlife protection, creating electricity through the use of hydroelectric power, sport and recreation activities, such as fishing and canoeing, and transport. 7. What shape do rivers erode into the side of mountains? A 'V' shape. <p>NB: <i>If, after completing the orange paper assessment, you find a large amount of your pupils lack understanding of one particular star knowledge, you should adapt the flashback four questions for "Last Topic" in the next topic, in order to give you time to re-visit this. Please speak to the subject lead to discuss how to do this before editing the questions.</i></p>					

		<p>observe and record what happens to the water over different materials, take photographs and label with key river features and processes).</p> <ul style="list-style-type: none"> - Can locate and label the main British rivers on a map of the British Isles and add the names of settlements at the mouth of the rivers. 		
--	--	--	--	--

Lesson Breakdown

Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5
<p><u>Learning Objective</u> LO: To introduce the land part of the water cycle using geographical vocabulary</p> <p><u>Success Criteria</u></p> <ul style="list-style-type: none"> • I can describe where rainfall goes when it falls to Earth. • I know that rainwater forms streams and rivers. • I can use the appropriate geographical vocabulary. 	<p><u>Learning Objective</u> LO: To introduce the sky (atmosphere) and its role in the water cycle</p> <p><u>Success Criteria</u></p> <ul style="list-style-type: none"> • I know that water evaporates from oceans, seas, lakes and the ground. • I understand that water condenses as clouds. • I appreciate how and why rain falls from clouds. 	<p><u>Learning Objective</u> LO: To learn about a major UK river and to follow a river from source to mouth</p> <p><u>Success Criteria</u></p> <ul style="list-style-type: none"> • I can follow the River Thames on a map from source to mouth. • I can identify a range of rural river features, including settlements. • I can identify a range of urban river features, including settlements. 	<p><u>Learning Objective</u> LO: To explore the ways in which people use and change some of the world's major rivers</p> <p><u>Success Criteria</u></p> <ul style="list-style-type: none"> • I can describe and explain some ways people use rivers. • I can describe and explain some ways people change rivers. • I know something about several of the world's major rivers. 	<p><u>Learning Objective</u> LO: To introduce the land part of the water cycle using geographical vocabulary</p> <p><u>Success Criteria</u></p> <ul style="list-style-type: none"> • I can name some of the world's main mountain ranges. • I can locate some of the world's main mountain ranges on a map. • I can describe how water has helped to make these mountain ranges the shapes they are today.

<p><u>Star knowledge</u></p> <p>From a source, a stream develops, it flows downhill, joins together with other streams; these eventually join to form a river.</p>	<p><u>Star knowledge</u></p> <p>The atmosphere is the superhighway in the sky that moves water everywhere over the Earth. Water at the Earth's surface evaporates into water vapor, then rises up into the sky to become part of a cloud which will float off with the winds, eventually releasing water back to Earth as precipitation.</p>	<p><u>Star knowledge</u></p> <p>From source to sea, the Thames 215 miles flow from springs in Gloucestershire through rural and developed areas to London and on to the imposing tidal estuary into the North Sea.</p>	<p><u>Star knowledge</u></p> <p>People use rivers for wildlife protection, creating electricity through the use of hydroelectric power, sport and recreation activities, such as fishing and canoeing.</p>	<p><u>Star knowledge</u></p> <p>As rivers flow down mountains, they erode the landscape vertically. They cut a V shape into the landscape, forming a valley.</p> <p>A glacier forms a U shape into the landscape.</p>
---	---	---	---	--

--	--	--	--	--	--	--	--	--

Flashback Four

<p>Last lesson Name three countries that Route 66 runs through.</p> <p><i>California, Arizona, New Mexico, Texas, Oklahoma, Kansas, Missouri, Illinois</i></p>	<p>Last topic Is Alaska a state or part of Canada? <i>A state</i></p>	<p>Last lesson Tell a partner the 4 stages of a river.</p> <p><i>Source, lower course, middle course, upper course, mouth.</i></p>	<p>Last topic Name three countries in South America. <i>Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Guyana, Paraguay, Peru, Suriname, Uruguay, and Venezuela</i></p>	<p>Last lesson What is the scientific name for water being released from clouds as rain, snow or hail? <i>precipitation</i></p>	<p>Last topic What is a province? <i>An area of land that is part of a country, similar to a state or a country.</i></p>	<p>Last lesson How many miles long is the River Thames? <i>215 miles</i></p>	<p>Last topic Name three states in North America. <i>(any of the 50 states named)</i></p>	<p>Last lesson Name three ways people use rivers. <i>Transport, water supplies for homes and industries, conservation e.g. wildlife protection.</i></p>	<p>Last topic What year was Route 66 established? <i>1926</i></p>
<p>Last year What is the climate like in the UK? <i>Temperate climate</i></p>	<p>Previous key stage What direction is Scotland and Wales from us? <i>Scotland- North Wales-West</i></p>	<p>Last year What is the equator? Where is it? <i>An imaginary line through the middle of the earth that seperates the Northern hemisphere from the southern hemisphere.</i></p>	<p>Previous key stage What and where is the highest mountain in the world? <i>Mount Everest in The Himalayas in Asia</i></p>	<p>Last year What is the tropic of cancer and Capricorn? <i>The tropic of cancer marks the northern edge of the world before the arctic circle whilst the tropic of Capricorn marks the southern edge of the earth before the Antarctic circle.</i></p>	<p>Previous key stage What is the difference between rivers, sea and oceans? <i>Oceans are large bodies of saltwater surrounding a continent. A river is a large flowing water body that empties itself into seas or oceans. A sea is smaller than an ocean.</i></p>	<p>Last year Name four UK seaside destinations. <i>(Naming any UK seaside destination e.g. Devon, st.ives, Tynemouth, Cornwall, Hunstanton, Southend etc.).</i></p>	<p>Previous key stage What are three of the seven wonders of the world? <i>The Great Pyramid of Giza, Egypt;</i> <i>The Hanging Gardens of Babylon;</i> <i>The Statue of Zeus at Olympia;</i> <i>The Temple of Artemis at Ephesus;</i> <i>The Mausoleum at Halicarnassus;</i> <i>The Colossus of Rhodes;</i> <i>The Lighthouse of Alexandria.</i></p>	<p>Last year What activities can families enjoy at the seaside? <i>Flying kites, rock pooling, building sandcastles, arcade, funfairs, crazy golf etc.</i></p>	<p>Previous key stage What are three major cities of the world? <i>Name any large city around the world e.g. Beijing, New York, Delhi, Moscow, Paris etc.</i></p>

