

Year: 9	Topic/Theme: UK's evolving physical landscape	Unit Title: Rivers	Term: 2.2
<p>Overview of SOW: A detailed study of rivers- the variety of river landscapes, processes and distinctive landforms along a rivers journey from source to mouth. Understanding the human and physical influences of flood risks and how these can be managed using a detailed case study.</p> <p>Knowledge:</p> <ul style="list-style-type: none"><li>• Why is there a variety of river landscapes in the UK?</li><li>• How do river processes form distinctive landforms</li><li>• How do climate, geology and slope processes affect different river landscapes</li><li>• How do OS maps help geographers investigate river landscapes</li><li>• How do physical and human activities affect storm hydrographs</li><li>• How do the physical and human processes interact to cause flooding (Sheffield case study)</li><li>• Why is the flood risk in the UK increasing and how can it be managed</li></ul> <p>Skills:</p> <ul style="list-style-type: none"><li>• Recognise &amp; describe distributions &amp; patterns of both human &amp; physical features at a range of scales using a variety of maps &amp; atlases</li><li>• Draw, label, annotate, understand &amp; interpret sketch maps</li><li>• Label &amp; annotate &amp; interpret different diagrams, maps, graphs, sketches and photographs</li><li>• Use &amp; interpret aerial, oblique, ground &amp; satellite photographs from a range of different landscapes</li><li>• Use maps in association with photographs &amp; sketches &amp; understand links to directions</li><li>• Use &amp; understand gradient, contour &amp; spot height on OS maps &amp; other isoline maps</li><li>• Interpret cross sections &amp; transects</li><li>• Identify questions or issues for investigation, develop a hypothesis and/or key questions</li><li>• Consider appropriate sampling procedures and sample size</li><li>• Consider health &amp; safety &amp; undertake risk assessment</li><li>• Select data collection methods &amp; equipment to ensure accuracy &amp; reliability, develop recording sheets for measurements &amp; observation</li><li>• Use of ICT to manage, collate, process &amp; present information in a suitable way</li><li>• Write descriptively, analytically &amp; critically about findings</li></ul> <p>End Point:</p> <ul style="list-style-type: none"><li>• Ability to analyse photos of landscapes and features</li><li>• Locate and recognise physical features on a map</li><li>• Complete and enquiry process appropriate to investigate</li><li>• Understand and draw simple hydrographs</li><li>• Using OS maps to draw valley cross sections</li><li>• Use cost benefit analysis to investigate river management</li></ul>			

<p>Prior Learning: (Linked Topics)</p> <p>Rivers (Year 8) Map skills (year 7)</p>	<p>National Curriculum Links:</p>	<p><b>GCSE (or A Level) AO Links:</b></p> <p><b>AO1:</b> Demonstrate knowledge of locations, places, processes, environments and different scales</p> <p><b>AO2:</b> Demonstrate geographical understanding of:</p> <p>a) Concepts &amp; how they are used in relation to places, environments &amp; processes</p> <p>The inter-relationships between places, environment &amp; processes</p> <p><b>AO3:</b> Apply knowledge and understanding to interpret, analyse and evaluate geographical information &amp; issues &amp; to make judgements</p> <p><b>AO4:</b> Select, adapt &amp; use a variety of skills &amp; techniques to investigate questions &amp; issues &amp; communicate findings</p>	<p>Opportunities for mastery/stretch and challenge:</p> <ul style="list-style-type: none"> <li>• HA assessment structure – less scaffolding after skills teaching.</li> <li>• HA questioning – more evaluative and less recall.</li> <li>• HA sources and texts used within lessons.</li> <li>• ‘Ask the teacher’ after reading sources and texts (structured questioning).</li> <li>• HA resources for homework tasks.</li> <li>• HA recommended reading lists.</li> <li>• Group work</li> </ul>
<p>Key words/Vocabulary:</p> <p><b>Geology</b> <b>Less resistant</b> <b>More resistant</b> <b>Faults</b> <b>Tectonic process</b> <b>Relief</b> <b>Upland</b> <b>Lowland</b> <b>Igneous</b> <b>Sedimentary</b> <b>Metamorphic</b> <b>Uplift</b> <b>Weathering</b> <b>Erosion</b> <b>Deposition</b> <b>Processes</b> <b>Glacial</b> <b>Valley</b></p>	<p>Personal Development &amp; SMSC:</p> <ul style="list-style-type: none"> <li>• Developing responsible, respectful and active citizens who are able to play their part and become actively involved in public life as adults</li> <li>• Developing and deepening pupils’ understanding of the fundamental British values of democracy, individual liberty, the rule of law and mutual respect and tolerance.</li> <li>• Developing pupils’ character, which we define as a set of positive personal traits, dispositions and virtues that informs their motivation and guides their conduct so that they reflect wisely, learn eagerly, behave with integrity and cooperate consistently well with others. This gives pupils the qualities they need to flourish in our society.</li> <li>• Developing pupils’ confidence, resilience and knowledge so that they can keep themselves mentally healthy.</li> <li>• Sense of enjoyment and fascination in learning about themselves, others and the world around them</li> <li>• Use of imagination and creativity in their learning</li> <li>• Willingness to reflect on their experiences</li> <li>•</li> </ul> <p>GCSE links to Edexcel paper 2 (UK Geographical issues)</p>	<p>Cultural Capital opportunities:</p> <ul style="list-style-type: none"> <li>• Direct links to Edexcel B GCSE content and skills (future pathways)</li> <li>• Develop an understanding and appreciation of the wide range of cultural influences that have shaped their own heritage and that of others</li> <li>• Develop an understanding and appreciation of the range of different cultures in the school and further afield as an essential element of their preparation for life in modern Britain</li> <li>• Develop an ability to recognise, and value, the things we share in common across cultural, religious, ethnic and socio-economic communities</li> <li>• Do we have a moral duty to protect our coastlines?</li> </ul>	

<p> <b>Till</b>  <b>Traction</b>  <b>Saltation</b>  <b>Solution</b>  <b>Suspension</b>  <b>Attrition</b>  <b>Abrasion</b>  <b>Hydraulic action</b>  <b>Biological weathering</b>  <b>Mechanical weathering</b>  <b>Mass movement</b>  <b>Flood plain</b>  <b>Levees</b>  <b>Alluvium</b>  <b>Velocity</b>  <b>Discharge</b>  <b>Thalweg</b>  <b>Meander</b>  <b>Helicoidal flow</b>  <b>Ox-bow lake</b>  <b>Floodplain</b>  <b>Source</b>  <b>Mouth</b>  <b>Confluence</b>  <b>Tributary</b>  <b>Delta</b>  <b>Long profile</b>  <b>Cross profile</b>  <b>Cross section</b> </p> <p><b>Key Questions (product/process/developmental):</b></p> <p>         Which river processes involve movement?          Identify the correct order of river processes?          Summarise the formation of flood plain?          Describe the shape of a typical long profile river?       </p>	<p>Low Stake Assessment:</p> <ul style="list-style-type: none"> <li>• Names</li> <li>• Keywords</li> <li>• Dates</li> <li>• Command words</li> <li>• Information retrieval from prior learning</li> <li>• Retrieval of key skills linked to question types</li> <li>• Information recall from case studies</li> <li>• GEOG knowledge starters</li> </ul> <p>Formative Assessment/AFL:</p> <p>PIT stop x2 Formative Assessment, unseen fieldwork questions</p> <p>Summative % Assessment links:</p> <p>pit stop termly exams</p>	<p>Group/Pair work opportunities:</p> <ul style="list-style-type: none"> <li>• Make relevant contributions to discussions, responding appropriately to others</li> <li>• Be flexible in discussion, making different kinds of contributions</li> <li>• Present information/points of view clearly and in appropriate language in formal and informal exchanges and discussions</li> <li>• Comment on the relevance of context and its effects on a text</li> <li>• Establish and develop their own opinion and evidence this from knowledge of case studies</li> </ul> <p>Talking Points (oracy/discussion) opportunities:</p> <ul style="list-style-type: none"> <li>• Debating points of view</li> <li>• Explaining theories/ model answers</li> <li>• Think-pair-share activities</li> <li>• Expressing evaluative opinions</li> </ul> <p>Cross Curricular links:</p> <p>science, maths</p>
--	---	--

<b>Weeks</b>	<b>Week overview – skills and knowledge</b>	<b>Directed Lessons</b>	<b>Resources</b> <i>(consider dual-coding WAGOLL)</i>	<b>Assessment/Revision Opportunities</b>	<b>Consolidation Homework</b>
<b>Week 1</b>	<p>To describe the role of geology and past processes in creating the UK's upland landscapes</p> <p>To identify and describe the main features of a river</p>	<ol style="list-style-type: none"> <li>1) To identify the past geological processes that created UK landscape.</li> <li>2) To define and understand the key processes in creating the UKs landscape and the different rock types</li> <li>3) To understand how past processes and geology created the UKs upland landscapes</li> <li>4) To identify key terms of a drainage basin</li> <li>5) To explain how each feature affects the River.</li> </ol>	Power point, handouts, Edexcel b GCSE text book	GEOG knowledge rapid recall Pitstop PLC	Rivers Exam questions and homework booklet
<b>Week 2</b>	<p>To know the different processes that change the landscape of a river – Erosion</p> <p>To understand the different processes of erosion, transport and deposition</p>	<ol style="list-style-type: none"> <li>1) To Define the types of erosion</li> <li>2) To explain how rivers erode</li> <li>3) To identify the four river transportation processes</li> <li>4) To define river deposition</li> <li>5) To explain how rivers transports and deposits load</li> </ol>	Power point, handouts, Edexcel b GCSE text book	GEOG knowledge rapid recall Pitstop PLC	Rivers Exam questions and homework booklet
<b>Week 3</b>	<p>To understand how a river changes during its course</p> <p>To identify and explain the main features in the upper course of a river</p>	<ol style="list-style-type: none"> <li>1. To identify the differences between long and cross profiles</li> <li>2. To explain how a river changes over its course.</li> <li>3. To identify the features of the upper course.</li> <li>4. To explain how a waterfall and gorge is formed.</li> <li>5. To explain the processes in creating a waterfall</li> </ol>	Powerpoint, handouts, Edexcel b GCSE text book	GEOG knowledge rapid recall Pitstop PLC	Rivers Exam questions and homework booklet

<p><b>Week 4</b></p>	<p>To identify and explain the main features in the middle course of a river.</p> <p>To identify and explain the main features in the Lower course of a river</p>	<ul style="list-style-type: none"> <li>• To identify the middle course features.</li> <li>• To identify the processes involved in the formation of a meander and oxbow lake.</li> <li>• To explain the formation of a meander and oxbow lake and why this occurs in the middle course.</li> <li>• To <b>draw</b> a cross section of a rivers lower course.</li> <li>• To <b>describe</b> flood plains and levees</li> <li>• To <b>explain</b> the formation of floodplains and levees</li> </ul>	<p>Powerpoint, handouts, Edexcel b GCSE text book</p>	<p>GEOG knowledge rapid recall Pitstop PLC</p>	<p>Rivers Exam questions and homework booklet</p>
<p><b>Week 5</b></p>	<p>Pitstop and Dirt lesson</p>	<p>Students to complete a 20 mark pitstop and DIRT Feedback</p>	<p>Power point, handouts, Edexcel b GCSE text book</p>	<p>GEOG knowledge rapid recall Pitstop PLC</p>	<p>Rivers Exam questions and homework booklet</p>
<p><b>Week 6</b></p>	<p>To identify what flood hydrographs show and explain what affects them.</p> <p>To examine how the interaction of physical and human processes caused flooding in Sheffield in 2007</p>	<ol style="list-style-type: none"> <li>1. To draw a hydrograph and label it</li> <li>2. To understand the differences in hydrographs</li> <li>3. To explain why hydrographs differ</li> <li>4. <b>Identify</b> the impacts of flooding</li> <li>5. <b>Categorise</b> the impacts into social, economic, and environmental</li> <li>6. <b>Evaluate</b> the role of physical and human processes on flooding</li> </ol>	<p>Power point, handouts, Edexcel b GCSE text book Fieldwork booklet (Coasts)</p>	<p>GEOG knowledge rapid recall Pitstop PLC</p>	<p>Rivers Exam questions and homework booklet</p>
<p><b>Week 7</b></p>	<p>To explain how increasing risks from flooding effect peoples lives and the environment.</p> <p>To identify and examine the main ways of flooding</p>	<ol style="list-style-type: none"> <li>1. Will identify flood threats to the somerset levels</li> <li>2. Explain why flood risks are increasing in the UK</li> <li>3. To identify the two types of management (Hard and soft engineering)</li> <li>4. Explain which method of defence is best</li> <li>5. Evaluate why soft engineering is the preferred method of defence</li> </ol>	<p>Power point, handouts, Edexcel b GCSE text book Fieldwork booklet (Coasts)</p>	<p>GEOG knowledge rapid recall Pitstop PLC</p>	<p>Rivers Exam questions and homework booklet</p>