|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year 8: World of Water  Autumn term: half term 2 (7 weeks):  **Why are we studying this unit of work?**  This unit is designed to build upon the Year 7 curriculum. It allows pupils to develop their knowledge and understanding of river processes, the landforms that shape our land which are created by these processes. Pupils will also develop their knowledge and understanding of physical Geography, making links to Human Geography through the impacts of flooding. This unit will allow pupils to build upon their geographical skills.  **How does this unit build on students’ prior learning?** This unit builds on the foundations that have been introduced in Year 7, allowing pupils to develop a more complex understanding of Physical Geography, building on their understanding of Geology from the Rocky World SOW at the end of Year 7. It will allow pupils to link river processes to rock type and weather which they studied in Year 7. Pupils needed to gain an understanding of both topics before be able to build that knowledge into their World of Water unit.  **How does this unit provide a foundation for future learning?** It also provides a foundation for the KS4 unit of Physical landscapes in the UK where pupils will build a more complexed understanding of two topics from River Landscapes in the UK, Coastal Landscapes in the UK or Glacial Landscapes in the UK.  **Careers/SMSC:**  Geology – links to Science. Skills builder: Team work, Problem Solving, Aim High, Speaking and Listening. Careers – council worker, engineer, environmental surveyor, tourist industry.  **Summative assessment:** Assessments covering this topic, prior learning from Year 7, a range of Geographical skills and understanding of key terminology.  **End points:**  Lower ability: Student can: State the physical processes that shape the landscape. Describe the formation of erosional landscapes. Describe the advantages and disadvantages of hard engineering strategies. Use geographical skills to correctly locate some river features using 4 figure grid references.  Middle ability: In addition to the basic response students can: Describe the physical processes that shape the landscape. Describe the formation of river landscapes created by erosion and/or depositional processes. Explain the strategies that are used to manage the river landscape. Use geographical skills to correctly locate some river features using 4 and 6 figure grid references. Begin to use annotated diagrams and images to support written answers.  Higher ability: In addition to the clear response student can: Locate river features in the UK using specific detail and explain the physical processes that shape the landscape. Explain the formation of river landscapes created by erosional and/or depositional processes. Evaluate the strategies used to manage the river landscape for both hard and soft engineering strategies using specific detail. Use cartography skills to accurately state 4 and 6 figure grid references for multiple river features. Successfully use annotated diagrams and images to support with written exam answers.  Literacy Focus:   * SPaG – Spelling * Vocabulary – Frayer/PUSH * Oracy – SLANT/Paired talk/Sentence Stems * Writing – Extended writing using writing frames and modelling * Reading – Inference | | | | | |
| Time | Non negotiables | | | Adapt to the needs of the class | |
| Key Idea | Content | Key Vocabulary / Case Study | Suggested approaches to learning and resources | Assessment/Homework/Cross-curricular links |
| 1. | What does a River look like?  (1 lesson) | Know more:  What is the drainage basin?  Do more:  Explain the long profile of a river.  Go further: Use problem solving to label a drainage basin with key terminology. | PUSH: Drainage basin | Connect: flashback recall  Content:  Use images to begin to discuss what a drainage basin is, and then break down the word into some key meanings ‘Drain’ and ‘Basin’.  Stick the key terms for the half term into their books and use them to then label the features of a drainage basin.  Video of a long river profile – annotate the image with the characteristics and features that are found there.  Looking at the cross section of a river and annotate what it tells us about the shape of the river at each stage.  Checkpoint: What does a River look like?  Concentration: Describe differences in river characteristics through the long profile of a river.  Consolidation: Exit ticket  **Challenge:**  **Support:**  **Notes:** | Self-assessment |
| 2. | How does a river transport material?  (1 lesson) | Know more:  What are the process of transportation within a river system?  Do more:  Explain the different ways that a river can transport material.  Go further: Use teamwork to discuss definitions for the key processes of erosion, transportation and deposition. |  | Connect: flashback recall  Content:  Recap the 4 types of erosion – Think, pair, share. Which section of the river do you think this would happen in?  Video on how a river transports material – annotate an image  Recap the term deposition – how do you think this would impact the river features? Which section of the river do you think this would happen in?  Checkpoint: How does a river transport material?  Concentration: Explain the four different types of transportation in rivers.  Consolidation: 5,3,1 task  **Challenge:**  **Support:**  **Notes:** | Exit ticket |
| 3. | Which features are created by rivers?  (1 lessons) | Know more:  Which features are created by erosion along a river?  Do more:  Explain the formation of a waterfall and a gorge.  Go further: Use problem solving to answer grid reference questions using OS maps. |  | Connect: flashback recall  Content:  Recap – the 4 erosional processes.  Image of a waterfall – class discussion about how they think this was formed.  Video about the formation of a waterfall and a gorge. Students to answer the questions during the video.  On whiteboards – I do, we do, you do to explain the formation of a waterfall.  Map work OS maps and looking for waterfalls and gorges – practicing grid references  Checkpoint: Which features are created by erosion along a river?  Concentration: Explain the formation of a waterfall and a gorge using a diagram to help.  Consolidation: Traffic light questions (red=hard, orange= medium, green = easy)  **Challenge:**  **Support:**  **Notes:** | Whole class feedback |
| 4. | Which features are created by rivers?  (1 lesson) | Know more:  Which features are created by erosion and deposition along a river?  Do more:  Explain the processes involved in the formation of a meander and an oxbow lake.  Go further:  Aim high to explain the formation of a meander and ox-bow lake using a figure. |  | Connect: flashback recall  Content:  Recap deposition definition.  Picture of a meander and an ox bow lake. Think pair share to discuss what this feature might be and how it may form – linking to erosion and deposition.  Video to explain the process.  Whiteboards – I do, we do, you do for the formation of a meander and ox bow lake.  Checkpoint: Which features are created by erosion and deposition along a river?  Concentration: Study the photograph of Cuckmere Haven.  Using the photograph, explain the processes involved in the formation of the landforms shown.  Consolidation: Write down one question to ask your partner about today's learning.  **Challenge:**  **Support:**  **Notes:** | Live |
| 5 | Which features are created by rivers?  (1 lesson) | Know more:  Which features are created by deposition along a river?  Do more: Explain the processes involved in the formation of floodplains and deltas.  Go further:  Aim high to explain how multiple features along a river are created by deposition. |  | Connect: flashback recall  Content:  Recap deposition definition.  Picture of a floodplain and delta. Think pair share to discuss what this feature might be and how it may form – linking to deposition.  Video to explain the process.  Whiteboards – I do, we do, you do for the formation of a floodplain and delta.  Checkpoint: Which features are created by deposition along a river?  Concentration: Explain the processes involved in the formation of floodplains and deltas, use an image to support your answer.  Consolidation: 3,2,1  **Challenge:**  **Support:**  **Notes:** | Self-assessment |
| 6 | Why do rivers flood?  (1 lesson) | Know more:  What are the causes of river flooding in the UK?  Do more: Explain the causes of river flooding in the UK.  Go further:  Use problem solving to explain human and physical factors that lead to flooding. |  | Connect: flashback recall  Content:  Recap Boscastle and the causes of floods then to think about why other areas of the coast may flood.  Put a picture that shows both human and physical features that cause flooding – annotate. Challenge: do human or physical factors have the biggest impact?  Checkpoint: What are the human causes of river flooding in the UK?  Concentration: Flooding is mostly caused by humans. To what extent do you agree? (smart writer to support)  Consolidation: 5 true or false questions  **Challenge:**  **Support:**  **Notes:** |  |
| 7 | What are the impacts of river flooding?  (1 lesson) | Know more:  How do floods impact people?  Do more: Explain the social, economic and environmental impacts from flooding.  Go further:  Use creativity to create a diary entry explaining the impacts that floods have on people and the environment. |  | Connect: flashback recall  Content: Location description of Morpeth.  OS map work – what is the surrounding landscape like (link to both human and physical causes of flooding)  Class discussion - Why do you think Morpeth floods?  Smart reader about the impacts that it has had on people, economy and the environment.  Checkpoint: What are the social impacts of flooding?  Concentration: Write a diary entry about how you have been affected by the flood in Morpeth.  Consolidation: create a social media post to explain how the flood has impacted your local area.  **Challenge:**  **Support:**  **Notes:** | Exit ticket |
| 8 | How can management strategies be used to prevent river flooding? (1 lesson) | Know more:  How can we prevent rivers from flooding?  Do more: Explain the costs and benefits for multiple strategies used to prevent river flooding.  Go further:  Use problem solving to complete a table about the costs and benefits of river management strategies. |  | Connect: flashback recall  Content:  Recap of hard and soft engineering definitions from coasts topic.  Complete Move around the room to gather the information to complete the table.  Checkpoint: What hard engineering strategies can prevent river flooding?  Concentration: Explain the advantages and disadvantages of hard engineering strategies used to prevent river flooding.  Consolidation: Summarise todays learning into 30 words or less.  **Challenge:**  **Support:**  **Notes:** |  |
| 9 | How have Morpeth managed their river?  (1 lesson) | Know more:  What strategies have Morpeth used?  Do more: Evaluate the strategies used in Morpeth to prevent flooding.  Go further:  Aim high to evaluate river management strategies used in Morpeth to prevent river flooding. |  | Connect: flashback recall  Content: Recap what the impacts of flooding were in Morpeth.  Images of the management strategies they have used. Discuss what the advantages and disadvantages of them are based on the knowledge from last lesson.  Discuss when the last flood happened and whether they think the strategies have worked.  Checkpoint: What strategies have Morpeth used to prevent river flooding?  Concentration: Have the strategies used by Morpeth to prevent further flooding been successful?   * Include some of the impacts from previous lessons and advantages and disadvantages of the strategies.   Consolidation: Mini Quiz  **Challenge:**  **Support:**  **Notes:** | Teacher assessment |