

High Tunstall College of Science Curriculum Intent

Subject: Geography Year: 10 Half term: 5/6

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| **Unit: Living with the Physical Environment – Physical Landscapes in the UK: Rivers** | **Progress** |
| **Key ideas** | **R** | **A** | **G** |
| The shape of river valleys change as rivers flow downstream (CGP p49) |   |   |   |
| Distinctive fluvial landforms result from different physical processes (CGP p50-55) |   |   |   |
| Different management strategies can be used to protect river landscapes from the effects of flooding (CGP p56-58) |   |   |   |

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| **Lesson** | **Learning Focus** | **Assessment** | **Key Words** |
| **1** | Long profile and changing cross profile of a river and its valley  | * Exam question how does a river and it’s valley change downstream
 | Cross profile, Long profile.  |
| **2** | Fluvial Processes:Erosion; abrasion, hydraulic power, solution, attrition (ASHA)  | * Kinaesthetic activity to show recall of processes
 | Fluvial processes, Abrasion, Attrition, Hydraulic action. |
| **3** | Fluvial Processes:Vertical and lateral erosion | * Annotated diagram
 | Lateral erosion, Vertical erosion. |
| **4** | Fluvial Processes:Transportation; traction, saltation, suspension, solution (TSSS)Deposition | * Kinaesthetic activity to show recall of processes
* Exam question on processes of transportation
 | Saltation, Solution, Suspension, Traction. |
| **5** | Characteristics and formation of landforms resulting from erosion: interlocking spurs, waterfalls and gorges | * Waterfall Scripting
* Annotated Cross-sections
* Annotated sketch of High Force
* CGP Exam Q ILO from Urban Issues & Challenges
 | Gorge, Interlocking spurs, Waterfall. |
| **6** | Characteristics and formation of landforms resulting from erosion and deposition: meanders and ox-bow lakes  | * Sequenced diagrams with annotations.
 | Meander, Ox-bow lake. |
| **7** | Characteristics and formation of landforms resulting from deposition; levees and flood plains, estuaries | * Annotated photos of estuary of the Tees.
* Annotated satellite image of the Tees estuary
* OS map extract work
* Most Likely To…
* Triple Challenge
 | Estuary, Flood plain, Levees. |
| **8** | River Landscapes on OS maps | * Tewkesbury OS Map
* OS map extract work
 | See above. |
| **9** | **Case Study: The River Tees, NE England** | * Worksheet
* Word Art River Tees
 | See above. |
| **10** | Human and physical factors affecting flood risk Precipitation, geology, relief, land use | * Annotated diagram of river basin system
* Dr Pepper Scenarios
* Exam question
* CGP Exam Q ILO from Urban Issues & Challenges
 | Flood, Flood risk, Precipitation. |
| **11** | Hydrographs to show the relationship between precipitation and discharge | * Hydrograph worksheet
 | Discharge, Hydrograph. |
| **12** | Hard engineering; dams & reservoirs, straightening, embankments, flood relief channels | * Strategy match
* Plenary Dave: ‘Hard engineering strategies are the best way to deal with flooding’
 | Dam and reservoir, Embankments, Flood relief channels, Hard engineering, (Channel) straightening. |
| **13** | Costs and benefits of management strategies:Soft engineering; flood warnings & preparation, flood plain zoning, planting trees, river restoration | * Strategy match
* Plenary Dave: ‘Hard engineering strategies are the best way to deal with flooding’
* Exam question
 | Flood warning, Flood plain zoning, Soft engineering. |
| **14** | **Case Study: Oxford, Southern England or Somerset Levels;** why the scheme was required**;** the management strategy**;** social, economic and environmental issues | * Exam question
* Revision ILO for end of unit assessment.
 | See above. |
| **15** | Assessment in exam conditions. | * UK Physical Landscapes exam from 2 years’ previous 30 marks summative assessment
 | All the above. |