

## Geography - Year 10 - Manifest

## Paper 1 - Living with the Physical Environment

## 45 minutes - 35% OF THE GCSE

<b>Content overview</b> : Unit 1 – Living with the physical environment; Section C			R	А	G
<u>S</u>	Section C: Physical landscapes in the				
In this section, students are required to study <u>UK physical landscapes</u> and <u>Coastal</u> <u>landscapes in the UK</u> , <u>River landscapes in the UK</u>					
UK physical landscapes					
	Key idea	Specification content			
	The UK has a range of diverse landscapes.	An overview of the location of major upland/lowland areas and river systems.			
C	Coastal landscapes in the UK				
	Key idea	Specification content			
	The coast is shaped by a number of physical processes.	<ul> <li>Wave types and characteristics.</li> <li>Coastal processes: <ul> <li>weathering processes – mechanical, chemical</li> <li>mass movement – sliding, slumping and rock falls</li> <li>erosion – hydraulic power, abrasion and attrition</li> <li>transportation – longshore drift</li> <li>deposition – why sediment is deposited in coastal areas.</li> </ul> </li> </ul>			
	Distinctive coastal landforms are the result of rock type, structure and physical processes.	How geological structure and rock type influence coastal forms. Characteristics and formation of landforms resulting from erosion – headlands and bays, cliffs and wave cut platforms, caves, arches and stacks. Characteristics and formation of landforms resulting from deposition – beaches, sand dunes, spits and bars.			

	An <b>example</b> of a section of coastline in the UK to identify its major landforms of erosion and deposition.
Different management strategies can be used to protect coastlines from the effects of physical processes.	The costs and benefits of the following management strategies:
	<ul> <li>hard engineering – sea walls, rock armour, gabions and groynes</li> </ul>
	<ul> <li>soft engineering – beach nourishment and reprofiling, dune regeneration</li> </ul>
	<ul> <li>managed retreat – coastal realignment.</li> </ul>
	An <b>example</b> of a coastal management scheme in the UK to show:
	• the reasons for management
	• the management strategy
	• the resulting effects and conflicts.
liver landscapes in the UK	
Key idea	Specification content
The shape of river valleys changes as rivers flow downstream.	The long profile and changing cross profile of a river and its valley.
	Fluvial processes:
	<ul> <li>erosion – hydraulic action, abrasion, attrition, solution, vertical and lateral erosion</li> </ul>
	<ul> <li>transportation – traction, saltation, suspension and solution</li> </ul>
	<ul> <li>deposition – why rivers deposit sediment.</li> </ul>
Distinctive fluvial landforms result from different physical processes.	Characteristics and formation of landforms resulting from erosion – interlocking spurs, waterfalls and gorges.
	Characteristics and formation of landforms resulting from erosion and deposition – meanders and ox-bow lakes.
	Characteristics and formation of landforms resulting from deposition – levées, flood plains and estuaries.
	An <b>example</b> of a river valley in the UK to identify its major landforms of erosion and deposition.
Different management strategies can be used to protect river landscapes from the effects of flooding.	How physical and human factors affect the flood risk – precipitation, geology, relief and land use.
	The use of hydrographs to show the relationship between precipitation and discharge.
	The costs and benefits of the following management strategies:
	<ul> <li>hard engineering – dams and reservoirs, straightening,</li> </ul>

embankments, flood relief channels		
<ul> <li>soft engineering – flood warnings and preparation, flood plain zoning, planting trees and river restoration.</li> </ul>		
An <b>example</b> of a flood management scheme in the UK to show:		
• why the scheme was required		
• the management strategy		
<ul> <li>the social, economic and environmental issues.</li> </ul>		