



YEAR 12 Physical Geography Autumn TERM

'An ambitious curriculum that meets the needs of all'

Medium Term Planning - Topic: Coasts & Coastal Landforms

Curriculum Intent	<p>In addition to working further on objectives from Years 7 – 12, pupils will be taught, following the AQA A-level specification, the following this term:</p>
Skills/Assessment Objective Links	<p>Coasts as natural systems Systems in physical geography: systems concepts and their application to the development of coastal landscapes – inputs, outputs, energy, stores/components, flows/transfers, positive/negative feedback, dynamic equilibrium. The concepts of landform and landscape and how related landforms combine to form characteristic landscapes.</p> <p>Systems and processes Sources of energy in coastal environments: winds, waves (constructive and destructive), currents and tides. Low energy and high energy coasts. Sediment sources, cells and budgets. Geomorphological processes: weathering, mass movement, erosion, transportation and deposition. Distinctively coastal processes: marine: erosion – hydraulic action, wave quarrying, corrasion/abrasion, cavitation, solution, attrition; transportation: traction, suspension (longshore/littoral drift) and deposition; sub-aerial weathering, mass movement and runoff.</p> <p>Coastal landscape development The relationship between process, time, landforms and landscapes in coastal settings. Origin and development of landforms and landscapes of coastal erosion: cliffs and wave cut platforms, cliff profile features including caves, arches and stacks; factors and processes in their development. Origin and development of landforms and landscapes of coastal deposition. Beaches, simple and compound spits, tombolos, offshore bars, barrier beaches and islands and sand dunes; factors and processes in their development. Estuarine mudflat/saltmarsh environments and associated landscapes; factors and processes in their development. Eustatic, isostatic and tectonic sea level change: major changes in sea level in the last 10,000 years. Coastlines of emergence and submergence. Origin and development of associated landforms: raised beaches, marine platforms; rias, fjords, Dalmatian coasts. Recent and predicted climatic change and potential impact on coasts.</p> <p>Coastal management Human intervention in coastal landscapes. Traditional approaches to coastal flood and erosion risk: hard and soft engineering. Sustainable approaches to coastal flood risk and coastal erosion management: shoreline management/integrated coastal zone management.</p> <p>Case studies Case study(ies) of coastal environment(s) at a local scale to illustrate and analyse fundamental coastal processes, their landscape outcomes as set out above and engage with field data and challenges represented in their sustainable management. Case study of a coastal environment beyond the United Kingdom (UK) to illustrate and analyse coasts as presenting risks and opportunities for human occupation and development. Evaluation of human responses of resilience, mitigation and adaptation.</p>
	<p>Spiritual, moral, social, and cultural development SMSC: PSHE/British Values: Skills Builder: radial graphs, mann whitney statistics, spearman's rank statistics.</p>
Numeracy	
Literacy	<p>Vocabulary Tier 2: Analyse, annotate, assess, calculate, critically, define, describe, discuss, evaluate, examine, explain, interpret, justify, outline, interpret, to what extent, economic, political, social, environmental, local, regional, national, international. Vocabulary Tier 3: key words are in course booklets Reading: Research case studies of Holderness and Odisha. Writing: Essay writing practice throughout the topic.</p>

	Oracy: discussion and debate regarding the issues explored throughout the entire topic as outlined
Becoming future ready	Careers/Employability: coastal engineers, geologists, planning officer, sustainability officer.
Adaptation	Throughout this topic, quality first teaching will provide differentiation:
QFT/SEND Provision	<p>By product: different learners are asked to present outcomes in a different way via pieces of writing, targeted questioning, models and drawings and speaking.</p> <p>By resource: Booklets are clearly presented and accessible. Instructions are clearly outlined and separate from the information so that pupils know where to begin and end.</p> <p>By Intervention: by providing different levels of supervision and support.</p> <p>By Progressive Questioning: exploring pupils' understanding through interactive dialogue.</p> <p>By Grouping: according to prior attainment, gender, social preference.</p> <p>By Task: Pupils should be involved in the identification of targets which are meaningful to them and in the selection of an appropriate task from the given range.</p> <p>By Offering Optional Activities: In class or as homework, to extend learning.</p>
Implementation Curriculum Delivery	To be able to:
Learning Outcomes (Knowledge)	<ul style="list-style-type: none"> • describe and explain the coastal system as a natural system • give the sources of energy at the coast • explain sediment sources, cells and budgets • describe and explain the sub-aerial processes of Weathering, Mass movement and Runoff • describe and explain Marine processes - erosion, transportation and deposition • identify, describe and explain landforms and landscapes of coastal erosion • identify, describe and explain landforms and landscapes of coastal deposition • use a case study to exemplify coastal processes on the Holderness coastline. • explain Sea level change • identify, describe and explain coastlines of submergence and emergence and associated landforms • describe and explain the impact of present and predicted sea level increase. • identify, describe and explain coastal management strategies of hard and soft engineering • examine a case study of hard engineering • examine a case study of soft engineering • describe and explain sustainable integrated approaches • use a case study to exemplify a contrasting coastline can present risks and opportunities for humans • evaluate human responses of resilience, mitigation and adaptation. <p>Red denotes interleaving; aspects of knowledge covered previously.</p>
Current learning to be developed in the future within:	<p>The impacts of climate change on the coastal system in terms of sea level change.</p> <p>Impacts of climate change on tropical storms</p> <p>The impacts of tsunamis.</p>
Assessment	Refer to assessment maps for formative and summative assessment opportunities.
Impact	Attainment and Progress – Refer to assessment results / data review documentation.

