

12 Year Physical Geography

Curriculum Intent: Students will study three key units of Paper 1. Students will develop a firm understanding of Coastal Processes and their associated landforms, hazards and management. This is a large topic at A Level that builds on the knowledge and understanding gained at GCSE. Students will develop their understanding through reference to real world examples. This is followed by topics of Water and Carbon. Both very contemporary geography topics exploring security and sustainable strategies to combat local, regional and global issues. Both topics rely on a strong all round geographical understanding of both physical process and human development to explore causes of issues, human impacts and sustainable strategies. This means that 3 out of the 4 units on the Physical Geography Paper (paper 1) are covered in Year 12. Leaving Tectonics and Fieldwork NEA to be completed in Year 13 and leave time for revision and examination preparation.



Unit title: Paper 1

Term 1 Coasts

Term 2 Water

Term 3 Carbon

Topic Titles (in order of delivery)

1. Why are coastal landscapes different and what processes cause these differences
2. How do characteristic coastal landforms contribute to coastal landscapes

3. How do coastal erosion & sea level change alter the physical characteristics of coastlines and increase risks?
4. How can coastlines be managed to meet the needs of all players?

1. What are the processes operating within the hydrological cycle from global to local scale
2. What factors influence the hydrological system over short time scales

3. What factors influence the hydrological system over long term timescales
4. How does water insecurity occur and why is it becoming such a global issue for the 21st century

1. How does the carbon cycle operate to maintain planetary health?
2. What are the consequences for people and environment of our increasing demand for energy?

3. What are the consequences for people and environment of our increasing demand for energy?
4. How are the carbon and water cycles linked to the global climate system?

Key knowledge / Retrieval topics

Physical Processes including erosion, transportation, deposition, weathering & mass movement. Geology & lithology Sediment cells Landforms Holderness & Swanage

Understanding Sea Level Change Coastal Flooding including Bangladesh Management – Hard, Soft, Holistic Range of located coastal landscapes from around the world.

Hydrological Cycle Water Budgets Hydrographs ENSO` Drought Flooding Regional insecurity: Aral sea China California Australia Sahel

Climate change & changing water budgets Water Poverty Index Water sharing Hard & Soft engineering inc traditional & modern technology China, Israel, Singapore Helsinki Rules Nile Treaty Colorado

Geological CC Biological CC Stores & Fluxes Sequestration Greenhouse Effect Energy Security Energy Mix OPEC, TNCs Fossil Fuels Energy Pathways Bio Fuels

CCS, Hydrogen Fuel Cells, Electric Vehicles Radical Technology Deforestation Peatlands & Coral Ocean Acidification Drought in Amazon Kuznet Curve Responding to Climate Change Tipping Point Adaption & Mitigation

	Coastlines					
Understanding / Sequence of delivery	<ol style="list-style-type: none"> 1. Coastal Processes 2. Landforms and Landscapes 	<ol style="list-style-type: none"> 3. Coastal Risks 4. Management Strategies 	<ol style="list-style-type: none"> 1. Hydrology 2. Hazards inc ENSO, flooding & drought 	<ol style="list-style-type: none"> 3. Climate Change 4. Insecurity 5. Conflict 6. Management, policy & agreement 	<ol style="list-style-type: none"> 1. Carbon cycle 2. Energy security 3. Energy players 4. Traditional sources of energy FF & renewable 	<ol style="list-style-type: none"> 5. Radical Technology 6. Treats 7. Ocean Acidification 8. Implications for wellbeing 9. Uncertain future

Assessment CAT Test and feedback lesson as the last 2 lessons for each topic. Selected 12 and 20 mark questions completed for Homework will also be used to formalise the Progress Report grades.

Assessment POP Text in November of Term 1: Coasts up to the end of first half term.

Assessment End of Year Exam: Full section on Coasts & Water. Carbon Term 3a.