

Paper 1 – Most likely exam topics and case studies based on last years paper

Section 1 – The challenge of Natural Hazards – **Earthquakes and volcanoes**

1. Direction of plate movement in Constructive, Destructive, Conservative and Collision margins
2. How Convection currents move plates
3. How a conservative margin causes earthquakes
4. How a destructive margin causes volcanoes and earthquakes
- 5. Earthquakes case studies – Different effects and Responses to earthquakes in Chile and Nepal**
6. Prediction, planning and Protection for tectonic hazards (especially earthquakes)

Section 1 – The challenge of Natural Hazards – **Climate change**

1. How the Greenhouse effect works
2. Human causes of climate change (Power. Transport and Farming)
3. Earth's orbit, volcanoes and climate change
4. Ways of reducing (mitigating) climate change (renewable energy, afforestation)
- 5. Examples of extreme weather in the UK and their effects – Somerset floods**
6. Reasons why weather is becoming more extreme in the UK (Climate change)

Section 1 – The challenge of Natural Hazards – **Tropical storms**

1. Why do tropical storms form in the tropics
2. Features of a tropical storm (eye, shape, wind speed)
3. Hazards of tropical storms (storm surge, intense rainfall, extreme wind)
4. Sequence of weather as a tropical storm passes
5. Prediction, Planning and Protection for tropical storms

Section 2 – The Living world – **Tropical and cold environments**

1. The climate of the tropical rainforests
2. Adaptions of vegetation to cold environments
3. Threats to cold environments (climate change and economic activity)
4. National and international protection of cold environments
- 5. Case study of Protection of cold environments Arctic (Alaska) and Antarctic**

Section 3 – Physical Landscapes in the UK - **Coasts**

1. Types of coastal processes
2. Different types of erosion
3. How long shore drift and deposition form spits and beaches
4. How a sand dune forms and changes over time
5. How a cliff erodes and retreats over time
- 6. EXAMPLE How Old Harry formed and may change in the future**
7. Methods of soft engineering coastal management
8. Managed retreat – How it works and its benefits/problems

Section 3 – Physical Landscapes in the UK – **Rivers**

1. A river profile and changing river valley shape (upper, middle and lower course)
2. Formation of a waterfall, V shaped valley and floodplain with levees
- 3. Example - Features along a typical river valley – River Tees**
- 4. Case study - Effects of flooding and types of flood management - Boscastle**
5. Flood plain zoning and soft engineering