1. Living with the Physical Enviroment

1.1. The challenge of Natural Hazards

Year 10 Unit 2	Title: Coastal Landscapes
Why are you teaching it? **What do they need to know? Misconceptions?**	● **Specification link:** ○ **This is a compulsory topic in AQA Paper 1: Living with the Physical Environment. It builds knowledge of tectonic processes, atmospheric hazards, and climate change — all of which are core to GCSE success.** ● **Relevance & importance:** ○ **Natural hazards are highly topical, with frequent global examples (earthquakes, tropical storms, wildfires, heatwaves).** ○ **Gives students essential knowledge to understand global challenges, resilience, and sustainability.** ○ **Prepares students to critically evaluate news and media coverage of disasters.** ● **Skill development:** ○ **Develops geographical enquiry skills: interpreting maps, graphs, and data.** ○ **Strengthens literacy through extended writing (6- and 9-mark questions).** ○ **Builds numeracy through analysing graphs, climate data, and hazard distribution.** ○ **Oracy developed through debates (e.g., hazard management effectiveness).** ● **Cultural capital:** ○ **Increases global awareness by studying hazards in both HICs and LICs.** ○ **Builds empathy for communities impacted by disasters.** ○ **Links to wider debates on climate change and sustainable futures.**
Why are you teaching it now? What **prior learning** do students have?	● From KS3 Geography: ○ Introduction to plate tectonics and basic hazard types. ○ Understanding of weather patterns, the water cycle, and climate zones. ○ Map skills, including locating physical features and plotting global data. ● From Science: ○ Knowledge of energy transfer, rock cycle, and the greenhouse effect. ○ Understanding of processes such as convection and atmospheric circulation. ● From Maths: ○ Interpreting graphs, percentages, averages, and trends. ○ Using scale and coordinates on maps. ● From Literacy/English:

	○ Writing structured explanations and evaluations using PEEL/PEE paragraphs. ○ Reading comprehension of case study material.
What are you expecting students to be able to do at the end of the module that they couldn't do at the start	● Tectonic Hazards: ○ Explain plate tectonic theory (convection currents, plate boundaries, hotspots). ○ Describe and explain the distribution of volcanoes and earthquakes. ○ Apply case studies (e.g., Nepal 2015 vs. Chile 2010) to show impacts and responses. ● Weather Hazards: ○ Understand global atmospheric circulation and how it influences weather. ○ Describe formation and impacts of tropical storms, with case studies (e.g., Typhoon Haiyan, UK heatwaves). ○ Understand UK weather hazards and impacts of extreme events. ● Climate Change: ○ Explain natural and human causes of climate change. ○ Evaluate evidence for climate change and future projections. ○ Assess strategies for mitigation and adaptation (individual, national, global scale). **Skills** ● Interpret distribution maps, graphs, and climate data. ● Annotate diagrams of plate boundaries and storm formation. ● Write structured answers for 6- and 9-mark exam-style questions. ● Evaluate case studies using evidence, examples, and comparisons. **Oracy** ● Confidently explain processes aloud (e.g., convection currents, storm formation). ● Debate effectiveness of hazard management strategies. ● Use geographical terminology precisely when presenting. **Literacy** ● Apply tier-3 vocabulary (convection currents, mitigation, adaptation, hazard risk). ● Write extended answers with clear evaluation. ● Summarise complex case studies into concise, exam-ready notes. **Numeracy** ● Interpret and analyse graphs (earthquake magnitude, frequency, storm tracks, CO_2 levels). ● Calculate percentages, ratios, and changes over time from data sets. ● Use scale and coordinates when analysing hazard distribution maps.
As a result of assessment what % of students can achieve these focus skills.	Mastered (18+) = Secure (13-17) = Developing (8-12) =

	Emerging (0-7) =
What **amendments** are you going to make following evaluation of this module?	-

1.1.1. Tectonic Hazards

Lessons	Key Content	Student Activities	Key Objectives
Lesson 1 Tectonic Hazards	Basic theory of plate tectonics	Draw a diagram to show the different layers and their characteristics	Students should understand the basic theory of plate tectonics and the different layers of the earth
Lesson 2 Plate Margins	$ plate boundaries and the occurrence of earthquakes and volcano's	Draw the 4 plate boundaries and complete a table explaining the characteristics of each	Students need to understand what happens at the different plate boundaries and be able to identify where earthquakes and volcano's occur
Lesson 3 Earthquakes	Describing the elements of earthquakes		Characteristics of earthquakes and distinguish between the Richter scale,
Lesson 4 and 5 Comparing Impacts	Students have to compare the impacts and responses of two different earthquakes in two different countries : 1 LIC and 1 HIC	Students compare the impact and responses in a table	Students need to understand that Natural disasters have very different impacts on different countries at different Levels of Development
Lesson 4 and 5 Comparing Impacts	Students have to compare the impacts and responses of two different earthquakes in two different countries : 1 LIC and 1 HIC	Students compare the impact and responses in a table	Students need to understand that Natural disasters have very different impacts on different countries at different Levels of Development
Lesson 6 Responses	Students look at responses to two different earthquakes	Students compare two different earthquakes and the responses : Nepal and New Zealand	Links with previous lesson to show the practical implications that responses have due to economic development
Lesson 7 Plan, Predict and Preparation	What are the measures we can take to limit the damage	Students prepare a list of the most important actions to Plan, Prepare and Predict	How are 3 PPPs related to the economic status
Lesson 8 :Why do people live in areas of high risk	Advantages and disadvantages of living in areas of high risk	Various activities	What are the advantages of living in areas of high risk
Lesson 9 Assessment	Assessment	Assessment and feedback	Assessment and feedback

1.1.2. Weather Hazards

Lessons	Key Content	Student Activities	Key Objectives
Lesson 1 Global Circulation Models	Look at the characteristics of air pressure : High Pressure / Low Pressure and the three circulation cells	Students have to draw the basics circulation model (side view and top view)	Content : High pressure and low , Hadley / Ferrel and Polar and how this effects the location of certain ecosystems
Lesson 2 Tropical storms	The structure of TS and where they occur in the world / Conditions for formation	Students need to draw the location of Tropical storms and complete a quiz	Location of TS and the conditions for formation. The difference between the Northern and Southern Hemisphere
Lesson 3 : Case Study : Typhoon Haiyan	Impact of Typhoon Haiyan	Students have info sheet and look at why Typhoon Haiyan was so damaging	Facts about the impact of typhoon Haiyanan . LInk to level of development
Lesson 4 UK Weather	WHat drives the UK weather : DIfferance between Weather and Climate	Various activities	Students need to understand why the weather ofUK is so unsettled . What are the factors that influence the weather in the UK ?
Lesson 5 Extreme Weather in the UK	Is the weather becoming more extreme in the UK ?	Textbook based lesson : Geography AQA page 33	Student have to understand why the weather in the UK is likely to become more extreme
Lesson 6 and 7 Case study of an extreme weather event : Somerset level floods	Case study :Why did the S|Omersette Levels flood and why is it prone to flooding	Lots of activities and homework / Flip learning	Facts about the Somerset Level floods and reasons why , what has been done to prevent flooding in the future
Lesson 6 and 7 Case study of an extreme weather event : Somerset level floods	Case study :Why did the S|Omersette Levels flood and why is it prone to flooding	Lots of activities and homework / Flip learning	Facts about the Somerset Level floods and reasons why , what has been done to prevent flooding in the future
Lesson 8 Key Skills lesson :OS Maps	Key skills lessons : Working with OS maps	Various Activities using the map in textbook	Students need to master some Key maps skills

1.1.3. Climate Change

Lessons	Key Content	Student Activities	Key Objectives
Lesson 9: Climate Change	Concept and evidence for climate change	Debate : Arguments for and against	STudents need to realise the seriousness of the issue and should be able to weigh the evidence for and against

Lesson 10 Natural Causes for Climate Change	The Milankovitch cycles	Students complete the worksheet and various questions	Students need to understand the Natural causes of Climate change
Lesson 11 Human Causes of Climate Change	Students work through the various human activities that lead to Climate Change	QR Codes and worksheet	Understand the complexity of living in our current society and how this has to change if we were to address the causes of climate change
Lesson 12 Managing Climate Change	Students look at the different strategies that can be used to manage Climate climate change	Homework and Questions	Students need to understand how we can effectively manage climate change
Lesson 13 Mitigation Strategies	Look at the various mitigation strategies against Climate Change	Various Activities	What are the difference between mitigation strategies and Managing strategies
Lesson 14 Revision Lesson	Revision Topics	Students Revise	Revision topics
Lesson 15 Assessment	Assessment	Assessment	Assessment
Lesson 16 Feedback	R2F	Green Pen	Feedback