Topic 3 Hazards and Climate Change

Year 8 Unit 3	**Title: Terrific Tectonics**	
Why are you teaching it? **What do they need to know? Misconceptions?**	**Links to the KS3 National Curriculum:** 'Understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in physical geography relating to geological timescales, plate tectonics and rocks, weathering and soils.' **Misconceptions:** Students often get the layers of the earth mixed up, aren't always clear on the types of plate boundaries and how they cause earthquakes, volcanoes and tsunamis. Difference between primary and secondary effects.	
Why are you teaching it now? What **prior learning** do students have?	**Prior Learning**: Students have previously learnt about hazards in Year 7 - Wild Weather and may have touched on earthquakes before at KS2 (particularly projects on Pompei). **Why Now?**: Important that students learn about the basics of tectonics now before studying Year 9 - Extreme Hazards and this is a key topic at KS4 as well so important to embed. Also, a popular topic with students so taught before they pick their KS4 options.	
What are you expecting students to be able to do at the end of the module that they couldn't do at the start	**Oracy**	Confidently be able to discuss the issues within this topic. Some may be able to clearly explain the steps of plate tectonics and justify why some natural disasters are worse than others.
	Literacy	Define new key words such as 'subduction', 'destructive', 'constructive', 'conservative' and 'tsunami'. Be able to explain how geography processes create natural disasters.
	SEND	Success criteria is made clear for each lesson and differentiated resources provided for our SEND students to access all lessons. Support boxes provided in longer writing tasks.
As a result of assessment what % of students can achieve these focus skills.	Mastered (18+) = Secure (13-16) = Developing (8-12) = Emerging (0-7) =	
What **amendments** are you going to make following evaluation of this module?	- Make into 25 mark test for 21/22 teaching year.	

1. Tectonic Hazards and Climate change

    - Some of the Hazard lessons need to be fleshed out a bit (Please use some of the older lessons in the 2023/2024 folder

Tectonic Hazards and Climate change	Key content	Student Activities	Key Objective
Lesson 1 What are hazards ?	Difference between the different kinds of hazard	Students need to classify the different kinds of hazard	To distinguish between the different kinds of hazard

Lesson 2 The structure of the earth	Students have to identify the different layers and their characteristics	Students list the different layers , draw and identify characteristics	The different layers of the earth and how they differ
Lesson 3 Plate tectonics	Students identify the main causes of plate tectonics. They should show understanding of the theory	Students must complete various activities	A good understanding of the fundamentals of plate tectonics
Lesson 4 Plate boundaries	Students learn at what happens at the plate margins and distinguish between the different plate boundaries	Students complete the work sheet	The three main plate margins
Lesson 5 Volcano's	Formation of different kinds of volcano's	Students complete a storyboard	Different kinds of volcano's
Lesson 6 Living with volcano's	The advantages and disadvantages of living with or near a volcano	Various activities	Why do people live near volcano's: Advantages and disadvantages
Lesson 7 Case study of a volcano	Case study : Mt Murati Indonesie	Students complete a fact file	A case study : Needs to understand the reasons for eruption + how people prepare
Lesson 8 Earthquake	Characteristics of earthquakes and how people are effected	Students complete factfile after watching a video	The basic characteristic of earthquakes
Lesson 9 Haiti Earthquake	Primary and secondary impacts of the earthquake	Students list the primary and secondary impacts of the earthquake	Case study : the impact of the Haiti earthquake : Primary and secondary
Lesson 10 Responses to the earthquake	The Immediate and long-term responses to the earthquake	Responses to the earthquake : Worksheet	Responses to the earthquake : Ongoing consequences
Lesson 11 Tsunami	Causes of the Tsunami : Boxing day	Students complete a worksheet	Fundamentals of tsunami : Facts about Boxing day tsunami
Lesson 12 Assessment :tectonic hazards	Assessment	Assessment	Assessment
Lesson 13 R2F	Feedback	Green pen	Record data
Lesson 14 Climate change	Key terms : Greenhouse effect, greenhouse gases . Impact of climate change	Various activities	Fundamentals of climate change : Key terminology
Lesson 15 Impacts of climate change	Various impacts and consequences of climate change	Detailed spider diagram to illustrate the impact of climate change	Impacts of climate change
Lesson 16 Managing Climate change	How can climate change impacts be mitigated	Various activities	Mitigating strategies to limit the impact of climate change and to manage it

Medium Term Plan Year 8 - Climate Change SOW

Unit planning and evaluation sheet:

Year 8 Unit 5	**Title: Energy & Climate Change**

Why are you teaching it? **What do they need to know? Misconceptions?**	**Links to the KS3 National Curriculum:** 'Understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in physical geography relating to weather and climate, including the change in climate from the Ice Age to the present.' and 'Understand, through the use of detailed place-based exemplars at a variety of scales, the key processes in human geography relating to the use of natural resources.' and 'Understand how human and physical processes interact to influence, and change landscapes, environments and the climate and how human activity relies on effective functioning of natural systems.' **Misconceptions:** Students often don't realise the difference between renewable and non-renewable types of energy, the difference between natural climate change and human caused global warming.	
Why are you teaching it now? What **prior learning** do students have?	**Prior Learning**: Students have previously learnt about population changes in 'Year 7 - Population SOW', have studied the impact of growth in 'Year 8 - Global Development' and 'Year 8 - Urbanisation' and have seen the impact of humans on the environment in 'Year 7 - Brilliant Biomes'. **Why Now?**: This builds on their understanding of the world and links together the human processes studied in Year 8 and looks at the environmental impacts this causes. Links to their learning in Science around these topics.	
What are you expecting students to be able to do at the end of the module that they couldn't do at the start	**Oracy**	Confidently be able to discuss the issues within this topic. Some may be able to passionately speak about the damage caused by climate change on the environment and ask for change.
	Literacy	Define new key words such as 'renewable', 'sustainability', 'fossil fuels', 'global warming' and 'greenhouse gases'. Write about these processes and issues in depth using examples.
	SEND	BRY pathways are made clear for each lesson and differentiated resources provided for our SEND students to access all lessons.
As a result of assessment what % of students can achieve these focus skills.	Mastered (16+) = Secure (11-15) = Developing (6-10) = Emerging (0-5) =	
What **amendments** are you going to make following evaluation of this module?	TBC	