## Medium Term Plan Year 9 - Extreme Hazards SOW

## <u>Unit planning and evaluation sheet:</u>

| Year 9 Unit 3   | Title: Extreme Hazards   |  |  |  |  |
|---|--|--|--|--|--|
| Why are you teaching it?  | Links to the KS3 National Curriculum: To extend students locational knowledge using maps to locate each named                |  |  |  |  |
| What do they need to  | example.   |  |  |  |  |
| know? Misconceptions?   | Understand, using named examples to understand the processes linked to extreme weather events.                               |  |  |  |  |
|   | Evaluate the impact on human activity and methods of management.   |  |  |  |  |
|   |  |  |  |  |  |
|   | <b>Misconceptions:</b> Students often struggle to understand the difference between and the impact of high and low pressure. |  |  |  |  |
| Why are you teaching it   | <b>Prior Learning</b> : Students have previously learnt about tectonic hazards in Y8 and so this module builds on the        |  |  |  |  |
| now?  | prior knowledge of physical processes that lead to hazards and the human responses of monitoring, predicting,                |  |  |  |  |
| What <b>prior learning</b> do   | preparing. Students have been introduced to the concepts of high and low pressure in Y7 during the weather and               |  |  |  |  |
| students have?  | climate modu   | climate module. Students have studied the Beast from the East.   |  |  |  |
|   |  |  |  |  |  |
|   | Why Now?: Important that students learn about extreme hazards the factors that affect hazard risk.                           |  |  |  |  |
|   |  | port KS4 Geography Paper 1, Section A content.   |  |  |  |
|   | Key words  | Natural Hazard, geological, meteorological, hazard risk, low pressure, hurricanes, coriolis effect,    |  |  |  |
|   | (Highlighted   | GAC, Hadley Cell, prediction, protection   |  |  |  |
|   | for Frayer   | AE alassan and label for the doubt be also for this was dela   |  |  |  |
|   | model deep<br>dive)  | A5 glossary available for students books for this module.  |  |  |  |
| What are you expecting  | Oracy  | Confidently be able to discuss the issues within this topic. Always aim to <b>Elicit response from</b> |  |  |  |
| students to be able to do   | (highlight in  | whole class All students should respond to questions using either:                                     |  |  |  |
| at the end of the module  | yellow for a   | · , ,  |  |  |  |
| that they couldn't do at  | Fraver Think - Pair - Share  |  |  |  |  |
| the start   | model deep   | I Lise of Mini Whitehoards (Ensure all misconcentions are addressed hetore moving on)                  |  |  |  |
|   | dive)  | Type of guestions:   |  |  |  |
|   |  | Open questions. E.g What do you think about?   |  |  |  |
|   |  | Higher order questions. E.g What can you infer?  |  |  |  |
|   |  | 3. Hinge questions. E.g. diagnostic questions asked at the point in the lesson called the              |  |  |  |
|   |  | 'hinge' where you need to check if your students are ready to move on                                  |  |  |  |
|   |  | Students will use tier 2 & 3 vocabulary in their verbal answers.                                       |  |  |  |
| <b>Literacy</b> Define new key words such as hazard, r monitoring, prediction, preparing. |  | Define new key words such as hazard, risk, capacity, vulnerability, frequency, hurricane,              |  |  |  |
|   |  | 9,1  |  |  |  |
|   | Be able to explain the geography processes of weather systems, how tropical storms d   |  |  |  |  |
| high and low pressure weather events.   |  | high and low pressure weather events.  |  |  |  |
|   |  |  |  |  |  |
|   | Reading: Use of the three whole school reading strategies where appropriate:   |  |  |  |  |

|                             |  | 1. Skim, scan and zoom.  |  |
|-----------------------------|--|--|--|
|                             |  | Choral and repeated reading  |  |
|                             |  | 3. Use of tier 2 and 3 vocabulary  |  |
|                             |  | Extended writing using clear success criteria.   |  |
|                             |  |  |  |
|                             |  | Use of Frayer model to embed understanding of key words.   |  |
|                             | SEND Learning objectives are made clear for each lesson and differentiated resources provide |  |  |
|                             |  | SEND students to access all lessons.   |  |
|                             |  | Activities follow a YRB route to develop knowledge, skills and understanding.                        |  |
|                             |  | Use of PCS 10 for SEND strategies. All staff to have seating plans identifying SEND students, making |  |
|                             |  | sure SEND students are asked more questions and provided with more support in lessons. All staff     |  |
|                             |  | will have pupil profiles in their teaching and learning folders.                                     |  |
| As a result of assessment   | Mastered (18   | 3-25)  |  |
| what % of students can      | Secure (13-17)   |  |  |
| achieve these focus skills. | Developing (8-12)  |  |  |
|                             | Emerging (0-   | 7)   |  |
| What amendments are         | Develop assessment to 30 marks   |  |  |
| you going to make           |  |  |  |
| following evaluation of     |  |  |  |
| this module?                |  |  |  |

# Topic 1

### 1. Natural Hazards and Weather

| Natural Hazards and Weather            | Key content  | Student Activities   | Key Objective   |
|--|--|--|---|
| Lesson 1 What is a natural hazard      | The various different kinds of natural hazards                                       | Think, Pair , Share activities   | The difference between natural and man made Hazards. Different kinds of hazards         |
| Lesson 2 The risk of natural hazards   | Risk factors why some hazards are greater risk than others                           | Complete a sheet why some hazards pose a greater risk than others                      | Why some hazards have a greater impact than others                                      |
| Lesson 3 The causes of tropical storms | What are the main causes of Tropical Storms  | Resource sheet and other activities  | Main causes of tropical storms  |
| Lesson 4 Hurricane Katrina             | Impact of a hurricane on a HIC   | Literary resource on facts about<br>Hurricane Katrina                                  | Impact of a hurricane on a HIC  |
| Lesson 5 Typhoon Haiyan                | Impact of typhoon and comparison between HIC and LIC                                 | Comparison sheet between two different tropical storms                                 | Show the difference that a natural disaster has on two economically different countries |
| Lesson 6 Comparison ( extension)       | Environmental, Economic and social impact comparison between the two tropical storms | Write a longstyle and in depth essay on the differences in impact on the two countries | Impact should be divided into social, economic and environmental                        |

| Lesson 7 Heatwaves  | What is a heatwave, impact and potential future risk   | Read articles and discuss  | Impact of heatwaves and its potential danger to people in the UK due to Climate change  |  |
|---|--|--|---|--|
| Lesson 8 Managing Tropical storms   | Prepare, protect and plan and the effectives of these due to economic status                 | Various activities   | How can impact of tropical storms be managed : Prepare, Protect, Plan ) How will this be affected by economic status of a country |  |
| Lesson 9 Assessment Tropical storms ( weather hazards )   |  | Assessment   | Assessment  |  |
| Lesson 10 R2F Feedback  | Feedback   | Green pen Record data  |   |  |
| Lesson 11 Weather and climate   | Focus of the differences between weather and climate   | Short story : Other activities   | The difference between weather and climate  |  |
| Lesson 12 Recording the weather Recording equipment, measurements and methods   |  | Various activities to show units, instruments                              | Focus: Units, measurements and methods  |  |
| Lesson 13 Who cares about the Weather   |  |  | Show how weather impacts our everyday lives   |  |
| Lesson 14 What affects the weather in the UK ?  Basic factors that lead to the unstable weather the UK experience           |  | Reading weather charts and graphs Understand what effects the we in the UK |   |  |
| Lesson 15 'The Beast from the East '  | Case study of the Beast from the East .<br>Extreme weather more and more likely<br>in the UK | Information sheet on the 'Beast from the East'                             | Case study of a weather event in the Uk and the likelihood of it happening more often due to climate change                       |  |
| Lesson 16 'Why do the UK need a lot of water?'  Fundamentals about the impact a lack of rain on the UK                      |  | Factsheet  | Current topic : Understand how a lack of water effects the UK   |  |
| Lesson 17 Microclimates  Understand what micro climates are and how cities like London can generate their own micro climate |  | Graph and worksheets   | Understand what microclimate is and how cities can generate their own   |  |
| Lesson 18 Assessment Weather  | Assessment   | Assessment   | Assessment  |  |
| Lesson 19 R2F Feedback  |  | Green pen  | Record the data   |  |
|   |  |  |   |  |

#### Weather

| Year 9 Unit 3   | Title: Weather   |  |
|---|--|--|
| Why are you teaching it? What do they need to know? Misconceptions? | Geographical importance:     Weather affects daily life, human activity, and ecosystems, making it a highly relevant topic for students.     Weather and climate underpin many GCSE topics (natural hazards, ecosystems, climate change) and this module strengthens foundational knowledge.      Skill development: |  |

|  | Builds map, graph, and data interpretation skills using real-world weather maps, synoptic charts, and satellite imagery. Develops enquiry and investigation skills through data collection and analysis.  Cultural capital: Helps students understand extreme weather events globally and locally, fostering empathy and global awareness. Builds scientific literacy by linking geography with meteorology, climate science, and sustainability.  Relevance: Prepares students to critically evaluate media coverage of weather events and climate issues. Provides context for environmental and political discussions around adaptation and resilience. |  |
|--|--|--|
| Why are you teaching it<br>now?<br>What <b>prior learning</b> do<br>students have? | From Key Stage 2: Basic understanding of seasons, weather patterns, simple water cycle. Map skills (locating continents, countries, key physical features). From Year 7 Geography: Introduction to physical processes (water cycle, rainfall types). Map reading, compass points, use of OS maps. From Year 8 Geography: Knowledge of rivers and coasts (erosion, deposition, flooding), linking to impacts of extreme rainfall. Familiarity with human-environment relationships (population, hazards). Cross-curricular links: Science (heat transfer, water cycle, air pressure, energy). Maths (data handling, interpreting graphs and charts).        |  |

What are you expecting students to be able to do at the end of the module that they couldn't do at the start

Progress from reading simple weather symbols to interpreting detailed synoptic charts, analysing satellite imagery, and explaining weather data. Capable of evaluating impacts and responses to extreme weather.

As a result of assessment what % of students can achieve these focus skills.

Develop deeper understanding of global interdependence (how extreme weather affects different parts of the world). Able to make connections between weather, climate change, and hazards.

What **amendments** are you going to make following evaluation of this module?

Confidently use evidence from case studies to evaluate management strategies for extreme weather events. Begin structuring extended written responses.