



Knowledge focus: **Theme 5: Weather, Climate and Ecosystems**

Skills, knowledge and understanding to be developed in this Learning Plan:
 To understand global and UK patterns of weather and climate, explore the evidence and impacts of climate change, and investigate a range of ecosystems and biomes, including the effects of human activity. Students will also develop their enquiry skills through planning, collecting, presenting, and analysing fieldwork data.



Key terms to be learned in this LP:
Climate, Weather and Ecosystems:
 Climate, Weather, Climate change, Global warming, Greenhouse effect, Enhanced greenhouse effect, Carbon cycle, Carbon store, Carbon sink, Greenhouse gases, Air pressure, Low pressure system, Depression (weather), Jet stream, Atmospheric circulation, Hadley Cell, Ferrel Cell, Polar Cell, Hurricane/ Cyclone/ Typhoon, Storm surge, Drought, El Niño, La Niña, Ecosystem, Biotic, Abiotic, Food web, Nutrient cycle, Biome, Tropical rainforest, Tundra,, Adaptation, Succession, Sand dune,

**Week/Wythnos 1 Learning Objectives:
 Waves/ Coastal Processes**

- Identify and describe constructive and destructive waves.
- Explain how wave energy influences erosion.



Objective assessments:

- Be able to:
- Compare wave types using diagrams.
 - Explain coastal change resulting from wave type.
 - Label and explain key processes.
 - Apply understanding to landform formation.

Homework/Gwaith cartref:

Set:

Due:

**Week/Wythnos 2 Learning Objectives:
 Sub-Aerial Processes/ Headlands and bays**

- Describe erosion, transportation, and deposition processes.
- Explain how they shape the coastline.



Objective assessments:

- Identify sub-aerial processes in examples.
- Analyse coastal retreat using diagrams.
- Sequence landform formation steps.
- Use map examples to explain locations.

Homework/Gwaith cartref:

Set:

Due:

**Week/Wythnos 3 Learning Objectives:
 Arch Stack Stump Stack/ Wave cut Platform**

- Define weathering and mass movement.
- Explain their impact on cliff retreat.



Objective assessments:

- Use diagrams to annotate formation.
- Justify the order of landform development.
- Illustrate the stages of formation.
- Evaluate their significance in coastal processes.

Homework/Gwaith cartref:

Set:

Due:

**Week/Wythnos 4 Learning Objectives:
 Factors Affecting Erosion/ Longshore Drift**

- Describe the formation of headlands and bays.
- Explain their development from discordant coastlines.



Objective assessments:

- Categorise factors and rank importance.
- Link case study evidence to erosion rates.
- Diagram and annotate the process.
- Apply knowledge to formation of spits and bars.




Homework/Gwaith cartref:

Set:

Due:



Knowledge focus: **Theme 1: Landscapes and Physical Processes**

<p>Week/Wythnos 5 Learning Objectives: Formative PPQ/ Splits and Bars</p> <ul style="list-style-type: none"> • Describe how erosional features form over time. • Explain the evolution of coastal features. 	 <p>Objective assessments:</p> <ul style="list-style-type: none"> • Complete practice questions independently. • Reflect on feedback to improve responses. <p>Label diagrams of landforms.</p> <ul style="list-style-type: none"> • Use case studies to explain formation. 	<p>Homework/Gwaith cartref:</p> <p>Set:</p> <p>Due:</p>
<p>Week/Wythnos 6 Learning Objectives: Revision/ Assessment</p> <ul style="list-style-type: none"> • Identify primary and secondary volcanic hazards. • Analyse the impacts of these hazards on people and the environment. 	 <p>Objective assessments:</p> <ul style="list-style-type: none"> • Create revision mind maps or flashcards. • Answer revision questions with increasing independence. • Complete written assessment. • Use structured answers and key vocabulary. 	<p>Homework/Gwaith cartref:</p> <p>Set:</p> <p>Due:</p>
<p>Week/Wythnos 7 Learning Objectives: Feedback and Review</p> <ul style="list-style-type: none"> • Evaluate reasons why people choose to live near volcanoes. • Analyse the risks and benefits using examples. 	 <p>Objective assessments:</p> <ul style="list-style-type: none"> • Respond to teacher feedback. • Improve responses through DIRT activities. 	<p>Homework/Gwaith cartref:</p> <p>Set:</p> <p>Due:</p>

Keywords: Fieldwork and Enquiry

Enquiry question, Hypothesis, Data collection, Primary data, Secondary data, Quantitative data, Qualitative data, Sampling, Systematic sampling, Stratified sampling, Random sampling, Bias, Accuracy, Reliability, Presentation technique, Bar graph, Pie chart, Field sketch, Conclusion, Evaluation, Anomaly, Limitation, Justification.