

Year 10 Unit 2 Overview – Weather Hazards and Climate Change

AQA GCSE Geography Paper 1- Living with the Physical Environment



You will learn about:

- Location, formation and weather hazards of tropical storms
- Impacts and responses to Typhoon Haiyan
- Reducing the impacts of tropical storms

You will be able to:

- Use case studies/examples to explain processes.
- Carry out research.
- Use and create graphs/diagrams/maps to describe information.
- Use literacy (PEEL and PEAL).

<p>Lesson Overview:</p> <ol style="list-style-type: none"> 1. Global atmospheric circulation pattern 2. What is the global distribution of tropical storms and how are they formed? 3. How will climate change influence storms? 4. What happened in Super Typhoon Haiyan? (Case study- impacts and responses) 5. How can the impacts of tropical storms be reduced? 6. What are the UK's weather hazards and are they becoming more extreme? 7. What happened in the Somerset Levels Floods 2014? (causes, effects, responses) 8. Skills practice (OS map skills- Somerset) and Weather Hazards consolidation/ revision 9. How do we know that the has climate changed over time? 10. What are the natural causes of climate change? 11. How does the greenhouse effect work? 12. How can climate change be managed? 13. Climate change consolidation/ revision 14. End of Topic Test 15. DIT/ Reflection 	<p>Key Words:</p> <p>Adaptation- actions taken to adjust to events such as climate change to manage or cope with the consequences.</p> <p>Afforestation- planting trees</p> <p>Carbon capture and storage (CCS)- carbon dioxide created by burning fossil fuels is captured and stored underground.</p> <p>Carbon footprint- measurement of the carbon dioxide produced by human activities, e.g. burning fossil fuels.</p> <p>Climate change- a long-term change in the earth's climate, due to a change in global average atmospheric temperature.</p> <p>Coriolis effect- the effect of the earth's rotation which makes a tropical storm spin as it moves 5° north or south of the equator</p> <p>Eye- the calm centre of a tropical storm caused by cold air sinking (high pressure). It's clear with no wind or rainfall.</p> <p>Eye wall- the area surrounding the eye of a tropical storm where the most intense weather conditions occur- strongest winds and torrential rainfall. Very unstable low pressure.</p> <p>Extreme weather- a weather event significantly different from the usual weather pattern, or an especially severe event.</p> <p>Fossil fuels- coal, oil and gas which are all non-renewable</p> <p>Hurricane warning- advises that hurricane conditions are expected and that people should take immediate action</p> <p>Hurricane watch- advises hurricane conditions are possible</p> <p>Mitigation- limiting or reducing the impacts of something e.g. climate change</p> <p>Primary impacts- the impacts that happen during an event.</p> <p>Saffir-Simpson scale- the scale used to measure the power of tropical storms (1-5) based on wind speeds.</p> <p>Secondary impacts- impacts that happen as a result of the primary impacts e.g. homelessness, economic losses.</p> <p>Storm surge- a wall of water (around 5m high) flooding coasts as ocean is drawn up by the low pressure in a tropical storm.</p> <p>Tropical Storm (hurricane, cyclone, typhoon)- an area of low pressure with powerful winds moving in a spiral around a calm central point called the eye. Winds are over 175km per hour and rainfall is very heavy.</p>					
<p>Suggested reading:</p> <p>Fiction book Floodland by Marcus Sedgwick</p> <p>Non-fiction articles available on showbie</p>	<p>Cross curricular:</p> <ul style="list-style-type: none"> • SMSC: develop a critical understanding of the social and environmental impacts of tropical storms and how they impact different parts of the World. • Literacy: using key geographical terms, PEAL to write well balanced explanations and comparisons. Accurate SPAG. • Numeracy: to analyse compound line graphs for example showing years and tropical storm intensity and to calculate averages and increases/decreases. 					
Research	Note-making	Group work & discussion	Memorisation	Precision & accuracy	Independence	Reflection