Year 11
Subject: Geography
Topic/Unit: The challenge of natural hazards – weathe
When: HT4

Huntington School
Learn and succeed

Overview: The aims of this unit are to complete the challenge on natural hazards unit by focussing on meteorological processes and the need for management strategies governed by sustainability and consideration of the direct and indirect effects of human interaction with the Earth and the atmosphere. They learn how air moves around in the atmosphere and how this contributes to the formation of weather systems. The consider how tropical storms have significant effects on people and the environment and also how extreme weather events in the UK have impacts on human activity.

Why this? Why now? Students have already learned the tectonic processes and features which make up paper 1, question 1. This is the final hazard which makes up this section of the exam.

Building on…building to: This unit take the very basic concepts of weather systems which they learned in Year 7 and links them to the development of weather systems which affect us. The unit leads onto the study of hazards at A Level.

Sequence summary:

- General atmospheric circulation model
- Global distribution of tropical storms related to circulation of air in the atmosphere
- Causes of tropical storms, their structure and the sequence of their formation and development.
- How climate change might affect the distribution, frequency and intensity of tropical storms.
- Typhoon Haiyan case study - Primary and secondary effects & Immediate and long-term responses
- How monitoring, prediction, protection and planning can reduce the effects of tropical storms
- An overview of types of weather hazard experienced in the UK
- The Beast from the East - causes, social, economic and environmental impacts & management strategies to reduce risk.
- Evidence that weather is becoming more extreme in the UK.

Key Vocabulary:

- Global atmospheric circulation - The worldwide system of winds, which transports heat from tropical to polar latitudes.
- Extreme weather - This is when a weather event is significantly different from the average or usual weather pattern and is especially severe or unseasonal.
- Tropical storm - An area of low pressure with powerful winds and heavy rainfall moving in a spiral around the calm central point called the eye of the storm.

Assessments: Regular recall and retrieval tasks on whiteboards throughout each lesson to check understanding and dispel misconceptions. End of unit assessment exam questions from past papers.

Able and interested: Watch *Britain's Weather Crisis: Storms, Floods & Changing Climate* available on YouTube or through the BBC iPlayer Wild Weather Group, this focuses on the advanced supercomputers and satellite technology meteorological agencies use to track Atlantic storm anomalies.

Inclusion, Personal Development and Wider Skills: Tasks are scaffolded to build confidence. Longer exam questions are explicitly broken down into sections

Homework and Independent Learning: Homework is set weekly. Tasks may include completing graphs, interpreting maps and graphs, creating revision material and answering exam questions