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| **What will we be learning?**  **Challenge of Natural Hazards:**  **Weather Hazards** | **Why this? Why now?**  The focus in Year 9 is **INTERACTIONS.** Our previous of topic of Climate Change directly impacts the tropical storms and the extreme weather in the UK we study in this Weather Hazards topic. We will learn about how these Weather Hazards impact society and how humans can interact & manage these hazards. |
| **What will I learn?**   |  |  |  | | --- | --- | --- | | **Lesson Question** | **Date** | **Retrieval Practice** | | 1. What is a **natural hazard**? |  |  | | 1. How does **global atmospheric circulation** influence weather patterns? |  |  | | 1. What are **tropical storms**? |  |  | | 1. How do we **measure** tropical storms? |  |  | | 1. How do we **mitigate** the risk of tropical storms? |  |  | | 1. What were the **impacts of Typhoon Haiyan** on the Philippines? |  |  | | 1. What were the **responses** to Typhoon Haiyan? |  |  | | 1. Is the **UK’s weather** becoming more **extreme**? |  |  | | 1. How did the ‘**Beast from the East**’ impact the UK? |  |  | | |
| **What opportunities are there for wider study?**  **Links in School**: Topics on your Learning Journey that link to weather and climate include the Living World (ecosystems) topics in Y8 & at GCSE with A Level Water & Carbon Cycles and Hazards topics.  **Careers:** GIS, Environment Agency, Meteorological Office, Climatologist, Data Scientist, Engineering, Policymakers.  **Brilliant Websites for Revision & Wider Study:** regularly featured in news stories   * <https://www.bbc.co.uk/bitesize/guides/zpxgk7h/revision/1> * <https://www.bbc.co.uk/bitesize/guides/zgvjxsg/revision/1> * <https://www.internetgeography.net/aqa-gcse-geography/the-challenge-of-natural-hazards/> * <https://www.internetgeography.net/weather-and-climate/>   **How will I be assessed?**  You will be assessed by answering questions in your End of Year exam to help you get “**GCSE Ready**.” You will further be assessed on this topic at GCSE by completing SAPS and MAPs.  To help you prepare for this in class we will be attempting GCSE style exam questions to practice technique. | |
| **Key Words:**  **Natural Hazard:** A natural event (e.g. earthquake, flood, storm) that threatens people or has the potential to cause damage, destruction, and death.  **Risk:** The probability or chance that a natural hazard will cause harm to people or property.  **Frequency:** How often a hazard occurs.  **Distribution:** Where hazards happen geographically.  **Intensity:** The strength or magnitude of a hazard.  **Tectonic Hazard:** Hazards caused by movement of Earth's tectonic plates (e.g. earthquakes, volcanoes).  **Weather Hazard:** Hazards caused by changes in the atmosphere (e.g. storms, floods, droughts).  **Global Atmospheric Circulation:** The worldwide system of winds that transports heat from the equator to the poles, influencing climate and weather patterns.  **High Pressure:** A weather system where air is sinking, usually bringing dry, clear conditions.  **Low Pressure:** A weather system where air is rising, often leading to clouds, rain, and storms.  **Tropical Storms:** Intense low-pressure systems forming over warm oceans, with strong winds and heavy rain (also known as hurricanes, cyclones, typhoons).  **Coriolis Effect:** The deflection of moving air due to Earth’s rotation, causing storms to spin clockwise in the Southern Hemisphere and anticlockwise in the Northern Hemisphere.  **Storm Surge:** Abnormal rise in sea level caused by a tropical storm pushing water onto land, leading to coastal flooding.  **Saffir-Simpson Scale:** Categories 1 to 5 measure the intensity of tropical storms based on wind speed.  **Mitigation:** Actions taken to reduce the impact of a hazard (e.g. building flood defences).  **Prediction & Monitoring:** Using technology and data to forecast hazards and track their development.  **Preparation:** Planning and training to deal with hazards before they happen.  **Protection:** Measures taken to safeguard people and property (e.g. earthquake-resistant buildings).  **Primary Effects:** Immediate impacts of a hazard (e.g. buildings destroyed, injuries).  **Secondary Effects:** Later impacts caused by the primary effects (e.g. disease outbreaks, homelessness).  **Short Term Responses:** Immediate actions after a hazard (e.g. rescue, emergency aid).  **Long Term Responses:** Ongoing efforts to recover and rebuild (e.g. reconstruction, economic support).  **Extreme Weather:** Weather that is uncommon or vastly different to normal (e.g. heatwaves, heavy snow).  **Air Mass:** A large body of air with similar temperature and humidity, affecting UK weather.  **Storm:** A violent disturbance in the atmosphere with strong winds and rain.  **Flooding:** Overflow of water onto normally dry land.  **Drought:** A long period with little or no rainfall.  **Jet Stream:** A fast-flowing ribbon of air high in the atmosphere that influences weather patterns.  **Sudden Stratospheric Warming:** A rapid warming of the stratosphere that can disrupt the jet stream and lead to cold weather in the UK. | |