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| **Core Knowledge Map: Weather & Climate** | | | |
| Subject: Geography | Year: Year 8 | | Term: Autumn |
| What are we learning? | | | |
| Is our weather and climate becoming more extreme? | | | |
| How will I be assessed | | | |
| Students will complete a short essay to answer the following GCSE-style question:  *Evaluate the human and physical factors that made Typhoon Haiyan in the Philippines so devastating (8 marks)* | | | |
| Big questions: | | | |
| 1. What is the difference between weather and climate? 2. What is extreme weather? 3. What factors affect our climate and are these leading to more extreme weather events? 4. What caused the 2022 UK Heatwave? 5. How devasting was Typhoon Haiyan? | | | |
| How does this build on previous learning? | | How will this link to my future learning? | |
| Climate zones and the water cycle from Key Stage 2.  Locational Knowledge from Geo Skills unit in Year 7.  Factors affecting development from Population in Year 7 | | River flooding in the summer term Year 8,  Factors affecting development in Summer Term Year 8  Links onto: Global Hazards and Changing Climate at KS4.  Links onto: Carbon and Water Systems at KS5. | |
| Core knowledge: | | Key vocabulary: | |
| * Weather refers to short-term changes in the atmosphere, climate refers to atmospheric changes over longer periods of time. * Extreme weather is when a weather event is significantly different from the average or usual weather pattern. * The UK is under the influence of five different air masses that determine our climate. * As a mid-latitude country the UK is affected by depression systems that bring low pressure and rainfall. * High pressure systems are caused by anticyclones. When these weather systems stay over the UK for a prolonged period of time, they can lead to heatwaves. * Hurricanes, typhoons and cyclones bring extreme rainfall and wind speeds and can be devastating. | | **Air pressure:** the force exerted by air on Earth.  **Depression system**: a low pressure weather system that brings wind and rain.  **Weather front**: a boundary between two air masses, usually brings rain.  **Anticyclones**: An area of high pressure (descending air) where air circulates in a clockwise direction. Brings settled clear skies.  **Ocean currents**: movement of water in the ocean driven by the wind and Coriolis Effect (spin of Earth).  **Air mass**: Large volume of air in the atmosphere that has a uniform temperature and moisture- they typically adapt to the surface below them such as maritime (high moisture) and continental (low moisture)  **Tropical storms,** hurricanes, cyclones, typhoons: very intense low pressure weather system that develop over tropical oceans.  **Heatwav**e: a prolonged period of abnormally hot weather.  **Management**: How humans respond to weather and climate. | |
| Need more help? | | | |
| A global map of wind, weather and ocean conditions [https://earth.nullschool.net](https://earth.nullschool.net/)  How is climate linked to extreme weather? <https://www.metoffice.gov.uk/weather/climate/climate-and-extreme-weather> | | | |

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