The Challenge of Natural Hazards Key Ideas

Tectonic Hazards	**Natural hazards pose major risks to people and property.** ▪ Definition and types of natural hazards. ▪ Factors affecting **Hazard-Risk.**
	Earthquakes and volcanic eruptions are the result of physical processes. ▪ Plate tectonics theory. ▪ Global distribution of earthquakes & volcanic eruptions (& relationship to plate margins.) ▪ The physical processes taking place at different types of plate margins (**constructive**, **destructive** and **conservative**) that lead to **earthquakes** and **volcanic** activity.
	The effects of & responses to a tectonic hazard vary between areas of contrasting levels of wealth. ▪ Primary and secondary effects of a tectonic hazard. ▪ Immediate and long-term responses to a tectonic hazard. ▪ Comparison of the ***Nepalese 2015*** and ***Christchurch 2011/2016*** EQs.
	Management can reduce the effects of a tectonic hazard. ▪ Reasons why people continue to live in areas at risk from a tectonic hazard. ▪ How 3Ps: prediction, protection and planning can reduce the risks.
Weather Hazards	**Global atmospheric circulation helps determine patterns of weather and climate** ▪ General atmospheric circulation model(GACM): pressure belts and surface winds.
	Tropical storms (hurricanes, cyclones, typhoons) develop due to specific physical conditions ▪ Global distribution of tropical storms (**hurricanes, cyclones, typhoons**). ▪ An understanding of the relationship between tropical storms & GACM. ▪ Cause of tropical storms and the sequence of their formation and development. ▪ The structure and features of a tropical storm. ▪ How climate change might affect the distribution, frequency and intensity of tropical storms.
	Tropical storms have significant effects on people and the environment. ▪ Primary and secondary effects of tropical storms. ▪ Immediate and long-term responses to a tropical storm. ▪ Use named example of a tropical storm to show its effects and responses – Haiyan 2013 ▪ How 3Ps: prediction, protection and planning can reduce the effects of tropical storms.
	The UK is affected by a number of weather hazards. ▪ Overview of types of weather hazard experienced in the UK. ▪ ***Storm Desmond 2015*** causes, social, economic and environmental impacts, how management strategies can reduce risk and evidence that weather is becoming more extreme in the UK.
Climate Change	**Climate change is the result of natural and human factors and has a range of effects** ▪ Evidence for climate change from the beginning of the Quaternary period to the present day. ▪ Possible causes of climate change. **Natural factors**: orbital changes, volcanic activity and solar output & **Human factors**: use of fossil fuels, agriculture and deforestation. ▪ Overview of the effects of climate change on people and the environment.
	Managing climate change involves both mitigation (reducing causes) and adaptation (responding to change). ▪ **Mitigation** – alternative energy production, carbon capture, planting trees, international agreements ▪ **Adaptation** – change in agricultural systems, managing water supply, reducing risk from rising sea levels

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