




## Paper 1: Physical Geography

### Exam section: Natural hazards – Plate boundaries, Earthquakes, Tropical Storms, UK Extreme weather, Climate Change

Broad section	Specific content			
Natural hazards pose major risks to people and property.	Know the definition of a natural hazard.			
	Know climatic and tectonic hazards.			
	Know what hazard risk is			
	explain why some areas are more susceptible to hazards than others (hazard risk).			
Earthquakes and volcanic eruptions are the result of physical processes.	Can explain why and how plates move.			
	Can use maps to describe the distribution of earthquakes and volcanic eruptions and their relationship to plate margins.			
	Know the difference between oceanic and continental plates			
	Know the difference between constructive, destructive and conservative plate margins			
	Can explain in detail the physical processes taking place at different types of plate margin (1- constructive, 2 -destructive and 3 -conservative) that lead to earthquakes and volcanic activity.			
The effects of, and responses to, a tectonic hazard vary between areas of contrasting levels of wealth.	Can identify primary and secondary effects of a tectonic hazard.			
	Can describe possible immediate and long-term responses to a tectonic hazard and what is different between them.			
	Can recall factual information on the effects and responses to the HIC, earthquake: Kobe, Japan 1995			
	Can recall factual information on the effects and responses to the LIC, earthquake: Haiti 2010			
	Can explain why the effects and responses to the earthquakes varied because of the contrasting levels of wealth.			
Management can reduce the effects of a tectonic hazard.	Reasons why people continue to live in areas at risk from a tectonic hazard.			
	How monitoring, prediction, protection and planning can reduce the risks from a tectonic hazard.			
Global atmospheric circulation helps to determine patterns of weather and climate.	Know air rises when there is low pressure and this forms clouds and the opposite with high pressure.			
	Know the basic atmospheric circulation model - that there are pressure belts of high/low pressure and how air circulates between them.			
Tropical storms (hurricanes, cyclones, typhoons) develop as a result of particular	Know the basic distribution of tropical storms (hurricanes, cyclones, typhoons)			
	Understanding of the relationship between tropical storms and low pressure areas and air circulation from general atmospheric circulation model.			
	Explain the formation of tropical storms and the sequence of their formation and development.			
	Can identify the main features of a tropical storm (e.g. vortex shape and spin direction).			

physical conditions.	Can explain how climate change might affect the distribution, frequency and intensity of tropical storms (e.g. hotter oceans and possible change to el Nino)			
Tropical storms have significant effects on people and the environment.	Can give possible primary and secondary effects of tropical storms such as Hurricane Katrina			
	Can give immediate and long-term responses to tropical storms to reduce damage.			
	Remember factual information from Hurricane Katrina - specifically its effects and human responses.			
	Know what monitoring, prediction, protection and planning means			
	Can compare specific monitoring, prediction, protection and planning techniques to reduce the effects of tropical storms.			
The UK is affected by a number of weather hazards.	Give the definition of what extreme weather is			
	Can state and describe the different types of weather hazard experienced in the UK.			
Extreme weather events in the UK have impacts on human activity.	Using Storm Desmond flooding as an example of an extreme weather event can describe:			
	•• causes			
	•• social, economic and environmental impacts			
	•• Management strategies used to reduce risk.			
	Can give factual information on recent UK weather to show how extreme it is becoming in terms of BOTH more frequent and more varied (i.e. not just increased rain but increase droughts etc and more records broken recently).			
Climate change is the result of natural and human factors, and has a range of effects.	Know about ice core data collection as a way to estimate temperature and Greenhouse Gas concentration in the atmosphere.			
	Have a broad overview of how the climate has changed from the beginning of the Quaternary period (1.8 million years ago) to the present day.			
	Can explain these causes of climate change:			
	•• natural factors – orbital changes (distance from sun), volcanic activity and solar output			
	•• human factors – use of fossil fuels, agriculture and deforestation.			
	Can explain some of the main effects of climate change on people			
	Can explain some of the main effects of climate change on the environment.			
Managing climate change involves both mitigation (reducing causes) and adaptation (responding to change).	Knows what climate change mitigation is. – tree planting/ carbon capture/ international agreements			
	Can describe and assess the pros and cons of the following mitigation strategy - alternative energy production.			
	mitigation strategy - carbon capture			
	mitigation strategy - planting trees			
	mitigation strategy -international agreements			
	Knows what climate change <b>adaptation</b> is.			
	Can describe and assess the pros and cons of the adaptations strategies to do with reducing risk from sea level rise			