

Geography A Level Learning Journey - Hazards

Hazards – Teacher 1		
	Case studies/ examples	
Intro		Go through course outline, general vocabulary, expectations. Start pupil presentations on Japan (holiday homework)
		Intro lesson to Hazards
		Pupil presentations on Japan
	Japan	Case study: Japan - multi hazardous environment – nature of the hazards, social economic and environmental risks, human qualities and responses such as resilience, adaptation, mitigation and management lead to continuing human occupation
		LC1 Assessment 20 mark Q – planning & Q
Storm Hazards		Nature of storms and their causes. Forms of storm hazard – high winds, storm surges, coastal flooding, river flooding and landslides
		Storm distribution, magnitude, frequency, regularity and predictability of hazard events
		Impacts of storms – primary/ secondary, environmental, social, economic and political
		Responses to storms – short term/ long term: risk management to reduce the impacts through preparedness, mitigation, prevention and adaptation
	Hurricane Katrina v Typhoon Haiyan	Case studies: Impacts and responses to two recent tropical storms in contrasting areas of the world: Hurricane Katrina & Typhoon Haiyan case studies
		Skills: Spearman Rank – Hurricane Katrina, Choropleth map – Typhoon Haiyan
Fires in nature		Nature of wildfires. Conditions: vegetation, fuel, climate and recent weather and behaviour. Causes: Human v physical
		Impacts and of fires – primary/ secondary, environmental, social, economic and political
		Responses to wildfires – short term/ long term: risk management to reduce the impacts through preparedness, mitigation, prevention and adaptation
	Australia 2009 & more recent events	Case study: Impacts and responses to a recent wildfire event - Australia 2009
Local case study	Kobe	Case study at a local scale – Kobe – physical nature of the hazard, economic, social and political character of the community reflects the presence and impacts of the hazard and the community’s response to the risk

Hazards – Teacher 2

	Check	
Introduction		Nature, forms and potential impacts of natural hazards (geophysical, atmospheric and hydrological) Hazard Perception and its economic and cultural determinants. Risk and vulnerability – model of vulnerability (eruption of Mt Nyiragongo, Congo 2002)
		Human responses – fatalism, prediction, adjustment/ adaptation, mitigation, management, risk sharing – and their relationship to hazard incidence, intensity, magnitude, distribution and level of development
		The Park model of human response to hazards (link to Haiti case study). The Hazard Management Cycle
Plate Tectonics		Earth structure and internal energy sources. Plate tectonic theory of crustal evolution: plate movement, gravitational sliding, ridge push, slab pull, convection currents and sea floor spreading
		Plate Boundaries (destructive, constructive and conservative). Characteristic processes: seismicity and vulcanicity. Associated landforms : young fold mountains, rift valleys, ocean ridges, deep sea trenches and island arcs, volcanoes
		Magma plumes and their relationship to plate movement
Volcanic Hazard		Nature of vulcanicity and its relation to plate tectonics: category of volcano by cone shape and eruption type VEI
		Forms of volcanic hazards : nuees ardentes, lava flows, mudflows, pyroclastic and ash fall out, gases/acid rain, tephra. Spatial distribution, magnitude, frequency, regularity and predictability of hazard events
		Impacts : primary/ secondary, environmental, social, economic and political
		Responses to volcanic hazards – short term/ long term: risk management to reduce the impacts through preparedness, mitigation, prevention and adaptation
	Mt Nyiragongo, Congo & Iceland 2010	Case study: Impact and human responses to a recent volcanic event: Mt. Nyiragongo, Congo 2002
		Learning cycle exam. Feedback and ways to improve the answer
Seismicity	Boxing Day tsunami	The nature of seismicity and its relation to plate tectonics: forms of seismic hazard: earthquakes, shockwaves, tsunamis (illustrated through Boxing Day tsunami), liquefaction, and landslides. Spatial distribution, randomness, magnitude, frequency, regularity, predictability of hazard events Key language e.g. foci, epicentre.
		Spatial distribution, randomness, magnitude, frequency, regularity, predictability of hazard events
		Impacts : primary/secondary, environmental, social, economic, political.
		Short and long-term responses : risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation.
	Haiti	Case study: Impacts and human responses to a recent seismic event: Haiti (2010)

