Living with the physical environment

The challenge of natural hazards

Natural Hazards

Key idea	Specific content	RAG 1	RAG 2	RAG 3
Natural hazards pose major risks to people and property.	Definition of a natural hazard.			
	Types of natural hazard.			
	Factors affecting risk.			

Tectonic Hazards

Key idea	Specific content	RAG 1	RAG 2	RAG 3
Earthquakes and volcanic eruptions are the result of physical processes.	Plate tectonics theory.			
	Global distribution of earthquakes and volcanic eruptions and their relationship to plate margins.			
	Physical processes taking place at different types of plate margin (constructive, destructive and conservative) that lead to earthquakes and volcanic activity.			
	Primary and secondary effects of a tectonic hazard.			
The effects of, and responses to, a	Immediate and long-term responses to a tectonic hazard.			
tectonic hazard vary between areas of contrasting levels of wealth.	Use named examples to show how the effects and responses to a tectonic hazard vary between two areas of contrasting levels of wealth.			
	HIC example – Chile earthquake, 2010 LIC example – Nepal earthquake, 2015			
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.			

Weather hazards

Key idea	Specific content	RAG 1	RAG 2	RAG 3
Global atmospheric circulation helps to	General atmospheric circulation model: pressure belts and surface winds.			
determine patterns of weather and climate.				
Tropical storms (hurricanes, cyclones,	Global distribution of tropical storms (hurricanes, cyclones and typhoons).			

typhoons) develop as a result of particular physical conditions.	An understanding of the relationship between tropical storms and general atmospheric circulation. Causes 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 have significant effects on people and the environment.	tropical storms. Primary and secondary effects of tropical storms. Immediate and long-term responses to tropical storms. Use a named example of a tropical storm to show its effects and responses. Example – Typhoon Haiyan, Philippines - 2013 How monitoring, prediction, protection and planning can reduce the effects of tropical storms.		
The UK is affected by a number of weather hazards.	An overview of types of weather hazard experienced in the UK.		
Extreme weather events in the UK have impacts on human activity.	 An example of a recent extreme weather event in the UK to illustrate: Causes Social, economic and environmental impacts How management strategies can reduce risk. Examples – Beast from the East (extreme cold/snow), 2018 <u>OR</u> Somerset Levels (Floods), 2007. Evidence that weather is becoming more extreme in the UK. 		

Challenges in the Human Environment

Urban issues and challenges

Key idea	Specific content	RAG 1	RAG 2	RAG 3
A growing percentage of the population lives in urban areas.	The global pattern of urban change. Urban trends in different parts of the world including HICs and LICs. Factors affecting the rate of urbanisation – migration (push-pull theory), natural increase. The emergence of megacities.	-		
Urban growth creates opportunities and	A case study of a major city in an LIC or NEE to illustrate:			

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challenges for cities	LIC/NEE example – Rio de Janeiro,		
in LICs and NEEs.	Brazil		
	The location and importance of the		
	city, regionally, nationally and		
	internationally		
	Causes of growth: natural increase and migration		
	and migration		
	 How urban growth has created opportunities: 		
	 Social: access to services – 		
	health and education; access		
	to resources – water supply,		
	energy		
	 Economic: how urban 		
	industrial areas can be a		
	stimulus for economic		
	development		
	How urban growth has created		
	challenges:		
	 Managing urban growth – 		
	slums, squatter settlements		
	 Providing clean water, 		
	sanitation systems and		
	 energy Providing access to services 		
	– health and education		
	 Reducing unemployment and 		
	crime		
	 Managing environmental 		
	issues – waste disposal, air		
	and water pollution, traffic		
	congestion.		
	An example of how urban planning is		
	improving the quality of life for the poor.		
	Favela Bairro Project (Rio de Janeiro)		
	Overview of the distribution of population		
	and the major cities in the UK.		
	A case study of a major city in the UK to		
	illustrate:		
	Bristol		
Urban change in the	The location and importance of the aity in the UK and the wider world		
cities in the UK leads	city in the UK and the wider world		
to a variety of social,	Impacts of national and international migration on the growth and		
economic and	migration on the growth and character of the city		
environmental	 How urban change has created 		
opportunities and	opportunities:		
challenges.	 Social and economic: cultural 		
	mix, recreation and		
	entertainment, employment,		
	integrated transport systems		
	 Environmental: urban 		
	greening		

	 How urban change has created challenges: Social and economic: urban deprivation, inequalities in housing, education, health and employment Environmental: dereliction, building on brownfield and greenfield sites, waste disposal The impact of urban sprawl on the rural-urban fringe, and the growth of commuter settlements. 	
	An example of an urban regeneration project to show:	
	Bristol - Temple Quarter Regeneration	
	 Reasons why the area needed regeneration The main features of the project, 	
	Features of sustainable urban living:	
Urban sustainability	Water and energy conservation	
requires management of resources and	Waste recycling	
transport	Creating green space. How urban transport strategies are used to	
	reduce traffic congestion.	