AQA GCSE Geography Confidence Grid – Paper 1

Living with the physical environment

SECTION A - 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.			
The effects of, and 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.			
	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 determine patterns of weather and climate.	General atmospheric circulation model: pressure belts and surface winds.			
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.			
Tropical storms have significant effects on people and the environment.	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 OR Somerset Levels (Floods), 2007.**			
	Evidence that weather is becoming more extreme in the UK.			

Climate Change

Key idea	Specific content	RAG 1	RAG 2	RAG 3
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 climate change on people and the environment.			

Managing climate change involves both mitigation (reducing causes) and adaptation (responding to change).	Managing climate 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.			

SECTION B – THE LIVING WORLD

Ecosystems

Key idea	Specific content	RAG 1	RAG 2	RAG 3
Ecosystems exist at a range of scales and involve the interaction between biotic and abiotic components.	An **example** of a small-scale UK ecosystem to illustrate the concept of interrelationships within a natural system, an understanding of producers, consumers, decomposers, food chain, food web and nutrient cycling. **EXAMPLE – Epping Forest, London**			
	The balance between components. The impact on the ecosystem of changing one component.			
	An overview of the distribution and characteristics of large scale natural global ecosystems.			

Tropical rainforests

Key idea	Specific content	RAG 1	RAG 2	RAG 3
Tropical rainforest ecosystems have a range of distinctive characteristics.	The physical characteristics of a tropical rainforest.			
	The interdependence of climate, water, soils, plants, animals and people.			
	How plants and animals adapt to the physical conditions.			
	Issues related to biodiversity.			
Deforestation has economic and environmental impacts.	Changing rates of deforestation.			
	A **case study** of a tropical rainforest to illustrate: **CASE STUDY - Malaysia** • Causes of deforestation – subsistence and commercial farming, logging, road building, mineral extraction, energy development, settlement, population growth. • Impacts of deforestation – economic development, soil erosion, contribution to climate change.			

Tropical rainforests need to be managed to be sustainable.	Value of tropical rainforests to people and the environment.			
	Strategies used to manage the rainforest sustainably – selective logging and replanting, conservation and education, ecotourism and international agreements about the use of tropical hardwoods, debt reduction.			

Hot deserts

Key idea	Specific content	RAG 1	RAG 2	RAG 3
Hot desert ecosystems have a range of distinctive characteristics.	The physical characteristics of a hot desert.			
	The interdependence of climate, water, soils, plants, animals and people.			
	How plants and animals adapt to the physical conditions.			
	Issues related to biodiversity.			
Development of hot desert environments creates opportunities and challenges.	A **case study** of a hot desert to illustrate: **CASE STUDY – Thar Desert** • Development opportunities in hot desert environments: mineral extraction, energy, farming, tourism • Challenges of developing hot desert environments: extreme temperatures, water supply, inaccessibility.			
Areas on the fringe of hot deserts are at risk of desertification.	Causes of desertification – climate change, population growth, removal of fuel wood, overgrazing, overcultivation and soil erosion.			
	Strategies used to reduce the risk of desertification – water and soil management, tree planting and use of appropriate technology.			

SECTION C – PHYSICAL LANDSCAPES IN THE UK

UK physical landscapes

Key idea	Specific content	RAG 1	RAG 2	RAG 3
The UK has a range of diverse landscapes.	An overview of the location of the major upland/lowland areas and river systems.			

Coastal landscapes in the UK

Key idea	Specific content	RAG 1	RAG 2	RAG 3
The coast is shaped by a number of physical processes.	Wave types and characteristics.			
	Coastal processes: • Weathering processes – mechanical, chemical • Mass movement – sliding, slumping and rock falls • Erosion – hydraulic action, abrasion and attrition • Transportation – longshore drift • Deposition – why sediment is deposited in coastal areas.			
Distinctive coastal landforms are the result of rock type, structure and physical processes.	How geological structure and rock type influence coastal forms.			
	Characteristics and formation of landforms resulting from erosion – headlands and bays, cliffs and wave cut platforms, caves, arches and stacks.			
	Characteristics and formation of landforms resulting from deposition – beaches, sand dunes, spits and bars.			
	An **example** of a section of coastline in the UK to identify its major landforms of erosion and deposition. **EXAMPLE – Dorset coast**			
Different management strategies can be used to protect coastlines from the effects of physical processes.	The costs and benefits of the following management strategies: • Hard engineering – sea walls, rock armour, gabions and groynes • Soft engineering – beach nourishment and reprofiling, dune regeneration • Managed retreat – coastal realignment.			
	An **example** of a coastal management scheme in the UK to show: • The reasons for management • The management strategy • The resulting effects and conflicts. **EXAMPLE – Lyme Regis**			

River landscapes in the UK

Key idea	Specific content	RAG 1	RAG 2	RAG 3
The shape of river valleys changes as rivers flow downstream.	The long profile and changing cross profile of a river and its valley.			
	Fluvial processes: • Erosion – hydraulic action, abrasion, attrition, solution, vertical and lateral erosion • Transportation – traction, saltation, suspension and solution			

	• Deposition – why rivers deposit sediment.			
Distinctive fluvial landforms result from different physical processes.	Characteristics and formation of landforms resulting from erosion – interlocking spurs, waterfalls and gorges.			
	Characteristics and formation of landforms resulting from erosion and deposition – meanders and ox-bow lakes.			
	Characteristics and formation of landforms resulting from deposition – levees, flood plains and estuaries.			
	An **example** of a river valley in the UK to identify its major landforms of erosion and deposition. **EXAMPLE – River Tees**			
Different management strategies can be used to protect river landscapes from the effects of flooding.	How physical and human factors affect the flood risk – precipitation, geology, relief and land use.			
	The use of hydrographs to show the relationship between precipitation and discharge.			
	The costs and benefits of the following management strategies: • Hard engineering – dams and reservoirs, straightening, embankments, flood relief channels • Soft engineering – flood warnings and preparation, flood plain zoning, planting trees and river restoration.			
	An **example** of a flood management scheme in the UK to show: • Why the scheme was required • The management strategy • The social, economic and environmental issues.			