

Summer 2023 Geography GCSE

Paper 1 – Living with the physical environment

Section A			CGP pages:
The challenge of natural hazards	Natural hazards	<ul style="list-style-type: none"> Definition of a natural hazard. Types of natural hazard. Factors affecting hazard risk. 	2-3
	Tectonic hazards	<ul style="list-style-type: none"> 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. 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. 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. 	4-8
	Weather hazards	<ul style="list-style-type: none"> General atmospheric circulation model: pressure belts and surface winds. Global distribution of tropical storms. 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. 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. How monitoring, prediction, protection and planning can reduce the effects of tropical storms. An overview of types of weather hazard experienced in the UK. An example of a recent extreme weather event in the UK to illustrate- <ul style="list-style-type: none"> causes social, economic and environmental impacts how management strategies can reduce risk. Evidence that weather is becoming more extreme in the UK. 	9-14
	Climate change	<ul style="list-style-type: none"> Evidence for climate change from the beginning of the Quaternary period to the present day. Possible causes of climate change: <ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> mitigation – alternative energy production, carbon capture, planting trees, international agreements. adaptation – change in agricultural systems, managing water supply, reducing risk from rising sea levels. 	15-18

Section B			
The living world	Ecosystems	<ul style="list-style-type: none"> 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. 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. 	20-22
	Tropical rainforests	<ul style="list-style-type: none"> 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. Changing rates of deforestation. A case study of a tropical rainforest to illustrate: <ul style="list-style-type: none"> 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. 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. 	23-29
	Hot deserts	<ul style="list-style-type: none"> 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. A case study of a hot desert to illustrate: <ul style="list-style-type: none"> development opportunities in hot desert environments: mineral extraction, energy, farming, tourism. challenges of developing hot desert environments: extreme temperatures, water supply, inaccessibility. Causes of desertification – climate change, population growth, removal of fuel wood, overgrazing, over-cultivation and soil erosion. Strategies used to reduce the risk of desertification – water and soil management, tree planting and use of appropriate technology. 	30-33
Section C			
Physical landscapes in the UK	UK physical landscapes	<ul style="list-style-type: none"> An overview of the location of major upland/lowland areas and river systems. 	39
	Coastal landscapes in the UK	<ul style="list-style-type: none"> Wave types and characteristics. Coastal processes: <ul style="list-style-type: none"> weathering processes – mechanical, chemical mass movement – sliding, slumping and rock falls erosion – hydraulic power, abrasion and attrition transportation – longshore drift deposition – why sediment is deposited in coastal areas. 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. The costs and benefits of the following management strategies: <ul style="list-style-type: none"> hard engineering – sea walls, rock armour, gabions and groynes 	40-47

		<ul style="list-style-type: none"> ○ soft engineering – beach nourishment and reprofiling, dune regeneration ○ managed retreat – coastal realignment. • An example of a coastal management scheme in the UK to show: <ul style="list-style-type: none"> ○ the reasons for management ○ the management strategy ○ the resulting effects and conflicts. 	
	River landscapes in the UK	<ul style="list-style-type: none"> • The long profile and changing cross profile of a river and its valley. • Fluvial processes: <ul style="list-style-type: none"> ○ erosion – hydraulic action, abrasion, attrition, solution, vertical and lateral erosion ○ transportation – traction, saltation, suspension and solution ○ deposition – why rivers deposit sediment. • 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 – levées, flood plains and estuaries. • An example of a river valley in the UK to identify its major landforms of erosion and deposition. • 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: <ul style="list-style-type: none"> ○ 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: <ul style="list-style-type: none"> ○ why the scheme was required ○ the management strategy ○ the social, economic and environmental issues. 	49-58

Paper 2 – Challenges in the human environment

Section A

Urban issues and challenges	Urbanisation	<ul style="list-style-type: none"> • 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. 	69
	Lagos Case Study (NEE)	<ul style="list-style-type: none"> • A case study of a major city in an LIC or NEE to illustrate: <ul style="list-style-type: none"> ○ the location and importance of the city, regionally, nationally and internationally ○ causes of growth: natural increase and migration ○ how urban growth has created opportunities: <ul style="list-style-type: none"> ○ 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: <ul style="list-style-type: none"> ○ managing urban growth – slums, squatter settlements ○ providing clean water, sanitation systems and energy ○ providing access to services – health and education 	70-72

		<ul style="list-style-type: none"> ○ 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 urban poor. 	
	UK Cities & Liverpool Case study	<ul style="list-style-type: none"> • 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: <ul style="list-style-type: none"> ○ the location and importance of the city in the UK and the wider world ○ impacts of national and international migration on the growth and character of the city ○ how urban change has created opportunities: <ul style="list-style-type: none"> ○ social and economic: cultural mix, recreation and entertainment, employment, integrated transport systems ○ environmental: urban greening ○ how urban change has created challenges: <ul style="list-style-type: none"> ○ 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: <ul style="list-style-type: none"> ○ reasons why the area needed regeneration ○ the main features of the project. 	73-76
	Sustainable Urban Living	<ul style="list-style-type: none"> • Features of sustainable urban living: <ul style="list-style-type: none"> ○ water and energy conservation ○ waste recycling ○ creating green space. • How urban transport strategies are used to reduce traffic congestion. 	77-79
Section B			
The changing economic world	Global variations in economic development and quality of life.	<ul style="list-style-type: none"> • Different ways of classifying parts of the world according to their level of economic development and quality of life. • Economic and social measures of development: <ul style="list-style-type: none"> ○ Gross national income (GNI) per head, ○ Birth rate ○ Death rate ○ Infant mortality rate ○ Life expectancy ○ People per doctor ○ Literacy rate ○ Access to safe water ○ Human Development Index (HDI) • Limitations of economic and social measures. • Link between stages of the Demographic Transition Model and the level of development. • Causes of uneven development: <ul style="list-style-type: none"> ○ Physical ○ Economic ○ Historical • Consequences of uneven development: <ul style="list-style-type: none"> ○ Disparities in wealth and health 	81-85

		<ul style="list-style-type: none"> ○ International migration 	
	Reducing the development gap	<ul style="list-style-type: none"> • An overview of the strategies used to reduce the development gap: <ul style="list-style-type: none"> ○ Investment ○ Industrial development ○ Tourism ○ Aid ○ Intermediate technology ○ Fairtrade ○ Debt relief ○ Microfinance loans • An example of how the growth of tourism in an LIC or NEE helps to reduce the development gap. 	86-87
	India Case Study (Rapid economic development which leads to significant social, environmental and cultural change)	<ul style="list-style-type: none"> • A case study of one LIC or NEE to illustrate: <ul style="list-style-type: none"> ○ the location and importance of the country, regionally and globally ○ the wider political, social, cultural and environmental context within which the country is placed ○ the changing industrial structure. The balance between different sectors of the economy. How manufacturing industry can stimulate economic development ○ the role of transnational corporations (TNCs) in relation to industrial development. Advantages and disadvantages of TNC(s) to the host country ○ the changing political and trading relationships with the wider world ○ international aid: types of aid, impacts of aid on the receiving country ○ the environmental impacts of economic development ○ the effects of economic development on quality of life for the population. 	88-90
	Economic futures in the UK	<ul style="list-style-type: none"> • Causes of economic change: <ul style="list-style-type: none"> ○ De-industrialisation and decline of traditional industrial base ○ Globalisation and government policies. • Moving towards a post-industrial economy: <ul style="list-style-type: none"> ○ Development of information technology ○ Service industries ○ Finance ○ Research ○ Science and business parks. • Impacts of industry on the physical environment: <ul style="list-style-type: none"> ○ An example of how modern industrial development can be more environmentally sustainable. • Social and economic changes in the rural landscape in: <ul style="list-style-type: none"> ○ one area of population growth ○ one area of population decline. • Improvements and new developments in road and rail infrastructure, port and airport capacity. • The north-south divide and strategies used in an attempt to resolve regional differences. 	91-94

		<ul style="list-style-type: none"> • The place of the UK in the wider world. Links through: <ul style="list-style-type: none"> ○ Trade ○ Culture ○ Transport ○ Electronic communication ○ Economic and political links: <ul style="list-style-type: none"> -The European Union -The Commonwealth 	
Section C			
The challenge of resource management	Global distribution of resources	<ul style="list-style-type: none"> • The significance of food, water and energy to economic and social well-being. • An overview of global inequalities in the supply and consumption of resources. • Food: <ul style="list-style-type: none"> ○ the growing demand for high-value food exports from low income countries and all-year demand for seasonal food and organic produce ○ larger carbon footprints due to the increasing number of 'food miles' travelled, and moves towards local sourcing of food ○ the trend towards agribusiness. • Water: <ul style="list-style-type: none"> ○ the changing demand for water ○ water quality and pollution management ○ matching supply and demand – areas of deficit and surplus ○ the need for transfer to maintain supplies. • Energy: <ul style="list-style-type: none"> ○ the changing energy mix – reliance on fossil fuels, growing significance of renewables ○ reduced domestic supplies of coal, gas and oil ○ economic and environmental issues associated with exploitation of energy sources. 	96-99
	Water	<ul style="list-style-type: none"> • Areas of surplus (security) and deficit (insecurity): <ul style="list-style-type: none"> ○ global patterns of water surplus and deficit ○ reasons for increasing water consumption: economic development, rising population ○ factors affecting water availability: climate, geology, pollution of supply, over-abstraction, limited infrastructure, poverty. • Impacts of water insecurity – waterborne disease and water pollution, food production, industrial output, potential for conflict where demand exceeds supply. • Overview of strategies to increase water supply: <ul style="list-style-type: none"> ○ diverting supplies and increasing storage, dams and reservoirs, water transfers and desalination ○ an example of a large-scale water transfer scheme to show how its development has both advantages and disadvantages. • Moving towards a sustainable resource future: <ul style="list-style-type: none"> ○ water conservation, groundwater management, recycling, 'grey' water ○ an example of a local scheme in an LIC or NEE to increase sustainable supplies of water. 	107-112

Paper 3 – Geographical applications

Section A – Issue evaluation

- Assessment will consist of a series of questions related to a contemporary geographical issue, leading to a more extended piece of writing which will involve an evaluative judgement.
- Students will apply knowledge and understanding to interpret, analyse and evaluate the information and issue in the pre-release resources booklet and the question paper.
- They will also use geographical skills to set the issue in context and to examine conflicting viewpoints about the issue.

P.121

Section B - Fieldwork

Suitable question for geographical enquiry	<ul style="list-style-type: none"> • The factors that need to be considered when selecting suitable questions/hypotheses for geographical enquiry. • The geographical theory/concept underpinning the enquiry. • Appropriate sources of primary and secondary evidence, including locations for fieldwork. • The potential risks of both human and physical fieldwork and how these risks might be reduced. 	P.122
Selecting, measuring and recording data appropriate to the chosen enquiry	<ul style="list-style-type: none"> • Difference between primary and secondary data. • Identification and selection of appropriate physical and human data. • Measuring and recording data using sampling methods. • Description and justification of data collection methods. 	
Selecting appropriate ways of processing and presenting fieldwork data	<ul style="list-style-type: none"> • Appreciation that a range of visual, graphical and cartographic methods is available. • Selection and accurate use of appropriate presentation methods. • Description, explanation and adaptation of presentation methods 	
Describing, analysing and explaining fieldwork data	<ul style="list-style-type: none"> • Description, analysis and explanation of the results of fieldwork data. • Establish the links between data sets. • Use appropriate statistical techniques. • Identification of anomalies in fieldwork data. 	
Reaching conclusions	<ul style="list-style-type: none"> • Draw evidenced conclusions in relation to original aims of the enquiry. 	
Evaluation of geographical enquiry	<ul style="list-style-type: none"> • Identification of problems of data collection methods. • Identification of limitations of data collected. • Suggestions for other data that might be useful. • Extent to which conclusions were reliable. 	