

GCSE Geography AQA 8035 Specification

Revision Checklist for the Summer 2018 Exams

Geographical Skills will be assessed across all three units. Read through pages 115-125 of the revision guide to check your understanding of:

- o answering questions
- o labelling & comparing
- o map skills
- o charts & graphs
- o statistics

Unit 1 Living with the Physical Environment: 88 marks (including 3 SPaG marks) - 1 hour 30 minutes TUESDAY 22 MAY 2018 afternoon 35%

Section A The Challenge of Natural Hazards (33 marks) REVISION GUIDE PAGES 2-19

Natural Hazards

- o Definition of a natural hazard (2)
- o Types of natural hazard (2)
- o Factors affecting hazard risk (2)

Tectonic Hazards

- o Plate tectonics theory (3)
- o Global distribution of earthquakes and volcanic eruptions and their relationships to plate margins (3)
- o Physical processes taking place at different types of plate margin (constructive, destructive and conservative) that lead to earthquakes and volcanic activity (3-4)
- o Primary and secondary effects of a tectonic hazard - earthquake (5)
- o Immediate and long term responses to a tectonic hazard - earthquake (5)
- o How the effects and responses to a tectonic hazard vary between areas of contrasting levels of wealth: **Case Studies: Italy earthquake and Pakistan earthquake.** (7)
- o Reasons why people continue to live in areas at risk from a tectonic hazard (8)
- o How monitoring, prediction, protection and planning can reduce the risks from a tectonic hazard (8)

Weather Hazards

- o General atmospheric circulation model: pressure belts, surface winds and tropical storms (9)
- o Global distribution of tropical storms (hurricanes, cyclones, typhoons) (10)
- o Causes of tropical storms and the sequence of their formation and development (10)
- o The structure and features of a tropical storm (10)
- o How climate change might affect the distribution, frequency and intensity of tropical storms (10)
- o Primary and secondary effects of tropical storms (11)
- o Immediate and long term responses to tropical storms (11)
- o The effects of and responses to a tropical storm: **Case Study: Hurricane Katrina, USA** (12)
- o How monitoring, prediction, protection and planning can reduce the effects of a tropical storm (12)
- o The types of weather hazard experienced in the UK (13)
- o The causes, impacts and management strategies of the **Cold December of 2010 Case Study** (14)
- o Evidence that weather is becoming more extreme in the UK (13)

Climate Change

- o Climate change from the beginning of the Quaternary period to present day (15)
- o Possible natural causes of climate change: orbital changes, volcanic activity, solar output (15)
- o Possible human causes of climate change: fossil fuels, agriculture, deforestation (16)
- o The effects of climate change on people and the environment (17)
- o Managing climate change: Mitigation - alternative energy production, carbon capture, planting trees, international agreements (18)
- o Managing climate change: Adaptation - change in agricultural systems, managing water supply, reducing risk from rising sea levels (18)

Section B The Living World (25 marks) REVISION GUIDE PAGES 20-31 & 36

Ecosystems

- o A small scale UK ecosystem: interrelationships, producers, consumers, decomposers, food chain, food web and nutrient cycle: **Case Study: The Hedgerow Ecosystem** (20)
- o The balance between components. The impact on the ecosystem of changing one component (20)
- o The distribution and characteristics of large scale natural global ecosystems (21)

Tropical Rainforests

- o The physical characteristics of a tropical rainforest (22)
- o The interdependence of climate, water, soils, plants, animals and people (22)
- o How plants and animals adapt to the physical conditions (23)
- o Issues related to biodiversity (23)
- o Changing rates of deforestation (24)
- o **Case Study: The Amazon Rainforest, South America** (25)
- Causes of deforestation: subsistence and commercial farming, logging, road building, mineral extraction, energy development, settlement, population growth
- Impact of deforestation; economic development, soil erosion, contribution to climate change
- Value of tropical rainforests to people and the environment (26)
- o Strategies used to manage the rainforests successfully - selective logging and replanting, conservation and education, ecotourism and international agreements about the use of tropical hardwoods, debt reduction (26-27)

Hot Deserts

- o The physical characteristics of a hot desert (28)
- o The interdependence of climate, water, soils, plants, animals and people (28)
- o How plants and animals adapt to the physical conditions (29)
- o Issues related to biodiversity (29)
- o **Case Study: The Sahara Desert, North Africa** (30)
- Development opportunities in hot desert environments; mineral extraction, energy, farming and tourism
- Challenges of developing hot desert environments; extreme temperatures, water supply and inaccessibility
- o Causes of desertification - climate change, population growth, removal of fuel wood, overgrazing, over-cultivation and soil erosion (31)
- o Strategies used to reduce the risk of desertification - water and soil management, tree planting and use of appropriate technology (31)

Section C Physical Landscapes in the UK (30 marks) REVISION GUIDE PAGES 37-57

UK Physical Landscapes

- o Location of major UK landscapes:
- Upland areas (37), Lowland areas (37), River systems (37)

Coastal Landscapes in the UK

- o Wave types and characteristics (38 & 40)
- o Weathering: mechanical and chemical (38)
- o Mass movement: sliding, slumping and rock falls (38)
- o Erosion; abrasion, hydraulic power, solution, attrition (ASHA) (38)
- o Transportation: longshore drift (40)
- o Deposition (40)
- o Headlands and bays (39), Cliffs and wave-cut platforms (39), Caves, arches and stacks (39)
- o Beaches (41), Sand dunes (41), Spits and bars (41)
- o **Case Study: The Dorset Coast, Southern England** (43)
- Hard engineering: sea walls, rock armour, gabions, groynes (44)
- Soft engineering: beach nourishment and reprofiling, dune regeneration (44)
- Managed retreat (44)
- o **Case Study: Holderness, North East England** (45)
- reasons for management, the management strategy, the resulting effects and conflicts

River Landscapes in the UK

- o Long profile and changing cross profile of a river and its valley (47)
- o Erosion; abrasion, hydraulic power, solution, attrition (ASHA) (48)
- o Vertical and lateral erosion (47)
- o Transportation: traction, saltation, suspension, solution (TSSS) (48)
- o Deposition (48)
- o Interlocking spurs (49), Waterfalls and gorges (49)
- o Meanders and ox-bow lakes (50)
- o Levee and flood plains (51), Estuaries (51)
- o **Case Study: The River Clyde, Scotland** (53)
- o Human and physical factors affecting flood risk
- Precipitation, geology, relief, land use (54)
- o Hydrographs to show the relationship between precipitation and discharge (54)
- o Coasts and benefits of management strategies
- Hard engineering: dams & reservoirs, straightening, embankments, flood relief channels (55)
- Soft engineering: flood warnings & preparation, flood plain zoning, planting trees, river restoration (55)
- o **Case Study: Boscastle, Cornwall, South West England** (56)
- why the scheme was required, the management strategy, social, economic and environmental issues

Unit 2 Challenges in the Human Environment: 88 marks (including 3 SPaG marks) - 1 hour 30 minutes TUESDAY 5 JUNE 2018 afternoon 35%

Section A Urban Issues & Challenges (33 marks) REVISION GUIDE PAGES 67-76	Section B The Changing Economic World (30 marks) REVISION GUIDE PAGES 77-89	Section C The Challenge of Resource Management (25 marks) REVISION GUIDE PAGES 90-93 & 106-111
<u>A growing percentage of the world's population lives in urban areas</u> - o The global pattern of urban change (67) - o Urban trends in different parts of the world including HICs and LICs (67) - o Factors affecting the rate of urbanisation - migration (push-pull theory), natural increase (67) - o The emergence of megacities (67) <u>Urban growth creates opportunities and challenges for cities in LICs and NEEs</u> - o Opportunities & Challenges of urban growth - social, economic & environmental (68) - o Improving the life of the urban poor: Favela-Bairro Project, Brazil example (68) - o Case Study of Challenges and Opportunities of Urban growth in a NEE: Lagos, Nigeria (69) <u>Urban change in cities in the UK leads to a variety of social, economic and environmental opportunities and challenges</u> - o Overview of the distribution of population and the major cities in the UK (70) - o Opportunities & Challenges of urban growth - social, economic & environmental (71) - o Urban regeneration project: New Islington, Manchester example (71) - o Case Study of Challenges and Opportunities of major UK city: Liverpool (72-73) <u>Urban sustainability requires management of resources and transport</u> - o Features of sustainable urban living: water and energy conservation, waste recycling, creating green space (74) - o How urban transport strategies are used to reduce traffic congestion (75)	<u>Global Variations in economic development and quality of life</u> - o Measuring levels of development (77) - o Classifying the World in terms of economic development & quality of life (78) - o Development and the Demographic Transition Model - DTM (79) - o Causes and consequences of uneven development (80-81) <u>Strategies to reduce the global development gap</u> - o Investment, industrial development, tourism, aid, intermediate technology, fair trade, debt relief, microfinance loans (82) - o Growth of tourism to reduce development gap in LIC or NEE: Kenya example (83) <u>Rapid economic growth in LICs and NEEs has led to significant social, environmental and cultural change</u> - o Case Study: India (84-85) - Location & Importance of India on a regional and global scale - Political, social, cultural and environmental context of India - Changing industrial structure and growth of manufacturing sector - Role of transnational corporations in India (TNCs): advantages and disadvantages - Political and trading relationships of India with the rest of the world - International aid and India - types of aid & impacts of aid - Environmental impacts of economic development - Effects of economic development and the quality of life for the people of India <u>Impact of changes in the UK economy on employment patterns and regional growth</u> - o Causes of economic change: de-industrialisation, globalisation & government policies (86) - o Post-industrial economy: new industries including IT, service, finance, research, science & business parks (86) - o Social and economic changes in the rural landscape in one area of population growth (north Somerset) and an area of population decline (Cumbria) (87) - o The North-South divide and strategies to reduce this divide (87) - o Improvements and developments in the UK's transport networks (88) - o UK's position in the wider world; trade, culture, transport, electronic communication. Economic & political links with the European Union (EU) and the Commonwealth countries (88) - o Impacts of industry on the environment & how industrial development can become more sustainable: Jaguar Land Rover, Wolverhampton (88)	<u>Food, water and energy are fundamental to human development</u> - o The significance of food, water and energy to economic and social well-being (90) - o An overview of global inequalities in the supply and consumption of resources (90) <u>The changing demand and provision of resources in the UK creates opportunities and challenges</u> Food (91) - o The growing demand for high-value food exports from low income countries and all-year demand for seasonal food and organic produce - o Larger carbon footprints due to the increasing number of 'food miles' travelled and moves towards local sourcing of food - o The trend towards agri-business. Water (92) - o The changing demand for water - o Water quality and pollution management - o Matching supply and demand - areas of deficit and surplus - o The need for transfer to maintain supplies Energy (93) - o The changing energy mix - reliance on fossil fuels, growing significance of renewables - o Reduced domestic supplies of coal, gas and oil - o Economic and environmental issues associated with exploitation of energy sources <u>Demand for global energy resources is rising globally but supply can be insecure, which may lead to conflict</u> Areas of surplus (security) and deficit (insecurity) (106) - o Global distribution of energy consumption and supply (106) - o Reasons of increasing energy consumption: economic development, rising population, technology (106) - o Factors affecting energy supply: physical factors, cost of exploitation and production, technology and political factors (107) Impact of energy insecurity - exploitation of difficult and environmentally sensitive areas, economic and environmental costs, food production, industrial output, potential for conflict where demand exceeds supply (107) <u>Different strategies can be used to increase energy supply</u> Overview of strategies to increase energy supply: - o Renewable; (biomass, wind, hydro, tidal, geothermal, wave and solar) and non-renewable (fossil fuels and nuclear power) sources of energy (108) - o An example to show how the extraction of fossil fuels has both advantages and disadvantages: Shale gas Fracking (110) Moving towards a sustainable resource future - o Individual energy use and carbon footprints. Energy conservation: designing homes, workplaces and transport for sustainability, demand reduction, use of technology to increase efficiency in the use of fossil fuels. (109) - o An example of a local renewable scheme in a LIC or NEE to provide sustainable supplies of energy Rice Husks in Bihar, NE India (110)

Unit 3 Geographical Applications: 76 marks (including 6 SPaG marks) - 1 hour 15 minutes MONDAY 11 JUNE 2018 afternoon 30%

Section A Issue Evaluation (37 marks) REVISION GUIDE PAGE 112	Section B Fieldwork (39 marks) REVISION GUIDE PAGES 113-114
Preliminary material released Monday 19th March 2018	Physical Geography study in the Rural Environment: What changes in bedload and cross profile can be found over distance along the River Esk? Human and Physical Geography study in the Urban Environment: What are the physical and human attractions of the coastal landscape at Whitby?