

# Pearson Edexcel Level 3 GCE

May–June 2022 Assessment Window

Syllabus  
reference

9GEO

## Geography Advanced Level Advance Information Version 2

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### Instructions

- Please ensure that you have read this notice before the examination.

### Information

- This notice covers all examined components.
- This notice does **not** cover non-examined assessment (NEA) components.
- The format of the assessments remains unchanged.
- This advance information details the focus of the content of the exams in the May–June 2022 assessments.
- There are no restrictions on who can use this notice.
- This notice is meant to help students to focus their revision time.
- Students and teachers can discuss the advance information.
- This document has 31 pages.

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## General advice

- In addition to covering the content outlined in the advance information, students and teachers should consider how to:
  - manage their revision of parts of the specification that may be assessed in areas not covered by the advance information.
  - manage their revision of other parts of the specification that may provide knowledge that helps with understanding the areas being tested in 2022.
- For specifications with synoptic assessments, topics not explicitly given in the advance information may appear, e.g. where students are asked to bring together knowledge, skills and understanding from across the specification.
- For specifications with optional papers/topics/content, students should only refer to the advance information for their intended option.
- For specifications with NEA, advance information does not cover any NEA components.

A link to the Joint Council for Qualifications guidance document on advance information can be found on the Joint Council for Qualifications website or [here](#).

## Advance Information

### Subject specific section

- Questions will be drawn from one or more of the indicated areas of specification content.
- The information is presented in specification order and not in question order.
- The specification references for the content included in the examination are listed. Note that the exam may include some or all of the content in the listed topics.
- Some questions may be answerable using more than one area of specified content, including ones not listed.
- There is no expectation of knowledge beyond that identified to achieve full marks.
- Students will be expected to draw on the listed content from across the specification when responding to synoptic questions. Note that Students will be credited for using any relevant knowledge from any areas when answering questions including ones not listed.
- Where the detailed content in the specification must be studied in context, this is indicated by brackets containing the symbol , followed in some cases by suggested place contexts. These suggestions are not compulsory, and a similar suitable context could be chosen.
- Guidance for integrating geographical skills has been provided at the end of each content topic under the heading 'Guidance for integrating geographical skills'. Opportunities to integrate geographical skills are indicated by bracketed numbers in the detailed content, (1) for example. Please see page 8 of the specification for further information.
- This specification contains three synoptic themes. The synoptic themes are highlighted in the specification in bold italics (***P: role of planners, engineers***) for example. In this qualification, Paper 3 is a synoptic investigation that will link explicitly and/or implicitly to these synoptic themes and will incorporate key concepts. Please see page 9 of the specification for further information.

## Area of study 1: Dynamic landscapes

### Topic 1: Tectonic processes and hazards

#### Enquiry question 2: Why do some tectonic hazards develop into disasters?

Key idea	Detailed content
1.4 Disaster occurrence can be explained by the relationship between hazards, vulnerability, resilience and disaster.	c. The social and economic impacts of tectonic hazards (volcanic eruptions, earthquakes and tsunamis) on the people, economy and environment of contrasting locations in the developed, emerging and developing world.
1.6 Development and governance are important in understanding disaster impact and vulnerability and resilience.	a. Inequality of access to education, housing, healthcare and income opportunities can influence vulnerability and resilience.
	b. Governance ( <b>P: local and national government</b> ) and geographical factors (population density, isolation/ accessibility, degree of urbanisation) influence vulnerability and a community's resilience.
	c. Contrasting hazard events in developed, emerging and developing countries to show the interaction of physical factors and the significance of context in influencing the scale of disaster. (5)

#### Enquiry question 3: How successful is the management of tectonic hazards and disasters?

Key idea	Detailed content
1.8 Theoretical frameworks can be used to understand the predication, impact and management of tectonic hazards.	a. Prediction and forecasting ( <b>P: role of scientists</b> ) accuracy depend on the type and location of the tectonic hazard.
	b. The importance of different stages in the hazard management cycle (response, recovery, mitigation, preparedness). ( <b>P: role of emergency planners</b> )

**1.9** Tectonic hazard impacts can be managed by a variety of mitigation and adaptation strategies, which vary in their effectiveness.

a. Strategies to modify the event include land-use zoning, hazard – resistant design and engineering defences as well as diversion of lava flows. (**P: role of planners, engineers**) (7)

b. Strategies to modify vulnerability and resilience include hi- tech monitoring, prediction, education, community preparedness and adaptation. (F: models forecasting disaster impacts with and without modification)

c. Strategies to modify loss include emergency, short and longer term aid and insurance (**P: role of NGOs and insurers**) and the actions of affected communities themselves.



## Topic 2: Landscape Systems, Processes and Change

### Option 2A: Glaciated Landscapes and Change

#### Enquiry question 3: How do glacial processes contribute to the formation of glacial landforms and landscapes?

Key idea	Detailed content
<b>2A.7</b> Glacial erosion creates distinctive landforms and contributes to glaciated landscapes.	a. Glacial erosional processes (abrasion, quarrying, plucking, crushing and basal melting, combined with subaerial freeze thaw and mass movement).
	b. The processes leading to the formation of landforms associated with cirque and valley glaciers (cirques/corries (5), arêtes, pyramidal peaks, glacial troughs, truncated spurs/hanging valleys and ribbon lakes).
	c. The formation of landforms due to ice sheet scouring (roches moutonnées, knock and lochan, crag and tail) and the influence of differential geology.
<b>2A.8</b> Glacial deposition creates distinctive landforms and contributes to glaciated landscapes.	a. The formation of glacial (ice contact) depositional features (medial, lateral, recessional and terminal moraines and drumlins).
	b. The formation of lowland depositional features (till plains, lodgement and ablation till). (6)
	c. The assemblage of landforms can be used to reconstruct former ice extent, movement and provenance (erratics, moraines, crag and tail, drumlin orientation). (7)

**Enquiry question 4: How are glaciated landscapes used and managed today?**

Key idea	Detailed content
<p><b>2A.10</b> Glacial and periglacial landscapes have intrinsic cultural, economic and environmental value.</p>	<p>a. Relict and active glaciated landscapes have environmental and cultural value (polar scientific research, wilderness recreation, and spiritual/religious associations). <b>(A: attitudes range from exploitation to preservation)</b></p> <p>b. Glaciated landscapes are important economically (farming, mining, hydroelectric power, tourism, forestry) to include a study of contrasting environments around the world.</p> <p>c. Glaciated and periglacial landscapes have a unique biodiversity (tundra) and play an important role in the maintenance of natural systems (water and carbon cycles).</p>
<p><b>2A.11</b> There are threats facing fragile active and relict glaciated upland landscapes.</p>	<p>a. Glaciated landscapes face varying degrees of threat from both natural hazards (avalanches and glacial outburst floods) and human activities (leisure and tourism, reservoir construction, urbanisation) (🌍 Alpine Valleys).</p> <p>b. Human activity can degrade the landscape and fragile ecology of glaciated landscapes (soil erosion, trampling, landslides, deforestation). <b>(A: direct actions by players reduce resilience)</b></p> <p>c. Global warming is having a major impact on glacial mass balances, which in turn risks disruption of the hydrological cycle (meltwater, river discharge, sediment yield, water quality) (🌍 Himalayan Glaciers). (9) <b>(A: indirect actions by players alter natural systems)</b></p>



## Option 2B: Coastal Landscapes and Change

<b>Enquiry question 2: How do characteristic coastal landforms contribute to coastal landscapes?</b>	
<b>Key idea</b>	<b>Detailed content</b>
<b>2B.4</b> Marine erosion creates distinctive coastal landforms and contributes to coastal landscapes.	a. Different wave types (constructive/destructive) influence beach morphology and beach sediment profiles, which vary at a variety of temporal scales from short term (daily) through to longer periods. (4)
	b. The importance of erosion processes (hydraulic action, corrosion, abrasion, attrition) and how they are influenced by wave type, size and lithology.
	c. Erosion creates distinctive coastal landforms (wave cut notches, wave cut platforms, cliffs, the cave-arch-stack-stump sequence).
<b>2B.5</b> Sediment transport and deposition create distinctive landforms and contribute to coastal landscapes.	a. Sediment transportation is influenced by the angle of wave attack, the process of longshore drift, tides and currents. (5)
	b. Transportation and deposition processes produce distinctive coastal landforms (beaches, recurved and double spits, offshore bars, barrier beaches and bars, tombolos and cusped forelands), which can be stabilised by plant succession.
	c. The Sediment Cell concept (sources, transfers and sinks) is important in understanding the coast as a system of dynamic equilibrium, with both negative and positive feedback (🌐 Portland Bill to Selsey Bill)
<b>2B.6</b> Subaerial processes of mass movement and weathering influence coastal landforms and contribute to coastal landscapes.	a. Weathering (mechanical, chemical, biological) is important in sediment production and influences rates of recession.
	b. Mass movement (blockfall, rotational slumping, landslides) is important on some coasts with weak and/or complex geology.
	c. Mass movement creates distinctive landforms (rotational scars, talus scree slopes, terraced cliff profiles).



**Enquiry question 3: How do coastal erosion and sea level change alter the physical characteristics of coastlines and increase risks?**

Key idea	Detailed content
<p><b>2B.7</b> Sea level change influences coasts on different timescales.</p>	<p>a. Longer-term sea level changes result from a complex interplay of factors both eustatic (ice formation/melting, thermal changes) and isostatic (post glacial adjustment, subsidence, accretion and tectonics).</p>
	<p>b. Sea level change has produced emergent coastlines (raised beaches with fossil cliffs) and submergent coastlines (rias, fjords and Dalmatian). (6)</p>
	<p>c. Contemporary sea level change from global warming or tectonic activity is a risk to some coastlines.</p>
<p><b>2B.9</b> Coastal flooding is a significant and increasing risk for some coastlines.</p>	<p>a. Local factors increase flood risk on some low-lying and estuarine coasts (height, degree of subsidence, vegetation removal); global sea level rise further increases risk (🌐 Bangladesh or the Maldives).</p>
	<p>b. Storm surge events can lead to severe coastal flooding with dramatic short-term impacts (depressions, tropical cyclones).</p>
	<p>c. Climate change may increase coastal flood risk (frequency and magnitude of storms, sea level rise) but the pace and magnitude of this threat is uncertain. <b>(F: this risk is creating an uncertain future and needs mitigation and adaptation)</b></p>

**Enquiry question 4: How can coastlines be managed to meet the needs of all players?**

Key idea	Detailed content
<p><b>2B.10</b> Increasing risks of coastal recession and coastal flooding have serious consequences for affected communities.</p>	<p>a. Economic losses (housing, businesses, agricultural land, infrastructure) and social losses (relocation, loss of livelihood, amenity value) from coastal recession can be significant, especially in areas of dense coastal developments.</p>
	<p>b. Coastal flooding and storm surge events can have serious economic and social consequences for coastal communities in both developing and developed countries.</p>
	<p>c. Climate change may create environmental refugees in coastal areas.</p>

## Area of study 2: Dynamic Places

### Topic 3: Globalisation

**Enquiry question 1: What are the causes of globalisation and why has it accelerated in recent decades?**

Key idea	Detailed content
<b>3.1</b> Globalisation is a long-standing process which has accelerated because of rapid developments in transport, communications and businesses.	a. Globalisation involves widening and deepening global connections, interdependence and flows (commodities, capital, information, migrants and tourists). (1)
	b. Developments in transport and trade in the 19th century (railways, telegraph, steam-ships) accelerated in the 20th century (jet aircraft, containerisation), contributing to a 'shrinking world'.
	c. The 21st century has been dominated by rapid development in ICT and global communication (mobile phones, internet, social networking, electronic banking, fibre optics), lowering communication costs and contributing to time-space compression.
<b>3.2</b> Political and economic decision making are important factors in the acceleration of globalisation.	a. International political and economic organisations ( <b>P: role of World Trade Organization (WTO), International Monetary Fund (IMF), World Bank</b> ) have contributed to globalisation through the promotion of free trade policies and foreign direct investment (FDI).
	b. National governments are key players in terms of promoting free trade blocs ( <b>P: role of European Union (EU), The Association of Southeast Asian Nations (ASEAN)</b> ) and through policies (free-market liberalisation, privatisation, encouraging business start-ups). (P: role of governments in economic liberalisation)
	c. Special economic zones, government subsidies and attitudes to FDI (🌐 China's 1978 Open Door Policy) have contributed to the spread of globalisation into new global regions ( <b>P: role of governments in attracting foreign direct investment (FDI)</b> )

## Topic 4: Shaping Places

### Option 4A: Regenerating Places

#### Enquiry question 1: How and why do places vary?

An in-depth study of the local place in which you live or study and one contrasting place

Key idea	Detailed content
<b>4A.1</b> Economies can be classified in different ways and vary from place to place.	b. There are differences in economic activity (employment data and output data) and this is reflected through variation in social factors (health, life expectancy and levels of education). (1)
<b>4A.2</b> Places have changed their function and characteristics over time.	b. Reason for changes in a place might be explained by physical factors, accessibility and connectedness, historical development and the role of local and national planning. (2)
	c. Change can be measured using employment trends, demographic changes, land use changes and levels of deprivation (income deprivation, employment deprivation, health deprivation, crime, quality of the living environment, abandoned and derelict land). (3)
<b>4A.3</b> Past and present connections have shaped the economic and social characteristics of your chosen places.	a. Regional and national influences have shaped the characteristics of your chosen places. These places can be represented in a variety of different forms, giving contrasting images to that presented more formally and statistically. How the lives of students and those of others are affected by this continuity and change, both real and imagined.
	c. Consideration of the way in which economic and social changes in your chosen places have influenced people's identity. (4) ( <b>A: Attitudes on changes range from cultural erosion to enrichment</b> )

### Enquiry question 3: How is regeneration managed?

Key idea	Detailed content
<b>4A.7</b> UK government policy decisions play a key role in regeneration.	a. Infrastructure investment (high speed rail, airport development) in order to maintain growth and improve accessibility to regenerate regions. <b>(P: national government facilitate regeneration often in partnerships with charities and developers)</b>
	b. Rate and type of development (planning laws, house building targets, housing affordability, permission for 'fracking') affecting economic regeneration of both rural and urban regions. <b>(A: Government actions may prioritise national over local needs and opinions)</b>
	c. UK government decisions about international migration and the deregulation of capital markets (🌐 enabling foreign investment in prime London real estate) have significant impacts on the potential for growth and both direct and indirect investment. <b>(P: Government may create open or closed doors policies)</b>
<b>4A.8</b> Local government policies aim to represent areas as being attractive for inward investment.	a. Local governments compete to create sympathetic business environments with local plans designating areas for development for a range of domestic and foreign investors (🌐 Science and technology parks). <b>(A: the actions of local authorities will affect their success)</b>

### Enquiry question 4: How successful is regeneration?

Key idea	Detailed content
<b>4A.11</b> Different urban stakeholders have different criteria for judging the success of urban regeneration.	b. The changes that have taken place as a consequence of national and local strategies can be judged using a range of economic, social, demographic and environmental variables in an urban area. <b>(F: future success depends on past decisions)</b>
	c. Different stakeholders (local and national governments, local businesses and residents) will assess success using contrasting criteria; their views will depend on the meaning and lived experiences of an urban place and the impact of change on both the reality and the image of that place.

**4A.12** Different rural stakeholders have different criteria for judging the success of rural regeneration.

b. The changes that have taken place as a consequence of national and local strategies can be judged using a range of economic, social, demographic and environmental variables in a rural area. **(F: future success depends on past decisions)**

c. Different stakeholders (local and national governments, local businesses and residents) will assess success using contrasting criteria; their views will depend on the meaning and lived experiences of a rural place and the impact of change on both the reality and the image of that place.

## Option 4B: Diverse Places

### Enquiry question 1: How do population structures vary?

An in-depth study of the local place in which you live or study and one contrasting place

Key idea	Detailed content
<b>4B.1</b> Population structure varies from place to place and over time.	c. Population structure and dynamics are a result of differences in fertility and mortality rates as well as international and internal migration.
<b>4B.2</b> Population characteristics vary from place to place and over time.	a. There can be considerable variation in population characteristics (gender and ethnicity), both in and between settlements.
	b. Different levels of cultural diversity in places can be explained by social clustering, accessibility to key cities, physical factors and government planning policy. ( <b>A: actions by governments may foster or suppress diversity</b> )
	c. Fertility and mortality rates, as well as international and internal migration, are changing the cultural characteristics of places.
<b>4B.3</b> How past and present connections have shaped the demographic and cultural characteristics of your chosen places.	a. Regional and national influences that have shaped the characteristics of your chosen places. These places can be represented in a variety of different forms, giving contrasting images to that presented more formally and statistically. How lives of students and those of others are affected by this continuity and change, both real and imagined.
	c. Consideration of the way in which the demographic and cultural changes in your chosen local place have impacted on people's identity. (1)

**Enquiry question 2: How do different people view diverse living spaces?**

Key idea	Detailed content
<p><b>4B.4</b> Urban places are seen differently by different groups because of their lived experience of places and their perception of those places.</p>	<p>b. Some urban locations are perceived as undesirable or even threatening by residents and/or outsiders due to high crime rates, low environmental quality, population characteristics and reputation based on quantitative data but also due to lived experience and media representation. (2)</p>
	<p>c. Suburban and inner-city areas are perceived differently in terms of their desirability as places to live and work by contrasting demographic groups (by age, ethnicity, life-cycle stage). (3) <b>(A: attitudes may vary)</b></p>
<p><b>4B.5</b> Rural places are seen differently by different groups because of their lived experience of places and their perception of those places.</p>	<p>a. Rural places are often perceived as idyllic because of their tranquillity, natural landscapes and historical and cultural associations (🌐 Hardy's 'Wessex'). (4) <b>(A: Urban and rural residents may differ in their attitude to places.)</b></p>
	<p>b. Some rural locations are perceived as undesirable by residents and/or outsiders because of remoteness, limited social opportunities, limited range of services, high transport costs, population characteristics and reputation based on quantitative data but also because of lived experience and media representation.</p>
	<p>c. Rural areas are viewed in different ways: from very remote areas to retirement villages and commuter villages <b>(A: attitudes may vary)</b></p>

**Enquiry question 3: Why are there demographic and cultural tensions in diverse places?**

Key idea	Detailed content
<p><b>4B.7</b> Culture and society is now more diverse in the UK.</p>	<p>a. Significant internal movement of people within the UK has created uneven demographic and cultural patterns. (🌐 London and the south-east)</p>
	<p>b. Culture and society in the UK has changed because of significant international migration flows from former colonies (🌐 Indian sub-continent and the West Indies) and from the European Union. <b>(P: the main gatekeeper player affecting flows is the Government)</b></p>
	<p>c. Some international migrants choose to live in rural areas for specific reasons, creating social challenges and opportunities. (🌐 East Europeans in Lincolnshire)</p>
<p><b>4B.9</b> Changes to diverse places can lead to tension and conflict.</p>	<p>a. Different community groups, local and national governments and TNCs may make changes to land uses that create challenges and opportunities for local people and their lived experience of place. (A: different actions may have different impacts)</p>



**Enquiry question 4: How successfully are cultural and demographic issues managed?**

Key idea	Detailed content
<p><b>4B.10</b> The management of cultural and demographic issues can be measured using a range of techniques.</p>	<p>b. Social progress can be measured by reductions in inequalities both between areas and within them as well as improvements in social measures of deprivation and demographic changes (improvements in life expectancy). (8)</p>
<p><b>4B.11</b> Different urban stakeholders have different criteria for assessing the success of managing change in diverse urban communities.</p>	<p>b. The changes that have taken place can be judged using a range of economic, social, demographic and environmental variables in the changing urban area. <b>(F: changes may create differing legacies)</b></p> <p>c. Different stakeholders (local and national governments, local businesses and residents) will assess success using contrasting criteria depending on the meaning of the place and the impact of change on both the reality and their image of that place. (10) <b>(A: 'success' depends on the attitudes of different players)</b></p>
<p><b>4B.12</b> Different rural stakeholders have different criteria for assessing the success of managing change in diverse rural communities.</p>	<p>b. The changes that have taken place can be judged using a range of economic, social, demographic and environmental variables in the changing rural area. <b>(F: changes may create differing legacies)</b></p> <p>c. Different stakeholders (local and national governments, local businesses and residents) will assess success using contrasting criteria, depending on the meaning of the place and the impact of change on both the reality and their image of that place. <b>(A: 'success' depends on the attitudes of different players)</b></p>





## Area of study 3: Physical Systems and Sustainability

### Topic 5: The Water Cycle and Water Insecurity

#### Enquiry question 2: What factors influence the hydrological system over short- and long-term timescales?

Key idea	Detailed content
<b>5.4</b> Deficits within the hydrological cycle result from physical processes but can have significant impacts.	a. The courses of drought, both meteorological and hydrological: short-term precipitation deficit, longer term trends, and ENSO cycles. (5) (6)
	b. The contribution human activity makes to the risk of drought: over-abstraction of surface water resources and ground water aquifers. (🌍 Sahelian or Australia drought)
	c. The impacts of drought on ecosystem functioning (wetlands, forest stress) and the resilience of these ecosystems.
<b>5.5</b> Surpluses within the hydrological cycle can lead to flooding, with significant impacts for people.	a. Meteorological causes of flooding, including intense storms leading to flash flooding, unusually heavy or prolonged rainfall, extreme monsoonal rainfall and snowmelt. (5) (6)
	b. Human actions that can exacerbate flood risk (changing land use within the river catchment, mismanagement of rivers using hard engineering systems.)
	c. Damage from flooding has both environmental impacts (soils and ecosystems) and socio-economic impacts (economic activity, infrastructure and settlement). (🌍 UK flood events 2007 or 2012)
<b>5.6</b> Climate change may have significant impacts on the hydrological cycle globally and locally.	a. Climate change affects inputs and outputs within the hydrological cycle: trends in precipitation and evaporation.
	b. Climate change affects stores and flows, size of snow and glacier mass, reservoirs, lakes, amount of permafrost, soil moisture levels as well as rates of runoff and stream flow.

## Topic 6: The Carbon Cycle and Energy Security

**Enquiry question 1: How does the carbon cycle operate to maintain planetary health?**

<b>Key idea</b>	<b>Detailed content</b>
<b>6.2</b> Biological processes sequester carbon on land and in the oceans on shorter timescales.	a. Phytoplankton sequester atmospheric carbon during photosynthesis in surface ocean waters; carbonate shells/tests move into the deep ocean water through the carbonate pump and action of the thermohaline circulation.
<b>6.3</b> A balanced carbon cycle is important in sustaining other earth systems but is increasingly altered by human activities.	b. Ocean and terrestrial photosynthesis play an important role in regulating the composition of the atmosphere. Soil health is influenced by stored carbon, which is important for ecosystem productivity.

**Enquiry question 2: What are the consequences for people and the environment of our increasing demand for energy?**

Key idea	Detailed content
<p><b>6.4</b> Energy security is a key goal for countries, with most relying on fossil fuels.</p>	<p>a. Consumption (per capita and in terms of units of GDP) and energy mix (domestic and foreign, primary and secondary energy, renewable versus non-renewable). (3)</p> <p>b. Access to and consumption of energy resources depends on physical availability, cost, technology, public perception, level of economic development and environmental priorities (🌐 national comparisons: USA versus France).</p> <p>c. Energy players (<b>P: role of TNCs, The Organisation of the Petroleum Exporting Countries (OPEC), consumers, governments</b>) have different roles in securing pathways and energy supplies.</p>
<p><b>6.6</b> There are alternatives to fossil fuels but each has costs and benefits.</p>	<p>a. Renewable and recyclable energy (nuclear power, wind power and solar power) could help decouple fossil fuel from economic growth; these energy sources have costs and benefits economically, socially, and environmentally and in terms of their contribution they can make to energy security. (🌐 changing UK energy mix)</p>

## Area of study 4: Human Systems and Geopolitics

### Topic 7: Superpowers

#### Enquiry question 2: What are the impacts of superpowers on the global economy, political systems and the physical environment?

Key idea	Detailed content
7.6 Global concerns about the physical environment are disproportionately influenced by superpower actions.	a. Superpower resource demands (food, fossil fuels, and minerals) can cause environmental degradation and their carbon emissions contribute disproportionately to global warming. (4)
	c. Future growth in middle-class consumption in emerging superpowers has implications for the availability and cost of key resources (rare earths, oil, staple grains and water), as well as for the physical environment.

#### Enquiry question 3: What spheres of influence are contested by superpowers and what are the implications of this?

Key idea	Detailed content
7.7 Global influence is contested in a number of different economic, environmental and political spheres.	a. Tensions can arise over the acquisition of physical resources (Arctic oil and gas) where ownership is disputed and disagreement exists over exploitation. <b>(A: attitudes and actions in relation to resources)</b>
	c. Political spheres of influence can be contested leading to tensions over territory and physical resources (🌐 South and East China Seas) and in some cases resulting in open conflict (🌐 Western Russia/Eastern Europe) with implications for people and physical environments.
7.8 Developing nations have changing relationships with superpowers with consequences for people and the physical environment.	c. Cultural, political, economic and environmental tensions in the Middle East represent an ongoing challenge to superpowers and emerging powers due to complex geopolitical relations combined with the supply of vital energy resources. <b>(A: contrasting cultural ideologies)</b>

## Topic 8: Global Development and Connections

### Option 8A: Health, Human Rights and Intervention

#### Enquiry question 1: What is human development and why do levels vary from place to place?

Key idea	Detailed content
<b>8A.1</b> Concepts of human development are complex and contested.	c. Education is central to economic development (human capital) and to the understanding and assertion of human rights; this view is, however, not universally shared (attitudes to gender equality in education) as both access to education and standards of achievement vary greatly among countries (The United Nations Educational, Scientific and Cultural Organisation (UNESCO)).
<b>8A.2</b> There are notable variations in human health and life expectancy.	a. There are considerable variations in health and life expectancy in the developing world that are explained by differential access to basic needs such as food, water supply and sanitation, and which impact particularly on levels of infant and maternal mortality. (2)
	b. Variations in health and life expectancy in the developed world are largely a function of differences in lifestyles, levels of deprivation and the availability, cost and effectiveness of medical care. (2)

#### Enquiry question 2: Why do human rights vary from place to place?

Key idea	Detailed content
<b>8A.4</b> Human rights have become important aspects of both international law and international agreements.	b. The European Convention on Human Rights (ECHR) was drafted by the nations of the Council of Europe to help prevent conflict and integrated into the UK by the Human Rights Act of 1998; the ECHR remains controversial as some see it as an erosion of national sovereignty.
<b>8A.5</b> There are significant differences between countries in both their definitions and protection of human rights.	b. Some superpowers and emerging powers have transitioned to more democratic governments but the degree of democratic freedom varies (🌐 comparison of an authoritarian and a democratic system); the protection of human rights and degree of freedom of speech varies.
	c. Levels of political corruption vary and can be measured (Index of Corruption); high levels of corruption are a threat to human rights as the rule of law can be subverted. (4)

**Enquiry question 3: How are human rights used as arguments for political and military intervention?**

Key idea	Detailed content
<p><b>8A.7</b> There are different forms of geopolitical intervention in defence of human rights.</p>	<p>a. There is a wide range of geopolitical interventions to address development and human rights issues: development aid, trade embargoes, military aid, indirect and direct military action.</p>

**Enquiry question 4: What are the outcomes of geopolitical interventions in terms of human development and human rights?**

Key idea	Detailed content
<p><b>8A.10</b> There are several ways of measuring the success of geopolitical interventions.</p>	<p>a. Measurements of success comprise a wide range of variables, including improvements in health, life expectancy, educational levels, gender equality, freedom of speech and successful management of refugees as well as increases in GDP per capita. (8)</p>
	<p>b. For some governments and IGOs, the introduction of democratic institutions is deemed important and freedom of expression is seen as central to the development of democratic and capitalist societies.</p>
	<p>c. For other countries, (🌐) success is measured in terms of economic growth with less attention to holistic development (human wellbeing) or human rights and the development of democratic institutions.</p>
<p><b>8A.12</b> Military interventions, both direct and indirect, have a mixed record of success.</p>	<p>a. The recent history of military interventions, both direct and indirect, suggest that there are significant costs, including loss of sovereignty and human rights (🌐) and contrasts between short-term gains with long-term costs (🌐).</p>
	<p>b. Other non-military interventions may have a stronger record of improving both human rights and development (🌐 Cote d'Ivoire 2011).</p>
	<p>c. Lack of action also has global consequences (🌐) which may impact negatively on progress in environmental, political and social development (human wellbeing and human rights).</p>



## Option 8B: Migration, Identity and Sovereignty

### Enquiry question 1: What are the impacts of globalisation on international migration?

Key idea	Detailed content
<b>8B.1</b> Globalisation has led to an increase in migration both within countries and among them.	b. Between 3–4% of the global population live outside their country of birth but this proportion varies greatly between countries because of different policies relating to international migration and levels of engagement with the global economy (🌐 Singapore or Japan or Australia).
	c. The pattern of international migration is changing and will continue to change because environmental, economic and political events affect both the source areas of many migrants and their destinations; this results in flows of both voluntary economic migrants, refugees and asylum seekers. (1)
<b>8B.3</b> The consequences of international migration are varied and disputed.	a. Migration changes the cultural and ethnic composition of nation states but the rate of assimilation of migrants varies from nation to nation especially when there are distinctive ethnic differences.

### Enquiry question 2: How are nation states defined and how have they evolved in a globalising world?

Key idea	Detailed content
<b>8B.4</b> Nation states are highly varied and have very different histories.	a. National sovereign states vary greatly in their ethnic, cultural and linguistic unity (🌐 Iceland compared to Singapore); this results from their history of population growth, their degree of isolation and the role of migration. (4)
	b. Many national borders are a consequence of physical geography and historical development; other borders are a result of colonial history and might not take account of different ethnic or religious groups (🌐 Iraq or Rwanda), which can lead to problems of sovereignty and legitimacy.
	c. There are many contested borders (🌐 Ukraine/Russia) and not all nation states are universally recognised as such (🌐 Taiwan) which can lead to both potential conflict and population movements.

**Enquiry question 3: What are the impacts of global organisations on managing global issues and conflicts?**

Key idea	Detailed content
<p><b>8B.7</b> Global organisations are not new but have been important in the post-1945 world.</p>	<p>a. The United Nations was the first post-war IGO to be established and has grown in importance; its role in global governance is affected by the different geopolitical visions of members of the Security Council and its multiple functions in managing global environmental, socio-economic and political problems.</p>
<p><b>8B.8</b> IGOs established after the Second World War have controlled the rules of world trade and financial flows.</p>	<p>a. The IMF, WB and WTO were established by the WWII allied nations and have been important in maintaining the dominance of 'western' capitalism, global economic management and trade policy (free trade).</p> <p>b. Global borrowing rules and trade policies have been especially effective in delivering growth to the developed world, but the impact of Structural Adjustment and HIPC policies on the developing world's economies and economic sovereignty is disputed (🌐 Jamaica's structural adjustment programme).</p> <p>c. Membership of global trade and financial IGOs is almost universal, as a result of the dominance of these organisations, but regional groupings have emerged in the form of trading blocs (🌐 NAFTA/SEATO) and in some cases (EU) there has been a movement to closer political unity.</p>
<p><b>8B.9</b> IGOs have been formed to manage the environmental problems facing the world, with varying success.</p>	<p>a. Global environmental issues including issues concerning the quality of the atmosphere and biosphere (🌐 Montreal Protocol on Substances that Deplete the Ozone Layer) and biosphere (🌐 Convention on International Trade in Endangered Species of Wild Fauna and Flora CITES). (7)</p> <p>b. IGOs have been involved in developing laws for managing oceans (🌐 UN Convention on the Law of the Sea) and international rivers (🌐 Helsinki Water Convention rules) as well as monitoring the state of the environment (🌐 Millennium Ecosystem Assessment).</p> <p>c. IGO management also includes responsibility for Antarctica as a continent of peace and science (🌐 Antarctic Treaty System).</p>



## Additional content to be covered for Paper 3 Synoptic Investigation

This section only includes synoptic content that has not previously been identified above.

### Area of study 1: Dynamic landscapes

#### Topic 1: Tectonic processes and hazards

##### Enquiry question 2: Why do some tectonic hazards develop into disasters?

Key idea	Detailed content
1.4 Disaster occurrence can be explained by the relationship between hazards, vulnerability, resilience and disaster.	a. Definition of a natural hazard and a disaster, the importance of vulnerability and a community's threshold for resilience, the hazard risk equation.
	b. The Pressure and Release model (PAR) and the complex inter-relationships between the hazard and its wider context.

##### Enquiry question 3: How successful is the management of tectonic hazards and disasters?

Key idea	Detailed content
1.7 Understanding the complex trends and patterns for tectonic disasters helps explain differential impacts.	a. Tectonic disaster trends since 1960 (number of deaths, numbers affected, level of economic damage) in the context of overall disaster trends.(6); research into the accuracy and reliability of the data to interpret complex trends.
	c. The concept of a multiple-hazard zone and how linked hydrometeorological hazards sometimes contribute to a tectonic disaster (🌐 the Philippines).

## Area of study 2: Dynamic Places

### Topic 3: Globalisation

**Enquiry question 1: What are the causes of globalisation and why has it accelerated in recent decades?**

Key idea	Detailed content
<b>3.3</b> Globalisation has affected some places and organisations more than others.	c. There are physical, political, economic and environmental reasons why some locations remain largely 'switched off' from globalisation (🌐 North Korea or Sahel countries). (3)

**Enquiry question 2: What are the impacts of globalisation for countries, different groups of people and cultures and the physical environment?**

Key idea	Detailed content
<b>3.4</b> The global shift has created winners and losers for people and the physical environment.	b. Some communities in developing countries have experienced major environmental problems (including air and water pollution, land degradation, over-exploitation of resources, and loss of biodiversity), which impact on people's health and wellbeing.
<b>3.5</b> The scale and pace of economic migration has increased as the world has become more interconnected, creating consequences for people and the physical environment.	b. International migration has increased in global hub cities and regions, deepening interdependence between regions (elite migration (🌐 Russian oligarchs to London) and mass low- wage economic migration (🌐 India to UAE or the Philippines to Saudi Arabia)).
<b>3.6</b> The emergence of a global culture, based on western ideas, consumption, and attitudes towards the physical environment, is one outcome of globalisation.	b. In some locations, cultural erosion (loss of language, traditional food, music, clothes, social relations (🌐 loss of tribal lifestyles in Papua New Guinea) has resulted in changes to the built and natural environment (de-valuing local and larger-scale ecosystems).

**Enquiry question 3: What are the consequences of globalisation for global development and the physical environment and how should different players respond to its challenges?**

Key idea	Detailed content
<p><b>3.7</b> Globalisation has led to dramatic increases in development for some countries, but also widening development gap extremities and disparities in environmental quality.</p>	<p>a. Economic measures (both single and composite indices) of development (income per capita, economic sector balance) contrast with those focused on social development (Human Development Index (HDI), Gender Inequality Index (GII)) and environmental quality (air pollution indices). (7)</p>
	<p>b. Trends in widening income inequality, globally and nationally (measured using the Gini Coefficient), suggest globalisation has created winners and losers for people and physical environments between and within developed, emerging and developing economies. (8)</p>
	<p>c. Contrasting trends in economic development and environmental management between global regions since 1970 indicate differential progress that can be related to the outcomes from globalisation.</p>
<p><b>3.8</b> Social, political and environmental tensions have resulted from the rapidity of global change caused by globalisation.</p>	<p>c. Some groups seek to retain their cultural identity within countries and seek to retain control of culture and physical resources (🌐 First Nations in Canada), whereas others embrace its economic advantages.</p>

## Area of study 3: Physical Systems and Sustainability

### Topic 5: The Water Cycle and Water Insecurity

**Enquiry question 2: What factors influence the hydrological system over short- and long-term timescales?**

Key idea	Detailed content
<b>5.6</b> Climate change may have significant impacts on the hydrological cycle globally and locally.	c. Climate change resulting from short-term oscillations (ENSO cycles) and global warming increase the uncertainty in the system; this causes concerns over the security of water supplies. ( <b>F: projections of future drought and flood risk</b> )

**Enquiry question 3: How does water insecurity occur and why is it becoming such a global issue for the 21st century?**

Key idea	Detailed content
<b>5.8</b> There are consequences and risks associated with water insecurity.	c. The potential for conflicts to occur between users within a country, and internationally over local and trans-boundary water sources (🌍 Nile or Mekong). ( <b>P: role of different players</b> ). (9)

### Topic 6: The Carbon Cycle and Energy Security

**Enquiry question 3: How are the carbon and water cycles linked to the global climate system?**

Key idea	Detailed content
<b>6.8</b> There are implications for human wellbeing from the degradation of the water and carbon cycles	c. Threats to ocean health pose threats to human wellbeing, especially in developing regions that depend on marine resources as a food source and for tourism and coastal protection.

**6.9** Further planetary warming risks large-scale release of stored carbon, requiring responses from different players at different scales.

a. Future emissions, atmospheric concentration levels and climate warming are uncertain owing to natural factors (the role of carbon sinks), human factors (economic growth, population, energy sources) and feedback mechanisms (carbon release from peatlands and permafrost, and tipping points, including forest die back and alterations to the thermohaline circulation). (8)

**(F: uncertainty of global projections)**

b. Adaptation strategies for a changed climate (water conservation and management, resilient agricultural systems, land-use planning, flood-risk management, solar radiation management) have different costs and risks.

c. Re-balancing the carbon cycle could be achieved through mitigation (carbon taxation, renewable switching, energy efficiency, afforestation, carbon capture and storage) but this requires global scale agreement and national actions both of which have proved to be problematic.

**(A: attitudes of different countries, TNCs and people)**



## Area of study 4: Human Systems and Geopolitics

### Topic 7: Superpowers

**Enquiry question 2: What are the impacts of superpowers on the global economy, political systems and the physical environment?**

Key idea	Detailed content
<b>7.4</b> Superpowers have a significant influence over the global economic system.	a. Superpowers influence the global economy (promoting free trade and capitalism) through a variety of IGOs (World Bank, IMF, WTO, World Economic Forum (WEF)). (3)
	b. TNCs are dominant economic forces in the global economy and economic and cultural globalisation in terms of technology (patents) and trade patterns. <b><i>(P: role of TNCs in maintaining power and wealth)</i></b>

## Geographical skills

The geography specification requires students to use their prior knowledge and understanding of the geographical, mathematical and statistical skills required at GCSE.

### 1. Qualitative data

- (b) interpret and evaluate a range of source material including textual and visual sources, such as oral accounts, newspapers, creative media, social media, aerial, oblique, ground photographs, sketches and drawings
- (c) understand the opportunities and limitations of qualitative techniques such as coding and sampling and appreciate how they actively create particular geographical
- (d) understand the ethical and socio-political implications of collecting, studying and representing geographical data about human communities.

### 2. Quantitative data

- (a) use, interpret and analyse geographical information including dot maps, kite diagrams, linear and logarithmic scales, dispersion diagrams, satellite images, GIS
- (b) demonstrate an ability to collect and to use digital, geo-located data, and to understand a range of approaches to the use and analysis of such data
- (d) understand the purposes and difference between the following and be able to use them in appropriate contexts:
  - (i) descriptive statistics of central tendency and dispersion, including Gini Co-efficient and Lorenz curve
  - (ii) descriptive measures of difference and association from the following statistical tests: t-tests, Spearman's rank, chi-squared; inferential statistics and the foundations of relational statistics, including measures of correlation and lines of best fit on a scatter plot
  - (iii) measurement, measurement errors, and sampling

## END OF ADVANCE INFORMATION