

Important information about **A Level Geography**

Teachers and classes

Course specification

End of topic test and mock exam termly dates

Revision materials

Geography revision club timetable

Exam command words

Y12

Mrs Beeson	Mrs Wilde
Paper 2 - Globalisation Paper 2 – Regenerating places	Paper 1 – Tectonic processes and hazards Paper 1 – Coasts NEA Preparation

Y13

Mrs Beeson	Mrs Wilde
Paper 1 – The water cycle and water insecurity Paper 1 – The Carbon cycle and Energy security Paper 3 preparation	Paper 2 – Superpowers Paper 2 –Health, Human rights and Intervention Paper 3 preparation

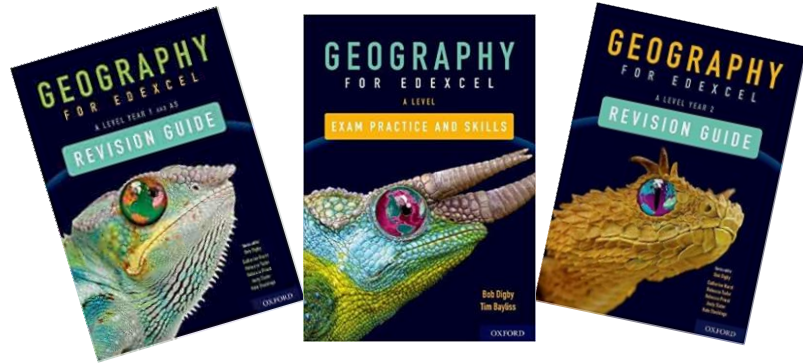
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Revision guide materials

Each year Oxford University Press Geography materials will be on offer to purchase, the bundles will on Parentpay accompanied with an information letter with prices and weblinks.



Revision clubs

Paper 1 / 2 Content/Technique And NEA	Mrs Wilde	TBC
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Qualification - GEOGRAPHY

Content and assessment overview

The Pearson Edexcel Level 3 Advanced GCE in Geography consists of three externally examined papers and one coursework component.

Students must complete all assessment in May/June in any single year.

Paper 1 (Paper code: 9GE0/01)

Written examination: 2 hours and 15 minutes

30% of the qualification

105 marks

Content overview¹

- Area of study 1, Topic 1: Tectonic Processes and Hazards
- Area of study 1, Topic 2: Landscape Systems, Processes and Change – including optional sub-topics from which students choose **one** from two: 2A: *Glaciated Landscapes and Change* or 2B: *Coastal Landscapes and Change*
- Area of study 3, Topic 5: The Water Cycle and Water Insecurity
- Area of study 3, Topic 6: The Carbon Cycle and Energy Security

Assessment overview

An externally-assessed written examination comprising three sections.

Section A relates to *Topic 1: Tectonic Processes and Hazards*.

Section B relates to *Topic 2: Landscape Systems, Processes and Change*. Students answer questions on **either** *Topic 2A: Glaciated Landscapes and Change* **or** *Topic 2B: Coastal Landscapes and Change*.

Section C relates to *Topic 5: The Water Cycle and Water Insecurity* and *Topic 6: The Carbon Cycle and Energy Security*.

The examination may include short open, open response and resource-linked questions. The examination includes 12-mark and 20-mark extended writing questions. Calculators may be used.

Paper 2 (Paper code: 9GE0/02)

Written examination: 2 hours and 15 minutes

30% of the qualification

105 marks

Content overview¹

- Area of study 2, Topic 3: Globalisation
- Area of study 2, Topic 4: Shaping Places – including optional sub-topics from which students choose **one** from two: 4A Regenerating Places or 4B Diverse Places
- Area of study 4, Topic 7: Superpowers
- Area of study 4, Topic 8: Global Development and Connections – including optional sub-topics from which students choose **one** from two: 8A Health, Human Rights and Intervention or 8B Migration, Identity and Sovereignty

Assessment overview

An externally-assessed written examination comprising three sections.

Section A relates to *Topics 3 and 7: Globalisation / Superpowers*.

Section B relates to *Topic 4: Shaping Places*. Students answer questions on **either** *Topic 4A: Regenerating Places* **or** *Topic 4B: Diverse Places*.

Section C relates to *Topic 8: Global Development and Connections*. Students answer questions on **either** *Topic 8A: Health, Human Rights and Intervention* **or** *Topic 8B: Migration, Identity and Sovereignty*.

The examination may include short open, open response and resource-linked questions. The examination includes 12-mark and 20-mark extended writing questions. Calculators may be used.

Paper 3 (*Paper code: 9GE0/03)

Written examination: 2 hours and 15 minutes

20% of the qualification

70 marks

Content overview

The specification contains three synoptic themes within the compulsory¹ content areas:

- Players
- Attitudes and actions
- Futures and uncertainties.

The synoptic investigation will be based on a geographical issue within a place-based context that links to the three synoptic themes and is rooted in two or more of the compulsory content areas.

Assessment overview

An externally-assessed written examination comprising three sections. A resource booklet will contain information about the geographical issue.

Sections A, B and C all draw synoptically on knowledge and understanding from compulsory content drawn from different parts of the course.

The examination may include short open, open response and resource-linked questions. The examination includes 8-mark, 18-mark and 24-mark extended writing questions. Calculators may be used.

Coursework: Independent Investigation (9GE0/04)

Non-examined assessment

20% of the qualification

70 marks

Content overview

- The student defines a question or issue for investigation, relating to the compulsory or optional content. The topic may relate to any aspect of geography contained within the specification
- The student's investigation will incorporate fieldwork data (collected individually or as part of a group) and own research and/or secondary data
- The fieldwork, which forms the focus and context of the individual investigation, may be either human, physical or integrated physical-human
- The investigation report will evidence independent analysis and evaluation of data, presentation of data findings and extended writing
- Students will be expected to show evidence that they have used both quantitative and qualitative data to support their independent investigation as appropriate to the particular environment and/or location.

Assessment overview

- The investigation report is internally assessed and externally moderated.
- The student will produce a written report of 3000–4000 words.

Geographical skills

This qualification requires students to evidence a variety of geographical skills, showing a critical awareness of the appropriateness and limitations of different methods, skills and techniques.

Full details of the required geographical skills are given in *Appendix 1: Geographical skills*.

Fieldwork

A Level students must complete a minimum of **four** days of fieldwork. Fieldwork must be carried out in relation to processes in physical and human geography. This is a Department for Education (DfE) requirement. Centres will be required to provide evidence of this fieldwork in the form of a written fieldwork statement. The fieldwork statement represents a true and accurate written declaration made by a centre to Pearson, confirming that a student to which that centre has delivered the A Level Geography assessment has undertaken geographical fieldwork over four days and in both physical and human environments. Pearson will publish the final deadline date for submission of this form on our website. Failure to return the Fieldwork Statement on time will constitute malpractice on the part of the Centre, see page 86.

In the coursework component, students are required to undertake an independent investigation that involves (but need not be restricted to) fieldwork, producing a written report. Students' investigations will incorporate fieldwork data (collected individually or as part of a group).

Full details of the required fieldwork skills are provided in *Appendix 2: Fieldwork skills*.

Area of study 1: Dynamic Landscapes

Topic 1: Tectonic Processes and Hazards

Overview

Tectonic hazards – earthquakes, volcanic eruptions and secondary hazards such as tsunamis – represent a significant risk in some parts of the world. This is especially the case where active tectonic plate boundaries interact with areas of high population density and low levels of development. Resilience in these places can be low, and the interaction of physical systems with vulnerable populations can result in major disasters. An in-depth understanding of the causes of tectonic hazards is key to both increasing the degree to which they can be managed, and putting in place successful responses that can mitigate social and economic impacts and allow humans to adapt to hazard occurrence.

Content

Enquiry question 1: Why are some locations more at risk from tectonic hazards?

Key idea	Detailed content
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1.1 The global distribution of tectonic hazards can be explained by plate boundary and other tectonic processes.	a.	The global distribution and causes of earthquakes, volcanic eruptions and tsunamis. (1)
	b.	The distribution of plate boundaries resulting from divergent, convergent and conservative plate movements (oceanic, continental and combined situations).
	c.	The causes of intra-plate earthquakes, and volcanoes associated with hot spots from mantle plumes.
1.2 There are theoretical frameworks that attempt to explain plate movements.	a.	The theory of plate tectonics and its key elements (the earth's internal structure, mantle convection, palaeomagnetism and sea floor spreading, subduction and slab pull).
	b.	The operation of these processes at different plate margins (destructive, constructive, collision and transform). (2)
	c.	Physical processes impact on the magnitude and type of volcanic eruption, and earthquake magnitude and focal depth (Benioff zone).
1.3 Physical processes explain the causes of tectonic hazards.	a.	Earthquake waves (P, S and L waves) cause crustal fracturing, ground shaking and secondary hazards (liquefaction and landslides).
	b.	Volcanoes cause lava flows, pyroclastic flows, ash falls, gas eruptions, and secondary hazards (lahars, jökulhlaup).
	c.	Tsunamis can be caused by sub-marine earthquakes at subduction zones as a result of sea-bed and water column displacement. (3)

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.
	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.
1.5 Tectonic hazard profiles are important to an	a.	The magnitude and intensity of tectonic hazards is measured using different scales (Mercalli, Moment Magnitude Scale (MMS) and Volcanic Explosivity Index (VEI)).

understanding of contrasting hazard impacts, vulnerability and resilience.	b. Comparing the characteristics of earthquakes, volcanoes and tsunamis (magnitude, speed of onset and areal extent, duration, frequency, spatial predictability) through hazard profiles.
	c. Profiles of earthquake, volcano and tsunami events showing the severity of social and economic impact in developed, emerging and developing countries. (4)
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 (P: local and national government) and geographical factors (population density, isolation and 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
1.7 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.
	b. Tectonic mega-disasters can have regional or even global significance in terms of economic and human impacts. (🌐 2004 Asian tsunami, 2010 Eyafjallajokull eruption in Iceland (global independence) and 2011 Japanese tsunami (energy policy))
	c. The concept of a multiple-hazard zone and how linked hydrometeorological hazards sometimes contribute to a tectonic disaster (🌐 the Philippines).
1.8 Theoretical frameworks can	a. Prediction and forecasting (P: role of scientists) accuracy depend on the type and location of the tectonic hazard.

<p>be used to understand the predication, impact and management of tectonic hazards.</p>	<p>b. The importance of different stages in the hazard management cycle (response, recovery, mitigation, preparedness). (P: role of emergency planners)</p>
<p>1.9 Tectonic hazard impacts can be managed by a variety of mitigation and adaptation strategies, which vary in their effectiveness.</p>	<p>c. Use of Park's Model to compare the response curve of hazard events, comparing areas at different stages of development.</p> <p>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)</p> <p>b. Strategies to modify vulnerability and resilience include hitech monitoring, prediction, education, community preparedness and adaptation. (F: models forecasting disaster impacts with and without modification)</p> <p>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.</p>

Topic 2: Landscape Systems, Processes and Change

Option 2B: Coastal Landscapes and Change

Overview

Coastal landscapes develop due to the interaction of winds, waves and currents, as well as through the contribution of both terrestrial and offshore sources of sediment. These flows of energy and variations in sediment budgets interact with the prevailing geological and lithological characteristics of the coast to operate as coastal systems and produce distinctive coastal landscapes, including those in rocky, sandy and estuarine coastlines. These landscapes are increasingly threatened from physical processes and human activities, and there is a need for holistic and sustainable management of these areas in all the world's coasts. Study must include examples of landscapes from inside and outside the UK.

Content

Enquiry question 1: Why are coastal landscapes different and what processes cause these differences?	
Key idea	Detailed content
2B.1 The coast, and wider littoral zone, has distinctive features and landscapes.	a. The littoral zone consists of backshore, nearshore and offshore zones, includes a wide variety of coastal types and is a dynamic zone of rapid change.
	b. Coasts can be classified by using longer term criteria such as geology and changes of sea level or shorter term processes such as inputs from rivers, waves and tides.
	c. Rocky coasts (high and low relief) result from resistant geology (to the erosive forces of sea, rain and wind), often in a highenergy environment, whereas coastal plain landscapes (sandy and estuarine coasts) are found near areas of low relief and result from supply of sediment from different terrestrial and offshore sources, often in a low-energy environment.
2B.2 Geological structure influences the development of coastal landscapes at a variety of scales.	a. Geological structure is responsible for the formation of concordant and discordant coasts.
	b. Geological structure influences coastal morphology: Dalmatian and Haff type concordant coasts and headlands and bays on discordant coasts.
	c. Geological structure (jointing, dip, faulting, folding) is an important influence on coastal morphology and erosion rates, and also on the formation of cliff profiles and the occurrence of micro-features, e.g. caves. (2)
2B.3 Rates of coastal recession and stability depend on lithology and other factors.	a. Bedrock lithology (igneous, sedimentary, metamorphic) and unconsolidated material geology are important in understanding rates of coastal recession.
	b. Differential erosion of alternating strata in cliffs (permeable/impermeable, resistant/less resistant) produces complex cliff profiles and influences recession rates. (3)

- c. Vegetation is important in stabilising sandy coastlines through dune successional development on sandy coastlines and salt marsh successional development in estuarine areas.

Enquiry question 2: How do characteristic coastal landforms contribute to coastal landscapes?

Key idea	Detailed content
<p>2B.4 Marine erosion creates distinctive coastal landforms and contributes to coastal landscapes.</p>	<p>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)</p> <p>b. The importance of erosion processes (hydraulic action, corrosion, abrasion, attrition) and how they are influenced by wave type, size and lithology.</p> <p>c. Erosion creates distinctive coastal landforms (wave cut notches, wave cut platforms, cliffs, the cave-arch-stackstump sequence).</p>
<p>2B.5 Sediment transport and deposition create distinctive landforms and contribute to coastal landscapes.</p>	<p>a. Sediment transportation is influenced by the angle of wave attack, tides and currents and the process of longshore drift. (5)</p> <p>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.</p> <p>c. The Sediment Cell concept (sources, transfers and sinks) is important in understanding the coast as a system with both negative and positive feedback, it is an example of dynamic equilibrium.</p>
<p>2B.6</p> <p>Subaerial processes of mass movement and weathering influence coastal landforms and contribute to coastal landscapes.</p>	<p>a. Weathering (mechanical, chemical, biological) is important in sediment production and influences rates of recession.</p> <p>b. Mass movement (blockfall, rotational slumping, landslides) is important on some coasts with weak and/or complex geology.</p> <p>c. Mass movement creates distinctive landforms (rotational scars, talus scree slopes, terraced cliff profiles).</p>

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>2B.7 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>2B.8 Rapid coastal retreat causes threats to people at the coast.</p>	<p>a. Rapid coastal recession is caused by physical factors (geological and marine) but can be influenced by human actions (dredging or coastal management 🌐 the Nile Delta, Guinea and Californian coastlines). (A: actions of different players may alter natural systems)</p> <p>b. Subaerial processes (weather and mass movement) work together to influence rates of coastal recession.</p> <p>c. Rates of recession are not constant and are influenced by different factors both short- and longer term (wind direction/fetch, tides, seasons, weather systems and occurrence of storms). (7)</p>
<p>2B.9 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, the Maldives).</p> <p>b. Storm surge events can cause severe coastal flooding with dramatic short-term impacts (depressions, tropical cyclones) can cause severe coastal flooding (🌐 the Philippines, Bangladesh).</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. (F: this risk is creating an uncertain future and needs mitigation and adaptation)</p>

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

Key idea	Detailed content
<p>2B.10 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 (🌐 Holderness, north Norfolk).</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 (🌐 the Philippines, Bangladesh and Netherlands).</p> <p>c. Climate change may create environmental refugees in coastal areas (🌐 Tuvalu Islands).</p>
<p>2B.11 There are different approaches to managing the risks associated with coastal recession and flooding.</p>	<p>a. Hard engineering approaches (groynes, sea walls, rip rap, revetments, offshore breakwaters) are economically costly and directly alter physical processes and systems. (8) (A: actions by different players may have unforeseen consequences)</p> <p>b. Soft engineering approaches (beach nourishment, cliff regrading and drainage, dune stabilisation) attempt to work with physical systems and processes to protect coasts (9) and manage changes in sea level.</p> <p>c. Sustainable management is designed to cope with future threats (increased storm events, rising sea levels) but its implementation can lead to local conflicts in many countries (🌐 Maldives, Namibia). (F: mitigation and adaptation will both be needed for future stability)</p>
<p>2B.12 Coastlines are now increasingly managed by holistic integrated coastal zone management (ICZM).</p>	<p>a. Coastal management increasingly uses the concept of littoral cells to manage extended areas of coastline. Throughout the world, countries are developing schemes that are sustainable and use holistic ICZM strategies.</p> <p>b. Policy decisions (No Active Intervention, Strategic Realignment and Hold The Line Advance The Line) are based on complex judgements (engineering feasibility, environmental sensitivity, land value, political and social reasons) (7); Cost Benefit Analysis (CBA) and Environmental Impact Assessment (EIA) are used as part of the decision-making process.</p>

- c. Policy decisions can lead to conflicts between different players (homeowners, local authorities, environmental pressure groups) with perceived winners and losers in countries at different levels of development (developed and developing or emerging countries) (🌐 Hapisburgh and Chittagong).
(A: attitudes of differing players may vary)

Area of study 2: Dynamic Places

Topic 3: Globalisation

Overview

Globalisation and global interdependence continue to accelerate, resulting in changing opportunities for businesses and people. Inequalities are caused within and between countries as shifts in patterns of wealth occur. Cultural impacts on the identity of communities increase as flows of ideas, people and goods take place. Recognising that both tensions in communities and pressures on environments are likely, will help players implement sustainable solutions.

Content

Enquiry question 1: What are the causes of globalisation and why has it accelerated in recent decades?	
Key idea	Detailed content
3.1 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 mobile communication (mobile phones, internet, social networking, electronic banking, fibre optics), lowering communication costs and contributing to time-space compression.
3.2 Political and economic decision making are important factors in the acceleration of globalisation.	a. International political and economic organisations (P: role of World Trade Organization (WTO), International Monetary Fund (IMF), World Bank) 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 (P: role of European Union (EU), The Association of Southeast Asian Nations (ASEAN)) 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 (P: role of governments in attracting foreign direct investment (FDI))

3.3 Globalisation has affected some places and organisations more than others.	a. Degree of globalisation varies by country and can be measured using indicators and indices (AT Kearney index, KOF index). (2)
	b. TNCs are important in globalisation (P: role of TNCs) both contributing to its spread (global production networks, glocalisation and the development of new markets) and taking advantage of economic liberalisation (outsourcing and offshoring).
	c. There are physical, political, economic and environmental reasons why some locations remain largely 'switched off' from globalisation (🌐 North Korea, 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
3.4 The global shift has created winners and losers for people and the physical environment.	a. The movement of the global economic centre of gravity to Asia via the global shift of manufacturing (🌐 China) and outsourcing of services (🌐 India) can lead to changes in the built environment that can bring benefits (infrastructure investment, waged work, poverty reduction, education and training) but also costs (loss of productive land, unplanned settlements, environmental and resource pressure).
	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.
	c. Some deindustrialised regions in developed countries face social and environmental problems as a result of economic restructuring (dereliction, contamination, depopulation, crime and high unemployment). (4)
3.5 The scale and pace of economic migration has increased as the world has become more interconnected, creating consequences for people and the physical environment.	a. Rural-urban migration (push and pull factors), and/or natural increase, is responsible for the growth of megacities (🌐 Mumbai, Karachi); rapid urban growth creates social and environmental challenges. (5)
	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, the Philippines to Saudi Arabia)).
	c. Migration has economic, social, political and environmental costs and benefits for both host and source locations.

<p>3.6 The emergence of a global culture, based on western ideas, consumption, and attitudes towards the physical environment, is one outcome of globalisation.</p>	<p>a.</p> <p>Cultural diffusion occurs as a result of globalisation; TNCs, global media corporations (P: role of TNCs), tourism and migration create and spread an increasingly 'westernised' global culture which impacts on both the environment and people (🌐 Changing diets in Asia). The spread of a global culture has also led to new awareness of opportunities for disadvantaged groups (🌐 Paralympic movement) particularly in emerging and developing countries. (P: opportunities for these groups) (6)</p>
	<p>b.</p> <p>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).</p>
	<p>c.</p> <p>Concern about cultural impacts, economic and environmental exploitation has led to opposition to globalisation from some groups. (A: attitudes of pro- and anti- globalisation groups, environmental movement)</p>

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>3.7 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.</p> <p>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.</p> <p>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.</p> <p>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>3.8 Social, political and environmental tensions have resulted from the</p>	<p>a.</p> <p>Open borders, deregulation and encouragement of foreign direct investment has created culturally mixed societies and thriving migrant diasporas in some locations, but tensions have resulted elsewhere (🌐 Rise of extremism in Europe, Trans-boundary water conflicts).</p>

<p>rapidity of global change caused by globalisation.</p>	<p>b. Attempts have been made in some locations to control the spread of globalisation by censorship (🌐 China, North Korea), limiting immigration (🌐 UK, Japan) and trade protectionism. (P: role of government) (A: attitudes of pro- and antiimmigration groups)</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>
<p>3.9 Ethical and environmental concerns about unsustainability have led to increased localism and awareness of the impacts of a consumer society.</p>	<p>a. Local groups and NGOs promote local sourcing (🌐 Transition towns) as one response to globalisation by increasing sustainability (A: actions of local pressure groups); this has economic, social and environmental costs and benefits.</p>
	<p>b. Fair trade and ethical consumption schemes may reduce the environmental degradation, the inequalities of global trade and improve working conditions for some people. (A: actions of NGOs and pressure groups)</p>
	<p>c. Recycling has a role in managing resource consumption and ecological footprints, but its use varies by product and place (🌐 local authorities in the UK, local NGOs such as Keep Britain Tidy). (F: environmental consequences of different patterns of resource consumption)</p>

Topic 4: Shaping Places

Option 4A: Regenerating Places

Overview

Local places vary economically and socially with change driven by local, national and global processes. These processes include movements of people, capital, information and resources, making some places economically dynamic while other places appear to be marginalised. This creates and exacerbates considerable economic and social inequalities both between and within local areas. Urban and rural regeneration programmes involving a range of players involve both place making (regeneration) and place marketing (rebranding). Regeneration programmes impact variably on people both in terms of their lived experience of change and their perception and attachment to places. The relative success of regeneration and rebranding for individuals and groups depends on the extent to which lived experience, perceptions, and attachments to places are changed.

Students should begin by studying the place in which they live or study in order to look at economic change and social inequalities. They will then put this local place in context in order to understand how regional, national, international and global influences have led to changes there. They should then study one further contrasting place through which they will develop their wider knowledge and understanding about how places change and are shaped.

Content

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
4A.1 Economies can be classified in different ways and vary from place to place.	a. Economic activity can be classified by sector (primary, secondary, tertiary and quaternary) and also by type of employment (part-time/full-time, temporary/permanent, employed/self-employed).
	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)
	c. The inequalities in pay levels across economic sectors and in different types of employment are reflected in quality of life indices.
4A.2 Places have changed their function and characteristics over time.	a. Over time, places have changed their functions (administrative, commercial, retail and industrial) and demographic characteristics (gentrification, age structure and ethnic composition).
	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)

	<p>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)</p>
<p>4A.3 Past and present connections have shaped the economic and social characteristics of your chosen places.</p>	<p>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.</p>
	<p>b. International and global influences that have shaped 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. (P: increasing roles of TNCs and IGOs)</p>
	<p>c. Consideration of the way in which economic and social changes in your chosen places have influenced people's identity. (4) (A: Attitudes on changes range from cultural erosion to enrichment)</p>

Enquiry question 2: Why might regeneration be needed?	
Key idea	Detailed content
<p>4A.4 Economic and social inequalities changes people's perceptions of an area.</p>	<p>a. Successful regions (🌐 San Francisco Bay area) have high rates of employment, inward migration (internal and international) and low levels of multiple deprivation but also high property prices and skill shortages in both urban and rural areas.</p>
	<p>b. In some regions (🌐 The Rust Belt, USA) economic restructuring has triggered a spiral of decline, which includes increasing levels of social deprivation (education, health, crime, access to services and living environment) in both deindustrialised urban areas and rural settlements once dominated by primary economic activities.</p>
	<p>c. There are priorities for regeneration due to significant variations in both economic and social inequalities (gated communities, 'sink estates', commuter villages, declining rural settlements).</p>

<p>4A.5 There are significant variations in the lived experience of place and engagement with them.</p>	<p>a. There are wide variations in levels of engagement in local communities (local and national election turnout, development and support for local community groups). (A: local communities vary in attitudes)</p>
	<p>b. Lived experience of, and attachment to, places varies according to age, ethnicity, gender, length of residence (new migrants, students) and levels of deprivation; these in turn impact on levels of engagement. (A: Attachment to places influence attitudes)</p>
	<p>c. Conflicts can occur among contrasting groups in communities that have different views about the priorities and strategies for regeneration, these have complex causes (lack of political engagement and representation, ethnic tensions, inequality and lack of economic opportunity). (P: Players vary attitudes(A) and may have contrasting approaches (F))</p>
<p>4A.6 There is a range of ways to evaluate the need for regeneration.</p>	<p>a. The use of statistical evidence to determine the need for regeneration in your chosen local place. (🌐) (5)</p>
	<p>b. Different media can provide contrasting evidence, questioning the need for regeneration in your chosen local place. (🌐) (6)</p>
	<p>c. How different representations of your chosen local place could influence the perceived need for regeneration. (🌐) (7)</p>

Enquiry question 3: How is regeneration managed?

Key idea	Detailed content
<p>4A.7 UK government policy decisions play a key role in regeneration.</p>	<p>a. Infrastructure investment (high speed rail, airport development) in order to maintain growth and improve accessibility to regenerate regions. (P: national government facilitate regeneration often in partnerships with charities and developers)</p>
	<p>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. (A: Government actions may prioritise national over local needs and opinions.)</p>
	<p>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. (P: Government may create open or closed doors policies)</p>

<p>4A.8 Local government policies aim to represent areas as being attractive for inward investment.</p>	<p>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 Parks). (A: the actions of local authorities will affect their success)</p>
	<p>b. Local interest groups (Chambers of Commerce, local preservation societies, trade unions) play a key role in decision-making about regeneration; there are often tensions between groups that wish to preserve urban environments and those that seek change. (🌐 London Olympics 2012) (A: differing attitudes may cause conflicts)</p>
	<p>c. Urban and rural regeneration strategies include retail-led plans, tourism, leisure and sport (🌐 London Olympics 2012), public/private rural diversification (🌐 Powys Regeneration Partnership).</p>
<p>4A.9 Rebranding attempts to represent areas as being more attractive by changing public perception of them.</p>	<p>a. Rebranding involves re-imaging places using a variety of media to improve the image of both urban and rural locations and make them more attractive for potential investors.</p>
	<p>b. For UK deindustrialised cities, rebranding can stress the attraction of places, creating specific place identity building on their industrial heritage; this can attract national and international tourists and visitors (🌐 Glasgow 'Scotland with Style'). (8)</p>
	<p>c. There are a range of rural rebranding strategies in the post-production countryside based on heritage and literary associations, farm diversification and specialised products, outdoor pursuits and adventure in both accessible and remote areas; these strategies are intended to make these places more attractive to national and international tourists and visitors (🌐 'Brontë country, Kielder Forest).</p>

Enquiry question 4: How successful is regeneration?

Key idea	Detailed content
<p>4A.10 The success of regeneration uses a range of measures: economic, demographic, social and environmental.</p>	<p>a. The success of economic regeneration can be assessed using measures of income, poverty and employment (both relative and absolute changes) both within areas and by comparison to other more successful areas.</p>
	<p>b. Social progress can be measured by reductions in inequalities both between areas and within them; social progress can also be measured by improvements in social measures of deprivation and in demographic changes (improvements in life expectancy and reductions in health deprivation).</p>

	<p>c. Regeneration is successful if it leads to an improvement in the living environment (levels of pollution reduced, reduction in abandoned and derelict land). (9)</p>
<p>4A.11 Different urban stakeholders have different criteria for judging the success of urban regeneration.</p>	<p>a. A study of the strategies used in the regeneration of an urban place (📍 Salford Quays) and the contested nature of these decisions within local communities. (10) (A: Attitudes will include NIMBYism)</p> <p>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. (F: future success depends on past decisions)</p> <p>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.</p>
<p>4A.12 Different rural stakeholders have different criteria for judging the success of rural regeneration.</p>	<p>a. A study of the strategies used in the restructuring of a rural place (📍 North Antrim coast) and the contested nature of these decisions within local communities.</p> <p>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)</p> <p>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.</p>

Area of study 3: Physical Systems and Sustainability

Topic 5: The Water Cycle and Water Insecurity

Overview

Water plays a key role in supporting life on earth. The water cycle operates at a variety of spatial scales and also at short- and long-term timescales, from global to local. Physical processes control the circulation of water between the stores on land, in the oceans, in the cryosphere, and the atmosphere. Changes to the most important stores of water are a result of both physical and human processes.

Water insecurity is becoming a global issue with serious consequences and there is a range of different approaches to managing water supply.

Content

Enquiry question 1: What are the processes operating within the hydrological cycle from global to local scale?	
Key idea	Detailed content
5.1 The global hydrological cycle is of enormous importance to life on earth	a. The global hydrological cycle's operation as a closed system (inputs, outputs, stores and flows) driven by solar energy and gravitational potential energy. (1)
	b. The relative importance and size (percentage contribution) of the water stores (oceans, atmosphere, biosphere, cryosphere, groundwater and surface water) and annual fluxes between atmosphere, ocean and land.
	c. The global water budget limits water available for human use and water stores have different residence times; some stores are non-renewable (fossil water or cryosphere losses).
5.2 The drainage basin is an open system within the global hydrological cycle.	a. The hydrological cycle is a system of linked processes: inputs (precipitation patterns and types: orographic, frontal, convectional) flows (interception, infiltration, direct runoff, saturated overland flow, throughflow, percolation, groundwater flow) and outputs (evaporation, transpiration and channel flow).
	b. Physical factors within drainage basins determine the relative importance of inputs, flows and outputs (climate, soils, vegetation, geology, relief).
	c. Humans disrupt the drainage basin cycle by accelerating processes (deforestation; changing land use) and creating new water storage reservoirs or by abstracting water. (🌍 Amazonia)
5.3 The hydrological cycle influences water budgets and river	a. Water budgets show the annual balance between inputs (precipitation) and outputs (evapotranspiration) and their impact on soil water availability and are influenced by climate type (🌍 tropical, temperate, polar examples). (2)

systems at a local scale.	b. River regimes indicate the annual variation of discharge of a river and result from the impact of climate, geology and soils as shown in regimes from contrasting river basins. (🌐 Yukon, Amazon, Indus). (3)
	c. Storm hydrographs shape depends on physical features of drainage basins (size, shape, drainage density, rock type, soil, relief and vegetation) as well as human factors (land use and urbanisation). (P: the role of planners in managing land use). (4)

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

Key idea	Detailed content
5.4 Deficits within the hydrological cycle result from physical processes but can have significant impacts.	a. The causes of drought, both meteorological (short-term precipitation deficit, longer trends, ENSO cycles and hydrological). (5) (6)
	b. The contribution human activity makes to the risk of drought: over-abstraction of surface water resources and ground water aquifers. (🌐 Sahelian drought; Australia)
	c. The impacts of drought on ecosystem functioning (wetlands, forest stress) and the resilience of these ecosystems.
5.5 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)
5.6 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.
	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. (F: projections of future drought and flood risk)

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
<p>5.7 There are physical causes and human causes of water insecurity.</p>	<p>a. The growing mismatch between water supply and demand has led to a global pattern of water stress (below 1,700 m³ per person) and water scarcity (below 1000 m³ per person). (7)</p> <p>b. The causes of water insecurity are physical (🌍 climate variability, salt water encroachment at coast) as well as human (👤 over abstraction from rivers, lakes and groundwater aquifers, water contamination from agriculture, industrial water pollution).</p> <p>c. The finite water resource faces pressure from rising demand (increasing population, improving living standards, industrialisation and agriculture), which is increasingly serious in some locations and is leading to increasing risk of water insecurity. (F: projections of future water scarcity)</p>
<p>5.8 There are consequences and risks associated with water insecurity.</p>	<p>a. The causes of and global pattern of physical water scarcity and economic scarcity and why the price of water varies globally. (8)</p> <p>b. The importance of water supply for economic development (industry, energy supply, agriculture) and human wellbeing (sanitation, health and food preparation); the environmental and economic problems resulting from inadequate water.</p> <p>c. The potential for conflicts to occur between users within a country, and internationally over local and trans-boundary water sources (🌍 Nile, Mekong). (P: role of different players). (9)</p>
<p>5.9 There are different approaches to managing water supply, some more sustainable than others.</p>	<p>a. The pros and cons of the techno-fix of hard engineering schemes to include water transfers, mega dams and desalination plants (🌍 Water transfers in China).</p> <p>b. The value of more sustainable schemes of restoration of water supplies and water conservation (smart irrigation, recycling of water) (🌍 Singapore). (A: contrasting attitudes to water supply)</p> <p>c. Integrated drainage basin management for large rivers (🌍 Nile, Colorado) and water sharing treaties and frameworks (United Nations Economic Commission for Europe (UNECE) Water Convention, Helsinki and the Water Framework Directive and Hydropower, Berlin). (P: role of players in reducing water conflict risk)</p>

Topic 6: The Carbon Cycle and Energy Security

Overview

A balanced carbon cycle is important in maintaining planetary health. The carbon cycle operates at a range of spatial scales and timescales, from seconds to millions of years. Physical processes control the movement of carbon between stores on land, the oceans and the atmosphere. Changes to the most important stores of carbon and carbon fluxes are a result of physical and human processes. Reliance on fossil fuels has caused significant changes to carbon stores and contributed to climate change resulting from anthropogenic carbon emissions.

The water and carbon cycles and the role of feedbacks in and between the two cycles, provide a context for developing an understanding of climate change.

Anthropogenic climate change poses a serious threat to the health of the planet. There is a range of adaptation and mitigation strategies that could be used, but for them to be successful they require global agreements as well as national actions.

Content

Enquiry question 1: How does the carbon cycle operate to maintain planetary health?	
Key idea	Detailed content
6.1 Most global carbon is locked in terrestrial stores as part of the long-term geological cycle.	a. The biogeochemical carbon cycle consists of carbon stores of different sizes (terrestrial, oceans and atmosphere), with annual fluxes between stores of varying size (measured in Pg/Gt), rates and on different timescales. (1)
	b. Most of the earth's carbon is geological, resulting from the formation of sedimentary carbonate rocks (limestone) in the oceans and biologically derived carbon in shale, coal and other rocks.
	c. Geological processes release carbon into the atmosphere through volcanic out-gassing at ocean ridges/subduction zones and chemical weathering of rocks.
6.2 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. Terrestrial primary producers sequester carbon during photosynthesis; some of this carbon is returned to the atmosphere during respiration by consumer organisms.
	c. Biological carbon can be stored as dead organic matter in soils, or returned to the atmosphere via biological decomposition over several years.
6.3 A balanced carbon cycle is important in sustaining other earth systems but	a. The concentration of atmospheric carbon (carbon dioxide and methane) strongly influences the natural greenhouse effect, which in turn determines the distribution of temperature and precipitation. (2)

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.
	c. The process of fossil fuel combustion has altered the balance of carbon pathways and stores with implications for climate, ecosystems and the hydrological cycle.

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

Key idea	Detailed content
6.4 Energy security is a key goal for countries, with most relying on fossil fuels.	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)
	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).
	c. Energy players (P: role of TNCs, The Organisation of the Petroleum Exporting Countries (OPEC), consumers, governments) have different roles in securing pathways and energy supplies.
6.5 Reliance on fossil fuels to drive economic development is still the global norm.	a. There is a mismatch between locations of conventional fossil fuel supply (oil, gas, coal) and regions where demand is highest, resulting from physical geography.
	b. Energy pathways (pipelines, transmission lines, shipping routes, road and rail) are a key aspect of security but can be prone to disruption especially as conventional fossil fuel sources deplete (🌐 Russian gas to Europe). (4)
	c. The development of unconventional fossil fuel energy resources (tar sands, oil shale, shale gas, deep water oil) has social costs and benefits, implications for the carbon cycle, and consequences for the resilience of fragile environments. (🌐 Canadian tar sands, USA fracking, Brazilian deep water oil) (P: role of business in developing reserves, versus environmental groups and affected communities)
6.6 There are alternatives to fossil fuels but each has costs and benefits.	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)

b. Biofuels are an alternative energy source that are increasing globally; growth in biofuels however has implications for food supply as well as uncertainty over how 'carbon neutral' they are. (🌐 Biofuels in Brazil) (5)

c. Radical technologies, including carbon capture and storage and alternative energy sources (hydrogen fuel cells, electric vehicles) could reduce carbon emissions but uncertainty exists as to how far this is possible.

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

Key idea	Detailed content
<p>6.7 Biological carbon cycles and the water cycle are threatened by human activity.</p>	<p>a.</p> <p>Growing demand for food, fuel and other resources globally has led to contrasting regional trends in land-use cover (deforestation, afforestation, conversion of grasslands to farming) affecting terrestrial carbon stores with wider implications for the water cycle and soil health. (6)</p> <p>b.</p> <p>Ocean acidification, as a result of its role as a carbon sink, is increasing due to fossil fuel combustion and risks crossing the critical threshold for the health of coral reefs and other marine ecosystems that provide vital ecosystem services.</p> <p>c.</p> <p>Climate change, resulting from the enhanced greenhouse effect, may increase the frequency of drought due to shifting climate belts, which may impact on the health of forests as carbon stores. (🌍 Amazonian drought events)</p>
<p>6.8 There are implications for human wellbeing from the degradation of the water and carbon cycles.</p>	<p>a.</p> <p>Forest loss has implications for human wellbeing but there is evidence that forest stores are being protected and even expanded, especially in countries at higher levels of development (environmental Kuznets' curve model). (A: attitudes of global consumers to environmental issues)</p> <p>b.</p> <p>Increased temperatures affect evaporation rates and the quantity of water vapour in the atmosphere with implications for precipitation patterns, river regimes and water stores (cryosphere and drainage basin stores) (🌍 Arctic) (F: uncertainty of global projections). (7)</p> <p>c.</p> <p>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.</p>
<p>6.9 Further planetary warming risks large-scale release of stored carbon, requiring responses from different players at</p>	<p>a.</p> <p>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)</p> <p>b.</p> <p>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.</p>

different
scales.

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

Overview

Superpowers can be developed by a number of characteristics. The pattern of dominance has changed over time. Superpowers and emerging superpowers have a very significant impact on the global economy, global politics and the environment. The spheres of influence between these powers are frequently contested, resulting in geopolitical implications.

Content

Enquiry question 1: What are superpowers and how have they changed over time?	
Key idea	Detailed content
7.1 Geopolitical power stems from a range of human and physical characteristics of superpowers.	a. Superpowers, emerging and regional powers can be defined using contrasting characteristics (economic, political, military, cultural, demographic and access to natural resources). (1)
	b. Mechanisms of maintaining power sit on a spectrum from 'hard' to 'soft' power, which vary in their effectiveness.
	c. The relative importance of these characteristics and mechanisms for maintaining power has changed over time (Mackinder's geo-strategic location theory).
7.2 Patterns of power change over time and can be uni-, bi- or multi-polar.	a. The maintenance of power during the imperial era by direct colonial control (British Empire, multipolar world 1919–1939).
	b. Multi-faceted, indirect control (political, economic, military, cultural) including neo-colonial mechanisms has become more important (Cold War era; emergence of China as a potential rival to the USA's hegemony). (2)
	c. Different patterns of power bring varying degrees of geopolitical stability and risk.
7.3 Emerging powers vary in their influence on people and the physical environment, which can change rapidly over time.	a. A number of emerging countries, including Brazil, Russia, India and China (BRIC) and other G20 members, are considered increasingly important to global economic and political systems, as well as global environment governance (UN Climate Change Conference).
	b. Each has evolving strengths and weaknesses (economic, political, military, cultural, demographic and environmental) that might inhibit or advance their economic and geopolitical role in the future.

	c. Development Theory (World Systems Theory, Dependency Theory, Modernisation Theory) can be used to help explain changing patterns of power.
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Enquiry question 2: What are the impacts of superpowers on the global economy, political systems and the physical environment?

Key idea	Detailed content
7.4 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 (public and state-led) are dominant economic forces in the global economy and economic and cultural globalisation in terms of technology (patents) and trade patterns. (P: role of TNCs in maintaining power and wealth)
	c. Global cultural influence (the arts, food the media) and 'westernisation' is an important aspect of power, linked to economic influence and technology.
7.5 Superpowers and emerging nations play a key role in international decision making concerning people and the physical environment.	a. Superpowers and emerging nations play a key role in global action (crisis response, conflict, climate change). (P: role of powerful countries as 'global police')
	b. Alliances, both military (North Atlantic Treaty Organisation (NATO), The Australia, New Zealand and United States Security Treaty (ANZUS) and economic (EU, North American Free Trade Agreement (NAFTA), ASEAN) and environmental (IPCC) increase interdependence and are important in geostrategy and global influence.
	c. The UN (Security Council, International Court of Justice, and peacekeeping missions and climate change conferences) are important to global geopolitical stability. (A: actions and attitudes of global IGOs)
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)
	b. There are differences in the willingness to act (USA, EU, China, and Russia) to reduce carbon emissions and reach global agreements on environmental issues. (A: attitudes and actions of different countries)
	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
<p>7.7 Global influence is contested in a number of different economic, environmental and political spheres.</p>	<p>a. Tensions can arise over the acquisition of physical resources (Arctic oil and gas) where ownership is disputed and disagreement exists over exploitation. (A: attitudes and actions in relation to resources)</p> <p>b. The global system of intellectual property rights can be undermined by counterfeiting, which strains trade relations and TNC investment.</p> <p>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.</p>
<p>7.8 Developing nations have changing relationships with superpowers with consequences for people and the physical environment.</p>	<p>a. Developing economic ties between emerging powers and the developing world (China and African nations) increase interdependence, generate environmental impacts and bring opportunities and challenges. (P: role of emerging powers)</p> <p>b. The rising economic importance of certain Asian countries (🌐 China, India) on the global stage increases the geopolitical influence of the region but also creates economic and political tensions within the region. (5)</p> <p>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. (A: contrasting cultural ideologies)</p>
<p>7.9 Existing superpowers face ongoing economic restructuring, which challenges their power.</p>	<p>a. Economic problems (debt, unemployment, economic restructuring, social costs) represent an ongoing challenge to the USA and EU.</p> <p>b. The economic costs of maintaining global military power (naval, nuclear, air power, intelligence services) and space exploration are questioned in some existing powers.</p> <p>c. The future balance of global power in 2030 and 2050 is uncertain and there are a range of possible outcomes (continued USA dominance, bi-polar and multi-polar structures). (F: uncertainty over future power structures) (6)</p>

Topic 8: Global Development and Connections

Option 8A: Health, Human Rights and Intervention

Overview

Traditional definitions of development are based largely on economic measures but have been increasingly challenged by broader definitions based on environmental, social and political quality of life with many new measures used to record progress at all scales in human rights and human welfare. There are variations in the norms and laws of both national and global institutions that impact on decisions made at all scales, from local to global. These decisions lead to a wide range of geopolitical interventions via international and national policies, from development aid through to military campaigns.

The impact of geopolitical interventions on both human health and wellbeing and human rights is variable and contested, with some groups appearing to benefit disproportionately, which can lead to increasing inequalities and injustice.

Content

Enquiry question 1: What is human development and why do levels vary from place to place?	
Key idea	Detailed content
8A.1 Concepts of human development are complex and contested.	a. Human development has traditionally been measured using the growth of GDP as an end in itself but the relationship between human contentment and levels of wealth and income is complex (Happy Planet Index) and many dominant models are contested (🕌 Sharia law, Bolivia under Evo Morales). (1)
	b. Improvements in environmental quality, health, life expectancy and human rights are seen by some (Rosling) as more significant goals for development while economic growth is often the best means of delivering them.
	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)).
8A.2 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)

- c. There are significant variations in health and life expectancy within countries (🌐 UK, Brazil) that are related to ethnic variations (🌐 Aboriginal peoples in Australia) and income levels and inequalities, which, in turn, impact on lifestyles.

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

Key idea	Detailed content
<p>8A.3 Governments and International Government Organisations play a significant role in defining development targets and policies.</p>	<p>a. The relationship between economic and social development is complex and dependent on decisions made by governments on the importance of social progress; this ranges from welfare states with high levels of social spending to totalitarian regimes run by elites with low levels of spending on health and education. (3)</p> <p>b. The dominant IGOs (World Bank, IMF, WTO) have traditionally promoted neo-liberal views of development based on the adoption of free trade, privatisation and deregulation of financial markets but also, recent programmes have been aimed at improving environmental quality, health, education and human rights.</p> <p>c. Progress against the United Nation’s Millennium Development Goals (MDGs) has been mixed in terms of individual countries, global regions and targets; the UN post-2015 development agenda expands on the MDGs, setting new goals to include sustainable development.</p>

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

Key idea	Detailed content
8A.4 Human rights have become important aspects of both international law and international agreements.	a. The Universal Declaration of Human Rights (UDHR) is a statement of intent and a framework for foreign policy statements to explain economic or military intervention but not all states have signed the Declaration.
	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.
	c. The Geneva Convention forms a basis in international law for prosecuting individuals and organisations who commit war crimes and is endorsed by 196 countries; however few cases come to trial and over 150 countries continue to engage in torture.
8A.5 There are significant differences between countries in both their definitions and protection of human rights.	a. Some states (🌐) frequently invoke human rights in international forums and debates whilst others prioritise economic development over human rights and defend this approach (🌐).
	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)
8A.6 There are significant variations in human rights within countries, which are reflected in different levels of social development.	a. In some states (post-colonial states) there are significant groups, defined by gender and/or ethnicity that have had fewer rights than the dominant group.
	b. Differences in rights are frequently reflected in differences in levels of health and education (🌐 indigenous populations in both North and South America).
	c. A demand for equality from both women and ethnic groups has been an important part of the history of many states in recent years (🌐 Afghanistan, Australia, Bolivia) with progress taking place at different rates.

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

Key idea	Detailed content
<p>8A.7 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> <p>b. Interventions are promoted by IGOs, national governments and NGOs (Amnesty International, Human Rights Watch) but there is seldom consensus about the validity of these interventions.</p> <p>c. Some Western governments frequently condemn human rights violations and use them as conditions for offering aid, negotiating trade agreements, and as a reason for military intervention, which challenge ideas of national sovereignty (🌐).</p>
<p>8A.8 Some development is focused on improving both human rights and human welfare but other development has very negative environmental and cultural impacts.</p>	<p>a. Development aid takes many forms from charitable gifts to address the impacts of hazards (🌐 Haiti) administered both by NGOs (🌐 Oxfam, Christian Aid) and national governments, to IGOs offering loans. (5)</p> <p>b. The impact of development aid is contested, successes include progress in dealing with life-threatening conditions (malaria) and improvements in some aspects of human rights (gender equality) but critics suggest that it encourages dependency, and promotes corruption and the role of the elite at the expense of human rights and minority groups. (6)</p> <p>c. Some economic development, both by superpowers and TNCs, has very serious impacts on the environment in which minority groups live and disregards their human rights to their land and culture (🌐 oil in the Niger Delta or Peruvian Amazon and land grabs in East Africa). (7)</p>
<p>8A.9 Military aid and both direct and indirect military intervention are frequently justified in terms of human rights.</p>	<p>a. Global strategic interests might drive military interventions but are often justified by the protagonists in terms of human rights (🌐).</p> <p>b. Military aid, both in terms of training personnel and weapons sales, is sometimes used to support countries that themselves have questionable human rights records (🌐).</p> <p>c. Direct military intervention is increasingly part of a 'war on terror', which is partially justified as promoting human rights of minority communities (🌐) but is compromised by the use of torture by combatant states that have signed the Declaration of Human Rights (🌐).</p>

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

Key idea	Detailed content
<p>8A.10 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>8A.11 Development aid has a mixed record of success.</p>	<p>a. The relationship of aid, development, health and human rights is unclear, with relative success stories in some states (🌐 Botswana, Ebola in West Africa) contrasted with relative failure in other states (🌐 Haiti, Iraq).</p> <p>b. In some states that receive substantial development aid, economic inequalities have increased while in other states economic inequalities have decreased; this in turn impacts on health and life expectancy. (9)</p> <p>c. The extent to which superpowers use development aid as an extension of their foreign policies and judge success in terms of access to resources, political support in IGOs and military alliances and formation of military alliances. (10)</p>
<p>8A.12 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>

Fieldwork

Overview

Students are required to complete a minimum of **four** days of fieldwork.

This fieldwork must relate to processes in **both** physical and human geography. It must also provide an introduction to the nature and process of a high-quality geographical enquiry.

Full details of the required fieldwork skills are provided in *Appendix 2: Fieldwork skills*.

Fieldwork statement

Centres will be required to provide evidence of this fieldwork (which can include days undertaken as part of a separate AS Level in Geography) in the form of a written fieldwork statement. See *Appendix 8: Fieldwork statement*.

Pearson will publish the final deadline date for submission of this form on our website each year. Failure to return the fieldwork statement on time will constitute malpractice on the part of the centre.

Relationship between the fieldwork and the independent investigation

The fieldwork will enable students to develop skills that they can use in their independent investigation.

Students may, but are not required, to use data collected in their four days' fieldwork as part of their independent investigation. However, it is also possible to carry out the independent investigation on a separate topic with new data collected.

Coursework: Independent Investigation

Overview

The purpose of this coursework is to test students' skills in independent investigation. Students are required to undertake an independent investigation that involves (but which need not be restricted to) fieldwork. The focus of the investigation must be derived from the specification the student is studying. The guidance for word length is 3000-4000 words. The student defines a question or issue relating to the compulsory or optional content. The student's investigation will incorporate fieldwork data (collected individually or as part of a group) and own research and/or secondary data. The student's report will evidence independent analysis and evaluation of data, presentation of data findings and extended writing.

Content

The independent investigation may relate to human or physical geography or it may integrate them.

The independent investigation must:

- be based on a question or issue defined and developed by the student individually to address aims, questions and/or hypotheses relating to any of the compulsory or optional content
- incorporate field data and/or evidence from field investigations, collected individually or in groups
- draw on the student's own research, including their own field data and, if relevant, secondary data sourced by the student
- require the student independently to contextualise, analyse and summarise findings and data
- involve the individual drawing of conclusions and their communication by means of extended writing and the presentation of relevant data.

The table below shows a suitable A Level Geography route to enquiry that forms the student's independent investigation.

Stage	Description
Purpose, identification of a suitable question/aim/hypothesis and developing a focus	Identify appropriate field research questions/aims/hypotheses, based on their knowledge and understanding of relevant aspects of physical and/or human geography. Research the relevant literature sources linked to possible fieldwork opportunities presented by the environment, considering their practicality and relationship to compulsory and optional content. Understand the nature of the current literature research relevant to the focus. This should be clearly and appropriately referenced within the written report.
Designing the fieldwork methodologies, research and selection of appropriate equipment	Consideration of how to observe and record phenomena in the field and to design appropriate data-collection strategies taking account of sampling and the frequency and timing of observation. Demonstrate knowledge and understanding of how to select practical field methodologies (primary) appropriate to their investigation (may include a combination of qualitative and quantitative techniques).
Information collation and data representation and analysis	Know how to use an appropriate diagrams, graphs and maps, and using geospatial technologies to select and present relevant aspects of the investigation outcomes.
Analysis and explanation of information	Use techniques appropriate for analysing field data and research information. Demonstrate the ability to write a coherent analysis of fieldwork findings and results linked to a specific geographical focus.
Conclusions and critical reflection on methods and results	Use knowledge and understanding to interrogate and interpret meaning from their investigation (theory, concepts, comparisons), through the significance of conclusions. Demonstrate the ability to interrogate and critically examine field data (including any measurement errors) in order to comment on its accuracy and/or the extent to which it is representative and reliable.
Recognising the wider geographical context	Explain how the results relate to the wider geographical context and use the experience to extend geographical understanding. Show an understanding of the ethical dimensions of field research.

Learning hours for the independent investigation are not specified because the process of producing the report is iterative and undertaken independently.

Exam command word definitions

This table lists the command words that could be used in the examinations for this qualification and their definitions.

Command word	Definition
Analyse	Use geographical skills to investigate an issue by systematically breaking it down into individual components and making logical, evidence-based connections on the causes and effects or interrelationships between the components.
Assess	Use evidence to determine the relative significance of something. Give balanced consideration to all factors and identify which are the most important.
Complete	Create a graphical representation of geographical information by adding detail to a resource that has been provided
Draw/Plot	Create a graphical representation of geographical information.
Evaluate	Measure the value or success of something and ultimately provide a balanced and substantiated judgement/conclusion. Review information and then bring it together to form a conclusion, drawing on evidence such as strengths, weaknesses, alternatives and relevant data.
Explain	Provide a reasoned explanation of how or why something occurs. An explanation requires understanding to be demonstrated through the justification or exemplification of points that have been identified.
Suggest	For an unfamiliar scenario, provide a reasoned explanation of how or why something may occur. A suggested explanation requires a justification/exemplification of a point that has been identified.