edexcel

GCSE (9-1) Geography A

This draft qualification has not yet been accredited by Ofqual. It is published to enable teachers to have early sight of our proposed approach to Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Geography A (1GA0). Further changes may be required and no assurance can be given at this time that the proposed qualification will be made available in its current form, or that it will be accredited in time for first teaching in September 2016 and first award in 2018.

Specification DRAFT

Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Geography A (1GA0)

First teaching from September 2016

First certification from 2018

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1 Introduction

Why choose Edexcel GCSE Geography A?

We've listened to feedback from all parts of the geography subject community, including hundreds of fellow teachers. We've used this opportunity of curriculum change to redesign a qualification that is engaging and relevant to today's geographers – a qualification that enables your students to explore the world, the challenges it faces and their own place in it, and to help prepare them to succeed in their chosen pathway.

Clear and coherent structure – our qualification has a straightforward structure with three components – The Physical Environment, The Human Environment and Geographical Investigations: Fieldwork and UK Challenges.

Straightforward assessments that are accessible for all abilities – there are three externally examined papers that provide gradual progression in demand throughout the topics. Across all three assessments there is consistent use of 13 different command words so that students know what to expect.

Engaging and manageable fieldwork – fieldwork environments are aligned with the core content of the course so that the experience of fieldwork can reinforce and enlighten learning in the classroom and learning in the classroom can underpin learning in the field. Fieldwork tasks will remain for the lifetime of the specification so there is less time spent on planning and administration and more time to bring geography to life in the field.

Provides an engaging real-world focus – students are encouraged to apply their knowledge and understanding to real-life 21st century UK challenges.

Continuous progression – the new specification content introduces students to physical or human geography first and then people-environment processes and interactions in the context of place at a range of scales. Building on this, via geographical investigation, students draw on their wider knowledge and understanding of UK geography to explore geographical issues.

Develops a holistic understanding of geography – content is written to show geographical overview and geographical depth. Geographical skills are integrated throughout *all* parts of the course so that students use them in context.

Supports progression to A Level – the compulsory and optional topic content provides the opportunity to lay foundations of knowledge and understanding that can be further developed at A Level.

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Supporting you in planning and implementing this qualification

Planning

- Our **Getting Started** guide gives you an overview of the new GCSE qualifications to help you to get to grips with the changes to content and assessment and to help you understand what these changes mean for you and your students.
- We will give you an editable **course planner** and **scheme of work** that you can adapt to suit your department.
- **Our mapping documents** highlight key differences between the new and 2012 qualifications.

Teaching and learning

There will be lots of free teaching and learning support to help you deliver the new qualifications, including:

- **topic packs** for *every* topic, including teaching and learning ideas on new and more challenging topics and skills and geographical literacy
- support for **embedding geographical skills and fieldwork** in teaching.

Preparing for exams

We will also provide a range of resources to help you prepare your students for the assessments, including:

- **additional assessment materials** to support formative assessments and mock exams
- marked **exemplars of student work** with examiner commentaries.

ResultsPlus

ResutsPlus provides the most detailed analysis available of your students' exam performance. It can help you identify the topics and skills where further learning would benefit your students.

Get help and support

Our subject advisor service, led by Jon Wolton, and online communities will ensure you receive help and guidance from us and that you can share ideas and information with other teachers. You can sign up to receive e-newsletters from Jon to keep up to date with qualifications and product and service news.

Learn more at qualifications.pearson.com

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Qualification at a glance

Content and assessment overview

The Pearson Edexcel Level 1/Level 2 GCSE (9–1) in Geography A consists of three externally-examined papers.

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

Component 1: The Physical Environment (*Paper 1 code: 1GA0/01)
Written examination: 1 hour and 30 minutes ***37.5% of the qualification*** ***94 marks***
Content overview • Topic 1: The changing landscapes of the UK – including optional sub-topics from which students choose **two** from three, 1A: Coastal landscapes and processes, 1B: River landscapes and processes and 1C: Glaciated upland landscapes and processes. • Topic 2: Weather hazards and climate change • Topic 3: Ecosystems, biodiversity and management
Assessment overview An externally-assessed written exam with three 30-mark sections. Of the 94 raw marks available, up to 4 marks are awarded for spelling, punctuation, grammar and use of specialist terminology. **Section A: The changing landscapes of the UK** **Section B: Weather hazards and climate change** **Section C: Ecosystems, biodiversity and management** In Section A, students answer Question 1 and choose **two** from optional questions (Question 2 Coastal landscapes and processes, Question 3 River landscapes and processes, Question 4 Glaciated upland landscapes and processes). Students answer all questions from Sections B and C. The exam includes multiple-choice questions, short open, open response, calculations, 6-mark and 8-mark extended writing questions.

Component 2: The Human Environment (*Paper 2 code: 1GA0/02)
Written examination: 1 hour and 30 minutes ***37.5% of the qualification*** ***94 marks***
Content overview • Topic 4: Changing cities • Topic 5: Global development • Topic 6: Resource management – including optional sub-topics from which students choose **one** from two, 6A: Energy resource management and 6B: Water resource management

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Assessment overview
An externally-assessed written exam with three 30-mark sections. Of the 94 raw marks available, up to 4 marks are awarded for spelling, punctuation, grammar and use of specialist terminology. **Section A: Changing cities** **Section B: Global development** **Section C: Resource management** Students answer all questions from Sections A and B. In Section C, students answer **one** from two optional questions (Energy resource management or Water resource management). The exam includes multiple-choice questions, short open, open response, calculations and 8-mark extended writing questions.

Component 3: Geographical Investigations: Fieldwork and UK Challenges (*Paper 3 code: 1GA0/03)
Written examination: 1 hour and 15 minutes ***25% of the qualification*** ***64 marks***
Content overview • Topic 7: Geographical investigations – fieldwork • Topic 8: Geographical investigations – UK challenges
Assessment overview An externally-assessed written exam with three sections. Of the 64 raw marks available, up to 4 marks are awarded for spelling, punctuation, grammar and use of specialist terminology. **Section A: Geographical investigations – physical environments** Students choose **one** from two optional questions (Rivers **or** Coasts). **Section B: Geographical investigations – human environments** Students choose **one** from two optional questions (Central/Inner Urban Area **or** Rural Settlements). **Section C: UK challenges** The exam includes multiple-choice questions, short open, open response, calculations, 6-mark and 10-mark extended writing questions.

*See *Appendix 6: Codes* for a description of this code and all other codes relevant to this qualification.

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2 Subject content and assessment information

The subject content sets out the knowledge, understanding and skills relevant to this qualification. Together with the assessment information it provides the framework within which centres create their programmes of study, so ensuring progression from Key Stage 3 national curriculum requirements and the possibilities for development into A Level.

Qualification aims and objectives

GCSE specifications for the discipline of geography gives students the opportunity to understand more about the world, the challenges it faces and their place within it. This GCSE course will deepen understanding of geographical processes, illuminate the impact of change and of complex people-environment interactions, highlight the dynamic links and interrelationships between places and environments at different scales, and develop students' competence in using a wide range of geographical investigative skills and approaches. Geography enables young people to become globally and environmentally informed and thoughtful, enquiring citizens.

The aims and objectives of this qualification are to enable students to build on their key Stage 3 knowledge and skills to:

- develop and extend their knowledge of locations, places, environments and processes, and of different scales, including global; and of social, political and cultural contexts (know geographical material)
- gain understanding of the interactions between people and environments, change in places and processes over space and time, and the interrelationship between geographical phenomena at different scales and in different contexts (think like a geographer)
- develop and extend their competence in a range of skills including those used in fieldwork, in using maps and Geographical Information Systems (GIS) and in researching secondary evidence, including digital sources; and develop their competence in applying sound enquiry and investigative approaches to questions and hypotheses (study like a geographer)
- apply geographical knowledge, understanding, skills and approaches appropriately and creatively to real world contexts, including fieldwork, and to contemporary situations and issues; and develop well-evidenced arguments drawing on their geographical knowledge and understanding (applying geography).

Geographical Skills

Geographical Skills Students are required to develop a range of geographical skills, including mathematics and statistics skills, throughout their course of study. These skills may be assessed across any of the examined papers. The full list of geographical skills is provided on page 34 and 35. Some geographical skills are specific to particular topic content, these are numbered within the content and indicated in the 'integrated skills' sections within the topics throughout the content pages.

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Subject content structure

The subject content has been written so that each topic in Component 1 and 2 is introduced by way of a geographical overview before progressing into geographical depth. Geographical overview content aims to develop students' broad, holistic understanding of the topic theme at a larger scale. Geographical depth content aims to develop students' detailed knowledge and understanding of processes and interactions in a particular smaller scale place or context.

Case Studies and Exemplars

Throughout the course it is a requirement to draw on case studies and exemplars from developing, emerging and developed countries. These must relate to, at least, two countries other than the UK. Any case studies and exemplars must be set within the broader contextual knowledge of the country.

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Component 1: The Physical Environment

Overview

This component brings together physical geography and people-environment processes and interactions. The component is divided into three sections:

- Topic 1: The changing landscapes of the UK – an overview of the distribution and characteristics of the UK's changing landscapes and detailed studies of **two** from three landscapes, 1A: Coastal landscapes and processes, 1B: River landscapes and processes or 1C: Glaciated upland landscapes and processes
- Topic 2: Weather hazards and climate change – an overview of the global circulation of atmosphere and climate change over time and two detailed studies of tropical cyclones and drought
- Topic 3: Ecosystems, biodiversity and management – an overview of the distribution and characteristics of global and UK ecosystems and two detailed studies of deciduous woodlands and tropical rainforests.

Content

Topic 1: The changing landscapes of the UK

Key idea	Detailed content
1.1 There are geological variations within the UK	a. Characteristics and distribution of the UK's main rock types: sedimentary (chalk, carboniferous limestone, clay) igneous (granite), metamorphic (schists, slates). (1)
	b. The role of geology past tectonic processes in the development of upland (igneous and metamorphic rocks) and lowland (sedimentary rocks) landscapes. (2)
1.2 A number of physical and human processes work together to create distinct UK landscapes	a. How distinctive upland and lowland landscapes result from the interaction of physical processes (glacial erosion and deposition, weathering and climatological, post-glacial river and slope processes). (3)
	b. How distinctive landscapes result from human activity (agriculture, forestry, settlement) over time. (4)
Integrated skills: (1) Geological maps; (2) Using simple geological cross sections to show the relationship between geology and relief; (3) Locating key physical features (uplands, lowland basins, rivers) on outline UK maps; (4) Recognition of physical and human geography features on 1:25000 and 1:50000 OS maps.	

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1A: Coastal landscapes and processes

Key idea	Detailed content
1.3 A variety of physical processes interact to shape coastal landscapes	a. The physical processes at work on the coast: weathering (mechanical, chemical, biological), mass movement (sliding and slumping), erosion (abrasion, hydraulic action, attrition and solution), transport (traction, saltation, suspension and solution, longshore drift) and deposition.
	b. Influence of geological structure (concordant / discordant, joints and faults) and rock type (hard /soft rock) and wave action (destructive and constructive waves) on landforms (1)
	c. How the UK's weather and climate (seasonality, storm frequency and prevailing winds) affect rates of coastal erosion and retreat, and impact on landforms and landscape. (2)
1.4 Coastal erosion and deposition create distinctive landforms within the coastal landscape	a. The role of erosional processes in the development of landforms: headlands and bays, caves, arches, cliffs, stacks, wave cut platforms. (3)
	c. The role of depositional processes in the development of landforms: bars, beaches and spits. (2)
1.5 Human activities can lead to changes in coastal landscapes which affect people and the environment	a. How human activities (urbanisation, agriculture and industry) have affected landscapes and the effects of coastal recession and flooding on people and the environment. (4)
	b. The advantages and disadvantages of different coastal defences used on the coastline of the UK (hard engineering, sea walls, groynes and rip rap and soft engineering, beach nourishment and offshore reefs) and how they can lead to change in coastal landscapes. (4)
1.6 Distinctive coastal landscapes are the outcome of the interaction between physical and human processes	a. The significance of the location of one named distinctive coastal landscape within the UK (discordant, concordant, coastline of deposition, coastal retreat) including how it has been formed and the most influential factors in its change. (3)
Integrated skills: (1) Use of BGS Geology maps (paper or online) to link coastal form to geology; (2) Using UK weather and climate data and calculation of mean rates of erosion using a multi-year data set; (3) Recognition of coastal landforms on 1:25000 and 1:50000 OS maps; (4) Use of 1:25000 and 1:50000 OS maps, and GIS, to investigate the impact of human intervention.	

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1B: River landscapes and processes

Key idea	Detailed content
1.7 A variety of physical processes interact to shape river landscapes	a. The physical processes at work in the river landscape: weathering (mechanical, chemical and biological), mass movement (sliding and slumping), erosion (abrasion, hydraulic action, attrition and solution), transport (traction, saltation, suspension and solution) and deposition.
	b. How river landscapes contrast between the upper courses, mid courses and lower courses of rivers and why channel shape (width, depth), valley profile, gradient, discharge, velocity and sediment size and shape change along the course of a named UK river. (1)
	c. How the UK's weather (short-term events such as storms and droughts) and climate affect river processes and impact on landforms and landscapes. (2)
1.8 Erosion and deposition interacting with geology create distinctive landforms in river landscapes	a. The role of erosion processes and the influence of geology in the development of landforms: interlocking spurs, waterfalls, and gorges and river cliff. (3)
	b. The role of depositional processes in the formation of flood plains, levees and point bar. (3)
	c. The interaction of deposition and erosion processes in the development of landforms (meanders, oxbow lakes). (3)
1.9 Human activities can lead to changes in river landscapes which affect people and the environment	a. How human activities and changes in land use (urbanisation, agriculture and industry) have affected river processes that impact on river landscapes; the physical and human causes and effects of river flooding. (4)
	b. Advantages and disadvantages of different defences used on UK rivers (hard engineering– dams, reservoirs and channelisation and soft engineering– flood plain zoning and washlands) and how they can lead to change in river landscapes. (4)
1.10 Distinctive river landscapes are the outcome of the interaction between physical and human processes	a. The significance of the location of one named distinctive river landscape (upland / lowland), how it has been formed and the most influential factors in its change.

Integrated skills: (1) Use of BGS Geology maps (paper or online) to link river long profiles to geology. (2) Using UK weather and climate data (3) Recognition of river landforms on 1:25000 and 1:50000 OS maps; (3) Drawing simple storm hydrographs using rainfall and discharge data; (4) Use of 1:25000 and 1:50000 OS maps, and GIS, to investigate the impact of human intervention.

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1C: Glaciated upland landscapes and processes

Key idea	Detailed content
1.11 A variety of physical processes interact to shape upland glaciated landscapes	a. Glacial processes that once operated in the upland glaciated landscape: glacial erosion (plucking, abrasion and freeze thaw), transport (on or within the ice) and deposition.
	b. Physical processes that operate on the relict upland glacial landscapes of today: mechanical weathering (freeze thaw), mass movement (soil movement, and rock falls/slides),
	c. How past climate and current UK weather and climate (seasonal and diurnal variations in weather) affect processes that impact on upland glaciated landscapes. (1)
1.12 Glacial erosion and deposition create distinctive landforms within upland glaciated landscapes	a. The role of erosional processes in the development of landforms (truncated spurs, corries, glacial troughs, arêtes hanging valleys and roche moutonnées). (2)
	b. The role of depositional processes in the development of landforms (ground and terminal moraines). (2)
	c. The interaction of deposition and erosion processes in the development of landforms (crag and tail and drumlins). (2)
1.13 Human activities can lead to changes in upland glaciated landscapes	a. How humans activity (farming, forestry, settlement) have impacted on physical processes in upland glaciated landscapes. (3)
	b. Advantages and disadvantages of development (water storage and supply, renewable energy, recreation and tourism, conservation) and how they can lead to change in upland glaciated landscapes. (3)
1.14 Distinctive glaciated upland landscapes are the outcome of the interaction between physical and human processes	a. The significance of the location of one named distinctive upland glaciated landscape in the UK (karst limestone/ igneous/metamorphic) in the UK, how it has been formed and the most significant factors in its change.
Integrated skills: (1) Using UK weather and climate data; (2) Recognition of river landforms on 1:25000 and 1:50000 OS maps; (3) Use of 1:25000 and 1:50000 OS maps, and GIS, to investigate the impact of human intervention.	

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Topic 2: Weather hazards and climate change

Key idea	Detailed content
2.1 The atmosphere operates as a global system transferring heat and energy	a. The features of the global atmospheric circulation.
	b. How circulation cells and ocean currents transfer and redistribute heat energy across the Earth.
2.2 The global climate was different in the past and continues to change due to natural causes	a. How climate has changed in the past over different time scales: glacial and interglacial periods during the Quaternary period.
	b. Causes (Milankovitch cycles, solar variation, volcanism) and evidence (ice cores, pollen records, tree rings, historical sources) for natural climate change.
2.3 Global climate is now changing as a result of human activity	a. How human activities (industry, transport, energy, farming) produce greenhouse gases (carbon dioxide, methane) that cause the enhanced greenhouse effect.
	b. Negative effects that climate change is having on the environment and people (changing patterns of crop yield, rising sea levels and retreating glaciers).
2.4 The UK has a distinct climate which has changed over time	a. Climate of the UK today and changes over the last 1000 years. (1)
	b. Spatial variations in temperature, prevailing wind and rainfall within the UK.
	c. The significance of the UK's geographic location in relation to its climate.
2.5 Tropical cyclones develop under specific conditions and in certain locations	a. Characteristics and geographical distribution of tropical cyclones (hurricanes and typhoons). (2)
	b. Causes of tropical cyclones in source areas and the sequence of their formation.
2.6 There are various impacts of and responses to tropical cyclones depending on a country's level of development	a. Reasons why tropical cyclones are hazards: high winds, intense rainfall, storm surges, coastal flooding and landslides. (3)
	b. Different social, economic and environmental impacts that tropical cyclones can have on a named developed* and a named emerging* or developing* country.
	c. Different responses to tropical cyclones of individuals, organisations and governments in a named developed and a named emerging or developing country. (4)

**See Appendix 2: Definitions*

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Key idea	Detailed content
2.7 The causes of drought are complex with some locations more vulnerable than others	a. Characteristics of drought and arid environments.
	b. Different causes of drought: meteorological, hydrological, and agricultural.
	c. Why the global circulation makes some locations more vulnerable to drought than others. (5)
2.8 The impacts of and responses to drought vary depending on a country's level of development	a. Reasons why droughts are hazardous.
	b. How the impacts of drought on people and ecosystems can vary for a named developed and emerging or developing country. (6)
	c. Different responses to drought from individuals, organisations and governments in a named developed and an emerging or developing country.
Integrated skills: (1) Use and interpretation of line graphs / bar charts showing climate change; (2) Use of GIS to track the movement of tropical cyclones; (3) Use of weather and storm surge data to calculate Saffir-Simpson magnitude; (4) Use of social media source, satellite images and socio-economic data to assess impact; (5) Use and interpretation of graphs showing medium term rainfall trends; (6) Use and interpretation of socio-economic data.	

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Topic 3: Ecosystems, biodiversity and management

Key idea	Detailed content
3.1 Large-scale ecosystems are found in different parts of the world and are important	a. Distributions and characteristics of the world's large-scale ecosystems (tropical, temperate and boreal forests, tropical and temperate grasslands, deserts and tundra). (1)
	b. The role of climate and local factors (soils and altitude) in influencing the distribution of different large-scale ecosystems. (2)
3.2 The biosphere is a vital system	a. How the biosphere provides resources for people (food, medicine, building materials and fuel resources) but is also increasingly exploited commercially for energy, water and mineral resources.
3.3 The UK has its own variety of distinctive ecosystems that it relies on	a. Distribution and characteristics of the UK's main terrestrial ecosystems (moorlands, heaths, woodlands, wetlands). (3)
	b. Importance of marine ecosystems to the UK as a resource and how human activities are degrading them.
3.4 Tropical rainforests show a range of distinguishing features	a. Biotic and abiotic characteristics of the tropical rainforest ecosystem (climate, soils and food webs).
	b. The interdependence of biotic and abiotic characteristics and the nutrient cycle (Gersmehl model). (4)
	c. Why rainforests have very high biodiversity and how plants (stratified layers, buttress roots, drip tips) and animals (strong limbs, modified wings and beaks, camouflage) are adapted to that environment.
3.5 Tropical rainforests provide a range of goods and services some of which are under threat	a. Examples of goods and services provided by tropical rainforests (food stuffs, medicines, timber and recreation).
	b. How climate change presents a threat to the structure, function and biodiversity of tropical rainforests.
	c. Economic and social causes of deforestation (conversion to agriculture, resource extraction, population pressure). (5)
	d. Political and economic factors (governance, commodity value and ecotourism) that have contributed to the sustainable management of a rainforest in a named region.
3.6 Deciduous woodlands show a range of distinguishing features	a. Abiotic and biotic characteristics of the deciduous woodland ecosystem (climate, soils and food webs).
	b. The interdependence of biotic and abiotic characteristics and the nutrient cycle (Gersmehl model).
	c. Why deciduous woodlands have moderate biodiversity and how plants (leaf size and structure, water conservation in winter) and animals (migration, hibernation and food storage) are adapted to that environment.

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Key idea	Detailed content
3.7 Deciduous woodlands provide a range of goods and services some of which are under threat	a. Examples of goods and services provided by deciduous woodlands (timber, fuel, conservation and recreation).
	b. How climate change presents a threats to both the structure, function and biodiversity of the deciduous woodland ecosystem.
	c. Economic and social causes of deforestation (urbanisation and population growth, timber extraction and agricultural change). (6)
	d. Different approaches to the sustainable use and management of deciduous woodlands in a named region.
Integrated skills: (1) Use of world maps to show the location of global biomes; (2) Comparing climate graphs for different biomes; (3) Interpret GIS maps; (4) Use and interpretation of nutrient cycle diagrams and food webs diagrams; (5) Use and interpretation of line graphs showing the range of future global population projections, and population in relation to likely available resources; (6) Use of GIS to identify the pattern of forest loss.	

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Assessment information

- First assessment: May/June 2018.
- The assessment is 1 hour and 30 minutes.
- The assessment consists of three sections.
- The assessment is out of 94 marks.
- The paper will assess spelling, punctuation, grammar and use of specialist terminology which will contribute 4 marks towards the overall marks for this paper.
- Each question is set in a context.
- Students must answer two from three optional questions (Coastal landscapes and processes, River landscapes and processes or Glaciated upland landscapes and processes) in Section A. Students must answer all questions from Sections B and C.
- The exam includes multiple-choice questions, short open, open response, calculations, 6-mark and 8-mark extended writing questions.
- Calculators may be used in the examination.

Sample assessment materials

A sample paper and mark scheme for this paper can be found in the *Pearson Edexcel Level 1/Level 2 GCSE (9–1) in Geography A* Sample Assessment Materials (SAMs) document.

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Component 2: The Human Environment

Overview

This component brings together human geography and people-environment issues. The component is divided into three sections:

- Topic 4: Changing cities – this covers an overview of global urban processes and trends and detailed case studies of a major UK city and a major city in a developing or emerging country
- Topic 5: Global development – this covers an overview of the causes and consequences of uneven global development and detailed case studies of challenges that affect a developing or emerging country
- Topic 6: Resource management – this covers an overview of the global and UK distribution of food, energy and water and one detailed study of **either** energy resource management **or** water resource management at different scales.

Content

Topic 4: Changing cities

Key idea	Detailed content
4.1 Urbanisation is a global process	a. Contrasting trends in urbanisation over the last 50 years in different parts of the world (developed, emerging and developing countries).
	b. How and why urbanisation has occurred at different times and rates in different parts of the world (developed, emerging and developing countries) and the effects.
4.2 The degree of urbanisation varies across the UK	a. Distribution of urban population in the UK and the location of its major urban centres.
	b. Factors causing the rate and degree of urbanisation to differ between the regions of the UK.

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Study of a major* UK city	
Key idea	**Detailed content**
4.3 The context of the chosen UK city influences its functions and structure	a. Site, situation and connectivity of the chosen UK city in a national (cultural and environmental), regional and global context.
	b. Chosen UK city's structure (Central Business District (CBD), inner city, suburbs, urban-rural fringe) in terms of its functions and building age.
4.4 The chosen UK city is being changed by movements of people, employment and services	a. The sequence of urbanisation, suburbanisation, counter-urbanisation and re-urbanisation processes and their distinctive characteristics for the chosen UK city. (2)
	b. Causes of national and international migration and the impact on different parts of the chosen UK city (age structure, ethnicity, housing, services). (3)
4.5 Globalisation and economic change create challenges for the chosen UK city that require long-term solutions	a. Key population characteristics of the chosen UK city's that is available from the Census and reasons for population growth or decline. (4)
	b. Causes of deindustrialisation (globalisation, de-centralisation, technological advances and developments in transport) and impacts on the chosen UK city.
	c. How economic change is increasing inequality in the city and the differences in quality of life.
	d. Recent changes in retailing and their impact on the chosen UK city: decline in the central business district (CBD), growth of edge- and out-of-town shopping and increasing popularity of internet shopping).
	e. The range of possible strategies aimed at making urban living more sustainable and improving quality of life (recycling, employment, education, health, transport, affordable and energy-efficient housing) for the chosen UK city. (5)

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Study of a major city in a developing country* or an emerging country*

4.6 The context of the chosen developing country or emerging country city influences its functions and structure	a. Site, situation and connectivity of the chosen city in a national (cultural and environmental), regional and global context.
	b. The chosen city's structure (Central Business District (CBD), inner city, suburbs, urban-rural fringe) in terms of its functions and building age.
4.7 The character of the chosen developing country or emerging country city is influenced by its fast rate of growth	a. Reasons for past and present trends in population growth (rates of natural increase, rural to urban migration, economic investment and growth). (1)
	b. Origins and causes (push and pull factors) of rural to urban migration in to the chosen city. (6)
	c. How the growth of the chosen city is accompanied by increasing inequality (areas of extreme wealth versus poverty) and reasons for differences in quality of life.
4.8 Rapid growth, within the chosen developing country or emerging country city, results in a number of challenges that need to be managed	a. Effects resulting from the chosen city's rapid urbanisation: housing shortages, squatter settlements, under-employment employment, pollution and inadequate services. (7)
	b. Advantages and disadvantages of both bottom-up and top-down approaches to solving the chosen city's problems and improving the quality of life or its people.
	c. The role of government policies in improving the quality of life (social, economic and environmental) within the chosen city.

Integrated skills: (1) Use and interpretation of line graphs and calculating of rate of change /annual or decadal percentage growth; (2) Using satellite images to identify different landuse zones in urban areas; (3) Using a combination of population pyramids, choropleth maps and GIS; (4) Using Census output area data for 2011; (5) Calculating the ecological footprint of people in the city, and comparing it to other locations; (6) Using GIS/satellite images, historic images and maps to investigate spatial growth; (7) Using quantitative and qualitative information to judge the scale of variations in quality of life.

**See Appendix 2: Definitions*

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Topic 5: Global development

Key idea	Detailed content
5.1 Definitions of development vary as do attempts to measure it	a. Contrasting ways of defining development, using economic criteria and broader social and political measures.
	b. Different factors contribute to the human development of a country: economic, social, technological, cultural, as well as food and water security.
	c. How development is measured in different ways: Gross Domestic Product (GDP) per capita, the Human Development Index, measures of inequality and indices of political corruption. (1)
5.2 The level of development varies globally	a. Global pattern of development and its unevenness between and within countries, including the UK. (2)
	b. Factors (physical, historic and economic) that have led to spatial variations in the level of development globally and within the UK.
5.3 Uneven global development has had a range of consequences	a. Impact of uneven development on the quality of life in different parts of the world: access to housing, health, education, employment, technology, and food and water security.
5.4 A range of strategies has been used to try to address uneven development	a. The range of international strategies (international aid and inter-governmental agreements) that attempt to reduce uneven development.
	b. Difference between top-down (government or transnational corporation (TNC) led) and bottom-up development projects (community led). Their advantages and limitations in the promotion of development.

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Study of development in a developing country*or an emerging country*

5.5 The level of development of the chosen developing or emerging country is influenced by its location and context in the world	a. Location and position of the chosen country in its region and globally.
	b. Broad political, social, cultural and environmental context of the chosen country in its region and globally.
	c. Unevenness of development within the chosen country (core and periphery) and reasons why development does not take place at the same rate across all regions.
5.6 The interactions of economic, social and demographic processes influence the development of the chosen developing or emerging country	a. Positive and negative impacts of changes that have occurred in the sectors (primary, secondary, tertiary and quaternary) of the chosen country's economy. (3)
	b. Characteristics of international trade and aid and the chosen country's involvement in both. (4)
	c. Changing balance between public investment (by government) and private investment (by TNCs and smaller businesses) for the chosen country.
	d. Changes in population structure and life expectancy that have occurred in the last 30 years in the chosen country. (5)
	e. Changing social factors (increased inequality, growing middle class and improved education) in the chosen country.
5.7 Changing geopolitics and technology impact on the chosen developing or emerging country	a. How geopolitical relationships with other countries affect the chosen country's development: foreign policy, defence, military pacts, territorial disputes.
	b. How technology and connectivity support development in different parts of the chosen country and for different groups of people. (6)
5.8 There are positive and negative impacts of rapid development for the people and environment of the chosen developing or emerging country	a. Positive and negative social, economic and environmental impacts of rapid development for the chosen country and its people.
	b. How the chosen country's government and people are managing the impacts of its rapid development to improve quality of life and its global status.

Integrated skills: (1) Comparing the relative ranking of countries using single versus composite (indices) development measures; (2) Interpreting choropleth maps; (3) Using numerical economic data to profile the chosen country; (4) Using proportional flow line maps to visualize trade patterns and flows; (5) Interpreting population pyramids; (6) Using socio-economic data to calculate difference from the mean, for core and periphery regions.

******See Appendix 2: Definitions*

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Topic 6: Resource management

Key idea	Detailed content
6.1 A natural resource is any feature or part of the environment that can be used to meet human needs	a. Natural resources can be defined and classified in different ways (biotic, abiotic, renewable and non-renewable).
	b. Ways in which people exploit environments in order to obtain water, food and energy (extraction of fossil fuels, fishing, farming and deforestation).
	c. How environments are changed by this exploitation (reduced biodiversity, soil erosion and reduced water and air quality).
6.2 The patterns of the distribution and consumption of natural resources varies on a global and a national scale	a. Global and UK variety and distribution of natural resources (soil and agriculture, forestry, fossil fuels, water supply, rock and minerals). (1)
	b. Global patterns of usage and consumption of food, energy and water. (2)
Integrated skills. (1) Use and interpretation of UK and world maps showing the distribution of resources; (2) Using different choropleth maps and data visualisations such as Gapminder.	

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6A: Energy resource management

Key idea	Detailed content
6.3 Renewable and non-renewable energy resources can be developed	a. Energy resources can be classified as renewable and non-renewable.
	b. Advantages and disadvantages of the production and development of one non-renewable energy resource.
	c. Advantages and disadvantages of the production and development of one renewable energy resource.
6.4 To meet demand, countries use energy resources in different proportions. This is called the energy mix	a. The composition of the UK's energy mix.
	b. How global variations in the energy mix are dependent on a number of factors: population, wealth and the availability of energy resources. (1)

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Key idea	Detailed content
6.5 There is increasing demand for energy that is being met by renewable and non-renewable resources	a. How and why global demand has changed over the past 100 years: world population, increased wealth and technological advances. (2)
	b. How non-renewable energy resources (coal, oil, natural gas and uranium) are being developed and how this can have both positive and negative positive impacts on people and the environment.
	c. How renewable energy resources (hydro-electric power (HEP), wind power and solar power) are being developed and how this can have both positive and negative positive impacts on people and the environment.
	d. How technology (fracking) can resolve energy resource shortages.
6.6 Meeting the demands for energy resources can involve interventions by different interest groups	a. How attitudes to the exploitation and consumption of energy resources vary with different stakeholders (individuals, organisations and governments).
6.7 Management and sustainable use of energy resources are required at a range of spatial scales from local to international	a. Why renewable and non-renewable energy resources require sustainable management. (3)
	b. Different views held by individuals, organisations and governments on the management and sustainable use of energy resources.
	c. How one developed country and one emerging country or developing country have attempted to manage their energy resources in a sustainable way.
Integrated skills. (1) Use and interpretation of world maps showing the distribution of energy resources; (2) Use and interpretation of line graphs showing the range of future global population projections, and population in relation to likely available energy resources; (3) Calculation off carbon and ecological footprints.	

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6B: Water resource management

Key idea	Detailed content
6.8 The supply of fresh water supply varies globally	a. Global distribution of fresh water.
	b. How the availability of fresh water varies on a global, national and local scale.
	c. Why some parts of the world have a water surplus or a water deficit. (1)
6.9 There are differences between the water consumption patterns of developing countries and developed countries	a. The proportion of water used by agriculture, industry and domestic in developed countries and emerging or developing countries.
	b. Why there are differences in water usage between developed and emerging or developing countries.
	c. How and why the demand for water resources in a developed country has changed in the past 50 years. (2)
6.10 Countries at different levels of development have water supply problems	a. Why the UK has water–supply problems (imbalances of the supply and demand for rainfall, seasonal imbalances and an ageing infrastructure: sewage and water pipes).
	b. Why one named emerging or developing country has water–supply problems (access to only untreated water, pollution of water courses and low annual rainfall).
6.11 Meeting the demands for water resources could involve technology and interventions by different interest groups	a. How attitudes to the exploitation and consumption of water resources vary with different stakeholders (individuals, organisations and governments). (3)
	b. How technology (desalination) can resolve water–resource shortages.
6.12 Management and sustainable use of water resources are required at a range of spatial scales from local to international	a. Why water resources require sustainable management.
	b. Different views held by individuals, organisations and governments on the management and sustainable use of water resources.
	c. How one developed country and one emerging or developing country have attempted to manage their water resources in a sustainable way.
Integrated skills: (1) Use and interpretation of UK and world maps showing the distribution of freshwater resources supply and demand; (2) Use and interpretation of line graphs showing the range of future global population projections, and population in relation to likely available water resources; (3) Use and Interpretation of UK and World relative water stress maps.	

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Assessment information

- First assessment: May/June 2018.
- The assessment is 1 hour and 30 minutes.
- The assessment consists of three sections.
- The assessment is out of 94 marks.
- The paper will assess spelling, punctuation, grammar and use of specialist terminology which will contribute 4 marks towards the overall marks for this paper.
- Each question is set in a context.
- Students must answer **one** from two optional questions (Energy resource management or Water resource management) in Section A. Students must answer all questions from Sections B and C.
- The exam includes multiple-choice questions, short open, open response, calculations and 8-mark extended writing questions.
- Calculators may be used in the examination.

Sample assessment materials

A sample paper and mark scheme for this paper can be found in the *Pearson Edexcel Pearson Edexcel Level 1/Level 2 GCSE (9–1) in Geography A* Sample Assessment Materials (SAMs) document.

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Component 3: Geographical Investigations: Fieldwork and UK Challenges

Overview

This component brings together practical geographical enquiry into physical and human processes and environments and the interactions between the two. The component is divided into two sections:

- Topic 7: Geographical investigations – fieldwork. Two geographical investigations each involving fieldwork and research. There is a choice of **one from two** environments in 7A: Investigating physical environments (rivers or coasts) and **one from two** environments 7B: Investigating human landscapes (central/inner urban area or rural settlements).
- Topic 8: Geographical investigations – UK challenges. Students are required to draw across their knowledge and understanding of the UK, from the physical and human geography drawn from Components 1 and 2, in order to investigate a contemporary challenge for the UK. Students are required to have a geographical overview of the four UK challenges in Topic 8 from which the assessment context will be drawn.

Topic 7: Geographical investigations – fieldwork

The experience of fieldwork helps students to develop new geographical insights into the two contrasting environments required for this qualification and to apply their geographical knowledge, understanding and skills to these environments.

One environment must be chosen from a river landscape or a coastal landscape and one from a central/inner urban area or rural settlement. Fieldwork must be outside the classroom and school/college grounds. It does not have to take place in the UK necessarily, but the examination for this will always treat fieldwork within the context of the UK.

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Contexts for fieldwork - focus, purpose, content and skills

The table below specifies the minimum types and range of fieldwork (including qualitative, quantitative and secondary data) required for the options available.

7A: Investigating physical environments (rivers or coasts)

Task: River landscapes – investigation of change in a river channel.

Enquiry process point	General focus and details of fieldwork
1. Enquiry question	Students must have an opportunity to develop understanding of the kinds of questions that can be investigated through fieldwork in coastal environments. Students must have an opportunity to develop a question(s) based on their location and the task.
2. Fieldwork methods and techniques	Fieldwork data collection must include at least **three** quantitative and at least **one** qualitative methods: • the design and completion of the calculation of river cross-sectional area and gradient • the design and completion of the calculation of river discharge • annotated photographs/field sketches of small selection of landscape features. Fieldwork data must be collected from **two** or more sites. Students should have an opportunity to consider sample size, sampling strategies and data–collection design to help them understand issues of reliability and accuracy of data. Students need to understand the purpose of each of the data collection methods for the investigation. Human interaction: students must develop their understanding of any implications of annual variations in the river discharge levels for people living in the catchment area.
3. Secondary data sources	The use of at least **two** different secondary sources of data including the National Rivers Flow Archive or similar and **one** other chosen by the centre.
4. Processing and presenting data	• both primary and secondary data should be processed, including the use of tally charts, calculation of means and calculation of percentages • primary and secondary data should be presented in map form using simple GIS applications • simple (pie, bar, line) and more complex (compound, radial, scatter) graphs should be used to present primary and secondary data • appropriate ways should be used to present qualitative data.
5. Analysis and explanation	Primary and secondary data should be analysed for meaning both individually and together, to draw out links, contrasts and comparisons.
6. Coming to conclusions	Conclusions drawn should relate to: • the extent to which changes in channel geometry downstream reflects accepted theories • the extent to which there are any implications of the river discharge levels for people living in the catchment area • conclusions must draw on both primary and secondary evidence, and consider anomalous and/or unexpected results.
7. Reflecting on data, methods	To include the accuracy and reliability of primary and secondary data, the extent to which conclusions are reliable and possible ways to improve results, and the extent to which the data

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Enquiry process point	General focus and details of fieldwork
and conclusions	collection techniques could be used for other fieldwork investigations.

Task: Coastal landscapes – investigation of coastal processes through landscape evidence

Enquiry process point	General focus and details of fieldwork
1. Enquiry question	Students must have an opportunity to develop understanding of the kinds of question that can be investigated through fieldwork in coastal environments. Students must have an opportunity to develop a question(s) based on their location and the task.
2. Fieldwork methods and techniques	Fieldwork data collection must include at least **three** quantitative and at least **one** qualitative methods: • the design and completion of a beach sediment (size and shape) analysis • the design and completion of a beach profile survey • annotated photographs/field sketches of a small selection of coastal landscape features. Students should have an opportunity to consider sample size, sampling strategies and data collection design to help them understand issues of reliability and accuracy of data. Students need to understand the purpose of each of the data collection methods for the investigation. Fieldwork data must be collected from **two** or more sites. Human interaction: students must develop their understanding of why the stretch of coast for fieldwork has been designated a category on the shoreline management plan (SMP).
3. Secondary data sources	The use of at least **two** different secondary sources of data, including use of a shoreline management plan of the area under study and **one** other chosen by the centre.
4. Processing and presenting data	• both primary and secondary data should be processed including the use of tally charts, calculation of means, and calculation of percentages. • primary and secondary data should be presented in map form using simple GIS applications. • simple (pie, bar, line) and more complex (compound, radial, scatter) graphs should be used to present primary and secondary data. • appropriate ways should be used to present qualitative data.
5. Analysis and explanation	Primary and secondary data should be analysed for meaning both individually and together, to draw out links, contrasts and comparisons.
6. Coming to conclusions	Conclusions drawn should relate to: • the extent to which coastal processes affect landscape features • the extent to which the management (designated by SMP) reduces the threat of coastal erosion on people/environment • conclusions must draw on both primary and secondary evidence, and consider anomalous and / or unexpected results.
7. Reflecting on data, methods and conclusions	To include the accuracy and reliability of primary and secondary data, the extent to which conclusions are reliable and possible ways to improve results, and the extent to which the data collection techniques could be used for other fieldwork investigations.

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7B: Investigating human landscapes (central/inner urban area or rural settlements).

Task: Changing city environments – investigating change in central/inner urban area(s)

Enquiry process point	General focus and details of fieldwork
1. Enquiry question	Students must have an opportunity to develop understanding of the kinds of question that can be investigated through fieldwork in urban environments. Students must have an opportunity to develop a question(s) based on their location and the task.
2. Fieldwork methods and techniques	Fieldwork data collection must include at least **three** quantitative and at least **one** qualitative methods: • the design and completion of a land-use and retail-type survey • the design and completion of a Pedestrian flow (footfall) study • annotated photographs / sketch maps of evidence of high street decay/development and areas of new improvement(s). Students should have an opportunity to consider sample size, sampling strategies and data collection design to help them understand issues of reliability and accuracy of data. Students need to understand the purpose of each of the data collection methods for the investigation. Fieldwork data must be collected from **two** or more sites. Physical interaction: students must develop their understanding of the impact of physical geography on site on land use within the central/inner urban area
3. Secondary data sources	The use of at least **two** different secondary sources of data, one of which must be the comparison of Index of Multiple Deprivation (IMD) data from two output areas using 2011 Census (Neighbourhood statistics) and **one** other chosen by the centre.
4. Processing and presenting data	• both primary and secondary data should be processed including the use of tally charts, calculation of means, and calculation of percentages • primary and secondary data should be presented in map form using simple GIS applications • simple (pie, bar, line) and more complex (compound, radial, scatter) graphs should be used to present primary and secondary data • appropriate ways should be used to present qualitative data.
5. Analysis and explanation	Primary and secondary data should be analysed for meaning both individually and together, to draw out links, contrasts and comparisons.
6. Coming to conclusions	Conclusions drawn should relate to: • the extent to which there is evidence of change within or across the central / inner urban area • the reasons for identified changes / development Conclusions must draw on both primary and secondary evidence, and consider anomalous and / or unexpected results.
7. Reflecting on data, methods and conclusions	To include the accuracy and reliability of primary and secondary data, the extent to which conclusions are reliable and possible ways to improve results, and the extent to which the data collection techniques could be used for other fieldwork investigations.

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Task: Changing rural environments – investigating change in rural settlements

Enquiry process point	General focus and details of fieldwork
1. Enquiry question	Students must have an opportunity to develop understanding of the kinds of question that can be investigated through fieldwork in rural environments. Students must have an opportunity to develop a question(s) based on their location and the task.
2. Fieldwork methods and techniques	Fieldwork data collection must include at least **three** quantitative and at least **one** qualitative methods: • the design and completion of visitor/tourist questionnaire surveys, using both open and closed questions • the design and completion of a pedestrian flow (footfall) and tourism service provision • annotated photographs/sketch maps of evidence of tourism activity in rural settlements. Students should have an opportunity to consider sample size, sampling strategies and data collection design to help them understand issues of reliability and accuracy of data. Students need to understand the purpose of each of the data collection methods for the investigation. Fieldwork data must be collected from **two** or more sites. **Physical interaction:** students must develop their understanding of the impact of the distinctive physical landscape features on why people visit honeypot rural settlements.
3. Secondary data sources	The use of at least two different secondary sources of data, one of which must be the use of the **data on the impact of tourism on the local or wider regional economy** and one other chosen by the centre.
4. Processing and presenting data	• both primary and secondary data should be processed including the use of tally charts, calculation of means, and calculation of percentages • primary and secondary data should be presented in map form using simple GIS applications • simple (pie, bar, line) and more complex (compound, radial, scatter) graphs should be used to present primary and secondary data • appropriate ways should be used to present qualitative data.
5. Analysis and explanation	Primary and secondary data should be analysed for meaning both individually and together, to draw out links, contrasts and comparisons.
6. Coming to conclusions	Conclusions drawn should relate to: • the extent to which there is evidence of change within or between the chosen locations • the reasons for identified change • conclusions must draw on both primary and secondary evidence, and consider anomalous and/or unexpected results.
7. Reflecting on data, methods and conclusions	To include the accuracy and reliability of primary and secondary data, the extent to which conclusions are reliable and possible ways to improve results, and the extent to which the data collection techniques could be used for other fieldwork investigations.

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A practical geographical enquiry process

Recommended stages of geographical enquiry together with guidance on possible activities.

(1) Identification of the question	Pre-fieldwork and planning	What are the possible fieldwork opportunities presented by the environment? Are they practical, realistic or achievable given the circumstances of the locations etc?
(2) Contextualising the fieldwork		Research into relevant background information (internet, magazines, books), i.e. secondary information and/or data. Opportunity to develop own ideas and models or use existing ones. Development of hypotheses and/or suitable key questions.
(3) Design: where and how many?	Primary field skills	Number of fieldwork sites (practically); group or individual observations. Consideration of appropriate sampling procedures (systematic vs random vs stratified) and sample size. Consideration of health and safety and undertake risk assessments.
(4) Equipment considerations; how to record. Primary data collection		Appropriate data collection methods that will help answer the questions being investigated. Appropriate equipment to ensure accuracy and reliability. Development of recording sheets for measurement and observation.
(5) Data processing and presentation	Presentation, analysis, conclusions and evaluation	Use of ICT to manage, collate and process information, e.g. shared spreadsheets and VLE/'cloud' to store for easy retrieval. Using ICT and/or hand-drawn graphical skills to present information in a suitable way.
(6) Analysis and conclusions		Describe the findings, explain possible reasons and make links. Simple statistics may be relevant, e.g. measures of central tendency, spread and cumulative frequency.
		Review information and then bring it together to form a conclusion, drawing on evidence and reasoned chains of argument.
(7) Critically reflecting on the results		A critical reflection on the fieldwork data, methods used, knowledge gained and how this could be applied to other fieldwork contexts. Reference to the accuracy, validity and reliability of the conclusions.

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Topic 8: Geographical investigations – UK challenges

In this topic, students are required to draw on their knowledge and understanding of the physical and human characteristics of the UK from Components 1 and 2, and use their geographical skills, to investigate a contemporary challenge for the UK. The UK challenge will be drawn from one or more of four themes below.

The UK Challenges	Detailed content	Related topics
8.1 The UK's resource consumption and environmental sustainability challenge	a. Changes in the UK's population in the next 50 years and implications on resource consumption. b. Pressures of growing populations on the UK's ecosystems. c. Range of national sustainable transport options for the UK.	2.3a; 3.3; 3.6a, c; 4.1a; 4.4b; 4.5b, c, d, e; 5.2; 6.1; 6.2a
8.2 The UK settlement, population and economic challenges	a. The 'two-speed economy' and options for bridging the gap between south east and the rest of the UK. b. Costs and benefits of greenfield development and the regeneration of brownfield sites. c. UK net migration statistics and their reliability and values and attitudes of different stakeholders towards migration.	4.2b; 4.4a, b; 4.5b, c, d, e; 5.2; 5.4b
8.3 The UK's landscape challenges	a. Approaches to conservation and development of UK National Parks b. Approaches to managing river and coastal UK flood risk.	1.5; 1.9; 1.13
8.4 The UK's climate change challenges	a. Uncertainties about how global climate change will impact on the UK's future climate. b. Impacts of climate change on people and landscapes in UK c. Range of responses to climate change in the UK at a local and national scale.	1.4b; 1.7b; 1.11b; 2.3b; 2.4a; 3.3; 3.6b; 4.5b; 6.2

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Assessment information

- First assessment: May/June 2018.
- The assessment is 1 hour and 15 minutes.
- The assessment consists of three sections.
- The assessment is out of 64 marks.
- The paper will assess spelling, punctuation, grammar and use of specialist terminology which will contribute 4 marks towards the overall marks for this paper.
- Students must answer one from the optional questions in Section A (River landscapes and processes or Coastal landscapes and processes) and one from the optional questions in Section B (Central urban area/CBD or Rural landscapes). Students must answer all questions from Section C.
- The exam includes multiple-choice questions, short open, open response, calculations, 6-mark and 10-mark extended writing questions.
- Calculators may be used in the examination.

In the examination in any given year, students will be assessed on **at least four** of the six enquiry stages below, **across both** their investigations:

Stage in the enquiry process	**Description**
1	Understanding of the kinds of question capable of being investigated through fieldwork and an understanding of the geographical enquiry processes appropriate to investigate these.
2	Understanding of the range of techniques and methods used in fieldwork, including observation and different kinds of measurement.
3	Processing and presenting fieldwork data in various ways including maps, GIS, graphs and diagrams (hand drawn and computer-generated).
4	Analysing and explaining data collected in the field using knowledge of relevant geographical case studies and theories.
5	Drawing evidenced conclusions and summaries from fieldwork transcripts and data.
6	Reflecting critically on fieldwork data, methods used, conclusions drawn and knowledge gained.

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Sample assessment materials

A sample paper and mark scheme for this paper can be found in the *Pearson Edexcel Pearson Edexcel Level 1/Level 2 GCSE (9–1) in Geography A* Sample Assessment Materials (SAMs) document.

Authentication of fieldwork

Centres must complete the Fieldwork Statement in *Appendix 1*. This form must be completed as evidence that students have undertaken appropriate fieldwork as part of their programme of study for this qualification. 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, see page 38.

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Geographical skills

Students are required to develop a range of geographical skills throughout their course of study. These skills may be assessed across any of the examined components. The full list of geographical skills is given below. Some geographical skills are specific to particular subject content; these are indicated in the 'integrated skills' sections within the topics throughout the specification.

Atlas and map skills:

- recognise and describe distributions and patterns of both human and physical features at a range of scales using a variety of maps and atlases
- draw, label, annotate, understand and interpret sketch maps
- recognise and describe patterns of vegetation, land use and communications infrastructure, as well as other patterns of human and physical landscapes
- describe and identify the site, situation and shape of settlements

Graphical skills:

- label and annotate different diagrams, maps, graphs, sketches and photographs
- use and interpret aerial, oblique, ground and satellite photographs from a range of different landscapes
- use maps in association with photographs and sketches and understand links to directions

Data and information research skills:

- use online census sources to obtain population and local geo-demographic information

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Mathematics and Statistics Skills

These skills are taken from the document Geography GCSE subject content published by the Department for Education (DfE) April 2014. These skills may be assessed across any of the examined components. Some mathematics and statistics skills are specific to particular subject content; these are indicated in the 'integrated skills' sections within the topics throughout the specification.

Cartographic skills:

- use and understand gradient, contour and spot height on OS maps and other isoline maps
- interpret cross sections and transects
- use and understand coordinates, scale and distance
- describe and interpret geo-spatial data presented in a GIS framework

Graphical skills:

- select and construct appropriate graphs and charts to present data, using appropriate scales and including bar charts, pie charts, pictograms, line charts, histograms with equal class intervals
- interpret and extract information from different types of graphs and charts including any of the above and others relevant to the topic
- interpret population pyramids, choropleth maps and flow-line maps

Numerical skills:

- demonstrate an understanding of number, area and scale and the quantitative relationships between units
- design fieldwork data collection sheets and collect data with an understanding of accuracy, sample size and procedures, control groups and reliability
- understand and correctly use proportion and ratio, magnitude and frequency
- draw informed conclusions from numerical data

Statistical skills:

- use appropriate measures of central tendency, spread and cumulative frequency (median, mean, range, quartiles and inter-quartile range, mode and modal class)
- calculate percentage increase or decrease and understand the use of percentiles
- describe relationships in bivariate data: sketch trend lines through scatter plots; draw estimated lines of best fit; make predictions; interpolate and extrapolate trends
- be able to identify weaknesses in selective statistical presentation of data

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Assessment Objectives

Students must:		% in GCSE
AO1	Demonstrate knowledge of locations, places, processes, environments and different scales.	15
AO2	Demonstrate geographical understanding of: • concepts and how they are used in relation to places, environments and processes; • the inter-relationships between places, environments and processes.	25
AO3	Apply knowledge and understanding to interpret, analyse and evaluate geographical information and issues and to make judgements.	35 (10% applied to fieldwork context(s))
AO4	Select, adapt and use a variety of skills and techniques to investigate questions and issues and communicate findings.	25 (5% used to respond to fieldwork data and contexts)
	Total	**100%**

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Breakdown of Assessment Objectives

Paper	Assessment Objectives				Total for all Assessment Objectives
	AO1 %	AO2 %	AO3 %	AO4 %	
Paper 1: The Physical Environment	6.5	11.5	10.5	9	37.5%
Paper 2: The Human Environment	6.5	11.5	10.5	9	37.5%
Paper 3: Geographical Investigations: Fieldwork and UK Challenges	2	2	14	7	25%
Total for GCSE	**15%**	**25%**	**35%**	**25%**	**100%**

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3 Administration and general information

Entries

Details of how to enter students for the examinations for this qualification can be found in our *UK Information Manual*. A copy is made available to all examinations officers and is available on our website: qualifications.pearson.com

Forbidden combinations and discount code

Centres should be aware that students who enter for more than one GCSE, or other Level 2 qualifications with the same discount code, will have only the grade for their 'first entry' counted for the purpose of the School and College Performance Tables (please see *Appendix 6: Codes*). For further information about what constitutes 'first entry' and full details of how this policy is applied, please refer to the DfE website: www.education.gov.uk

Students should be advised that, if they take two GCSEs with the same discount code, schools and colleges to which they wish to progress are very likely to take the view that they have achieved only one of the two GCSEs. The same view may be taken if students take two GCSE or other Level 2 qualifications that have different discount codes but which have significant overlap of content. Students or their advisers who have any doubts about their subject combinations should check with the institution to which they wish to progress before embarking on their programmes.

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Access arrangements, reasonable adjustments, special consideration and malpractice

Equality and fairness are central to our work. Our equality policy requires all students to have equal opportunity to access our qualifications and assessments, and our qualifications to be awarded in a way that is fair to every student.

We are committed to making sure that:

- students with a protected characteristic (as defined by the Equality Act 2010) are not, when they are undertaking one of our qualifications, disadvantaged in comparison to students who do not share that characteristic
- all students achieve the recognition they deserve for undertaking a qualification and that this achievement can be compared fairly to the achievement of their peers.

Access arrangements

Access arrangements are agreed before an assessment. They allow students with special educational needs, disabilities or temporary injuries to:

- access the assessment
- show what they know and can do without changing the demands of the assessment.

The intention behind an access arrangement is to meet the particular needs of an individual student with a disability, without affecting the integrity of the assessment. Access arrangements are the principal way in which awarding bodies comply with the duty under the Equality Act 2010 to make 'reasonable adjustments'.

Access arrangements should always be processed at the start of the course. Students will then know what is available and have the access arrangement(s) in place for assessment.

Reasonable adjustments

The Equality Act 2010 requires an awarding organisation to make reasonable adjustments where a person with a disability would be at a substantial disadvantage in undertaking an assessment. The awarding organisation is required to take reasonable steps to overcome that disadvantage.

A reasonable adjustment for a particular person may be unique to that individual and therefore might not be in the list of available access arrangements.

Whether an adjustment will be considered reasonable will depend on a number of factors, which will include:

- the needs of the student with the disability
- the effectiveness of the adjustment
- the cost of the adjustment; and
- the likely impact of the adjustment on the student with the disability and other students.

An adjustment will not be approved if it involves unreasonable costs to the awarding organisation, timeframes or affects the security or integrity of the assessment. This is because the adjustment is not 'reasonable'.

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Special consideration

Special consideration is a post-examination adjustment to a student's mark or grade to reflect temporary injury, illness or other indisposition at the time of the examination/ assessment, which has had, or is reasonably likely to have had, a material effect on a candidate's ability to take an assessment or demonstrate their level of attainment in an assessment.

Further information

Please see our website for further information about how to apply for access arrangements and special consideration.

For further information about access arrangements, reasonable adjustments and special consideration, please refer to the JCQ website: www.jcq.org.uk.

Malpractice

Candidate malpractice

Candidate malpractice refers to any act by a candidate that compromises or seeks to compromise the process of assessment or which undermines the integrity of the qualifications or the validity of results/certificates.

Candidate malpractice in examinations **must** be reported to Pearson using a *JCQ M1 Form* (available at www.jcq.org.uk/exams-office/malpractice). The form can be emailed to pqsmalpractice@pearson.com or posted to Investigations Team, Pearson, 190 High Holborn, London, WC1V 7BH. Please provide as much information and supporting documentation as possible. Note that the final decision regarding appropriate sanctions lies with Pearson.

Failure to report malpractice constitutes staff or centre malpractice.

Staff/centre malpractice

Staff and centre malpractice includes both deliberate malpractice and maladministration of our qualifications. As with candidate malpractice, staff and centre malpractice is any act that compromises or seeks to compromise the process of assessment or which undermines the integrity of the qualifications or the validity of results/certificates.

All cases of suspected staff malpractice and maladministration **must** be reported immediately, before any investigation is undertaken by the centre, to Pearson on a *JCQ M2(a) Form* (available at www.jcq.org.uk/exams-office/malpractice). The form, supporting documentation and as much information as possible can be emailed to pqsmalpractice@pearson.com or posted to Investigations Team, Pearson, 190 High Holborn, London, WC1V 7BH. Note that the final decision regarding appropriate sanctions lies with Pearson.

Failure to report malpractice itself constitutes malpractice.

More-detailed guidance on malpractice can be found in the latest version of the document *JCQ General and Vocational Qualifications Suspected Malpractice in Examinations and Assessments,* available at www.jcq.org.uk/exams-office/malpractice.

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Awarding and reporting

This qualification will be graded, awarded and certificated to comply with the requirements of Ofqual's General Conditions of Recognition.

This GCSE qualification will be graded and certificated on a nine-grade scale from 9 to 1 using the total subject mark where 9 is the highest grade. Individual papers are not graded.

Grade descriptions

The grade descriptions for this qualification are published by Ofqual and will be available on their website.

Student recruitment and progression

Pearson follows the JCQ policy concerning recruitment to our qualifications in that:

- they must be available to anyone who is capable of reaching the required standard
- they must be free from barriers that restrict access and progression
- equal opportunities exist for all students.

Prior learning and other requirements

This qualification has been built to progress from the geographical knowledge, understanding and skills in the geography programmes of study for the National Curriculum in England. Although the qualification does not directly assess geographical knowledge, understanding and skills of the content geography programmes of study for the National Curriculum in England it assumes that this geographical knowledge, understanding and skills have been developed lower down the key stages.

Progression

Students can progress from this qualification to a number of different qualifications at Level 3, including GCE in Geography, Geology, Environmental Sciences, Travel and Tourism, and Leisure and Recreation.

With this rounded qualification that helps students to understand the world around them they can, usually with further training, progress to employment.

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Appendix 1: Fieldwork Statement

Pearson Edexcel Level 1/Level 2 GCSE (9-1) in Geography	**1GA0/1GB0**
Centre name:	Centre number:
All candidates must carry out fieldwork, outside of the classroom and school grounds, on at least two occasions.	
Details of fieldwork	
Fieldwork occasion 1 Specification topic links: Fieldwork date:_____ Location:_____ Number of students:_____ Key issues/questions investigated:	**Fieldwork occasion 2** Specification topic links: Fieldwork date:_____ Location:_____ Number of students:_____ Key issues/questions investigated:

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Head teacher declaration

I declare that the fieldwork occasions recorded above have been carried out in accordance with 2016 Pearson Edexcel Level 1/Level 2 GCSE Geography (9-1) fieldwork requirements.

Head teacher name:			
Head teacher signature:		Date:	

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Appendix 2: Definitions

This lists terms used in this specification and their definition.

Term	Definition
Developing country	Country with low human development (LHD), a poor country
Emerging country	Country with high and medium development (HMHD), recently emerging country
Developed country	Country with very high human development (VHHD)
Major city	City with population of at least 400,000 inhabitants

Human Development as measured by the Human Development Index (HDI). For further information on which countries are categorised as Low, Medium, High and Very High Human Development by HDI please see this website : http://hdr.undp.org

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Appendix 3: 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
Identify/State/Name	Recall or select one or more pieces of information.
Define	State the meaning of a term.
Calculate	Produce a numerical answer, showing relevant working.
Draw/plot	Create a graphical representation of geographical information.
Label	Add a label/labels to a given resource, graphic or image.
Describe	Give an account of the main characteristics of something or the steps in a process. Statements in the response should be developed but do not need to include a justification or reason.
Compare	Find the similarities and differences of two elements given in a question. Each response must relate to **both** elements, and must include a statement of their similarity/difference.
Explain	Provide a reasoned explanation of how or why something occurs. An explanation requires a justification/exemplification of a point. Explanation may sometimes be supported by diagrams or annotation.
Suggest	Apply understanding to provide a reasoned explanation of how or why something may occur. A suggested explanation requires a justification/exemplification of a point.
Examine	Break something down into individual components/processes and say how each one individually contributes to the question's theme/topic and how the components/processes work together and interrelate.
Assess	Use evidence to determine the relative significance of something. Give consideration to all factors and identify which are the most important.
Discuss	Explore the strengths and weaknesses of different sides of an issue/question. Investigate the issue by reasoning or argument.
Evaluate	Measure the value or success of something and ultimately provide a 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.

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Appendix 4: The context for the development of this qualification

All our qualifications are designed to meet our World Class Qualification Principles[1] and our ambition to put the student at the heart of everything we do.

We have developed and designed this qualification by:

- reviewing other curricula and qualifications to ensure that it is comparable with those taken in high-performing jurisdictions overseas
- consulting with key stakeholders on content and assessment, including learned bodies, subject associations, higher-education academics, teachers and employers to ensure this qualification is suitable for a UK context .

This qualification has also been developed to meet criteria stipulated by Ofqual in their documents *GCSE (9 to 1) Qualification Level Conditions and Requirements* and *GCSE Subject Level Conditions and Requirements for Geography*, published in April 2014.

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[1] Pearson's World Class Qualification Principles ensure that our qualifications are:

- **demanding**, through internationally benchmarked standards, encouraging deep learning and measuring higher-order skills
- **rigorous**, through setting and maintaining standards over time, developing reliable and valid assessment tasks and processes, and generating confidence in end users of the knowledge, skills and competencies of certified students
- **inclusive**, through conceptualising learning as continuous, recognising that students develop at different rates and have different learning needs, and focusing on progression
- **empowering**, through promoting the development of transferable skills, see *Appendix 5*.

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From Pearson's Expert Panel for World Class Qualifications

"The reform of the qualifications system in England is a profoundly important change to the education system. Teachers need to know that the new qualifications will assist them in helping their learners make progress in their lives.

When these changes were first proposed we were approached by Pearson to join an 'Expert Panel' that would advise them on the development of the new qualifications.

We were chosen, either because of our expertise in the UK education system, or because of our experience in reforming qualifications in other systems around the world as diverse as Singapore, Hong Kong, Australia and a number of countries across Europe.

We have guided Pearson through what we judge to be a rigorous qualification development process that has included:

- Extensive international comparability of subject content against the highest-performing jurisdictions in the world
- Benchmarking assessments against UK and overseas providers to ensure that they are at the right level of demand
- Establishing External Subject Advisory Groups, drawing on independent subject-specific expertise to challenge and validate our qualifications
- Subjecting the final qualifications to scrutiny against the DfE content and Ofqual accreditation criteria in advance of submission.

Importantly, we have worked to ensure that the content and learning is future oriented. The design has been guided by what is called an 'Efficacy Framework', meaning learner outcomes have been at the heart of this development throughout.

We understand that ultimately it is excellent teaching that is the key factor to a learner's success in education. As a result of our work as a panel we are confident that we have supported the development of qualifications that are outstanding for their coherence, thoroughness and attention to detail and can be regarded as representing world-class best practice."

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Sir Michael Barber (Chair)

Chief Education Advisor, Pearson plc

Professor Sing Kong Lee

Director, National Institute of Education, Singapore

Bahram Bekhradnia

President, Higher Education Policy Institute

Professor Jonathan Osborne

Stanford University

Dame Sally Coates

Principal, Burlington Danes Academy

Professor Dr Ursula Renold

Federal Institute of Technology, Switzerland

Professor Robin Coningham

Pro-Vice Chancellor, University of Durham

Professor Bob Schwartz

Harvard Graduate School of Education

Dr Peter Hill

Former Chief Executive ACARA

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Appendix 5: Transferable skills

The need for transferable skills

In recent years, higher education institutions and employers have consistently flagged the need for students to develop a range of transferable skills to enable them to respond with confidence to the demands of undergraduate study and the world of work.

The Organisation for Economic Co-operation and Development (OECD) defines skills, or competencies, as 'the bundle of knowledge, attributes and capacities that can be learned and that enable individuals to successfully and consistently perform an activity or task and can be built upon and extended through learning.'[1]

To support the design of our qualifications, the Pearson Research Team selected and evaluated seven global 21st-century skills frameworks. Following on from this process, we identified the National Research Council's (NRC) framework as the most evidence-based and robust skills framework. We adapted the framework slightly to include the Program for International Student Assessment (PISA) ICT Literacy and Collaborative Problem Solving (CPS) Skills.

The adapted National Research Council's framework of skills involves[2]:

Cognitive skills

- **Non-routine problem solving** – expert thinking, metacognition, creativity.
- **Systems thinking** – decision making and reasoning.
- **Critical thinking** – definitions of critical thinking are broad and usually involve general cognitive skills such as analysing, synthesising and reasoning skills.
- **ICT literacy** – access, manage, integrate, evaluate, construct and communicate[3].

Interpersonal skills

- **Communication** – active listening, oral communication, written communication, assertive communication and non-verbal communication.
- **Relationship-building skills** – teamwork, trust, intercultural sensitivity, service orientation, self-presentation, social influence, conflict resolution and negotiation.
- **Collaborative problem solving** – establishing and maintaining shared understanding, taking appropriate action, establishing and maintaining team organisation.

Intrapersonal skills

- **Adaptability** – ability and willingness to cope with the uncertain, handling work stress, adapting to different personalities, communication styles and cultures, and physical adaptability to various indoor and outdoor work environments.
- **Self-management and self-development** – ability to work remotely in virtual teams, work autonomously, be self-motivating and self-monitoring, willing and able to acquire new information and skills related to work.

Transferable skills enable young people to face the demands of further and higher education, as well as the demands of the workplace, and are important in the teaching and learning of this qualification. We will provide teaching and learning materials, developed with stakeholders, to support our qualifications.

[1] OECD (2012), Better Skills, Better Jobs, Better Lives (2012): http://skills.oecd.org/documents/OECDSkillsStrategyFINALENG.pdf

[2] Koenig, J. A. (2011) Assessing 21st Century Skills: Summary of a Workshop, National Research Council

[3] PISA (2011) The PISA Framework for Assessment of ICT Literacy, PISA

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Appendix 6: Codes

Type of code	Use of code	Code
Discount codes	Every qualification is assigned to a discount code indicating the subject area to which it belongs. This code may change. See our website (qualifications.pearson.com) for details of any changes.	RF4
National Qualifications Framework (NQF) codes	Each qualification title is allocated an Ofqual National Qualifications Framework (NQF) code. The NQF code is known as a Qualification Number (QN). This is the code that features in the DfE Section 96 and on the LARA as being eligible for 16–18 and 19+ funding, and is to be used for all qualification funding purposes. The QN will appear on students' final certification documentation.	The QN for this qualification is: XXX/XXXX/X
Subject codes	The subject code is used by centres to enter students for a qualification. Centres will need to use the entry codes only when claiming students' qualifications.	GCSE – 1GA0
Paper codes	These codes are provided for reference purposes. Students do not need to be entered for individual components.	Paper 1: 1GA0/01 Paper 2: 1GA0/02 Paper 3: 1GA0/03

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Original origami artwork: Mark Bolitho
Origami photography: Pearson Education Ltd/Naki Kouyioumtzis

ISBN 9781446925676

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