Awaiting Accreditation

OCR Level 3 Advanced GCE in Geography (H481)

Specification

Version 1: First assessment 2018

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 A Level in Geography. 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 2016 and first award in 2018.

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1 Why choose an OCR A Level in Geography?

1a. Why choose an OCR qualification?

Choose OCR and you've got the reassurance that you're working with one of the UK's leading exam boards. Our new A Level in Geography course has been developed in consultation with teachers, employers and Higher Education to provide learners with a qualification that's relevant to them and meets their needs.

We're part of the Cambridge Assessment Group, Europe's largest assessment agency and a department of the University of Cambridge. Cambridge Assessment plays a leading role in developing and delivering assessments throughout the world, operating in over 150 countries.

We work with a range of education providers, including schools, colleges, workplaces and other institutions in both the public and private sectors. Over 13,000 centres choose our A Levels, GCSEs and vocational qualifications including Cambridge Nationals, Cambridge Technicals and Cambridge Progression.

Our Specifications

We believe in developing specifications that help you bring the subject to life and inspire your students to achieve more.

We've created teacher-friendly specifications based on extensive research and engagement with the teaching community. They're designed to be straightforward and accessible so that you can tailor the delivery of the course to suit your needs. We aim to encourage learners to become responsible for their own learning, confident in discussing ideas, innovative and engaged.

We provide a range of support services designed to help you at every stage, from preparation through to the delivery of our specifications. This includes:

- A wide range of high-quality creative resources including:
  - Delivery Guides
  - Transition Guides
  - Topic Exploration Packs
  - Lesson Elements
  - …and much more.
- Access to subject specialists to support you through the transition and throughout the lifetime of the specifications.
- CPD/Training for teachers including face-to-face events to introduce the qualifications and prepare you for first teaching.
- Active Results – our free results analysis service to help you review the performance of individual learners or whole schools.
- ExamCreator – our new online past papers service that enables you to build your own test papers from past OCR exam questions.

All A level qualifications offered by OCR are accredited by Ofqual, the Regulator for qualifications offered in England. The accreditation number for OCR's A Level in Geography is QNXXXXXX

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1b. Why choose an OCR A Level in Geography?

OCR's A Level in Geography aims to encourage learners to develop a range of essential skills for Higher Education and the world of work through content which is relevant to any citizen of the planet in the 21st century. Through exciting topics learners will understand the nature of physical and human geography whilst unpicking the debates surrounding contemporary challenges facing the world today.

OCR will have a comprehensive support package in place for the delivery of A Level Geography, including a range of free resources available on the website, CPD opportunities and Geography Subject Specialists who are available to support teachers. This support will continuously evolve to suit the requirements of teaching and learning throughout the lifetime of the specification, based on continued feedback from teachers.

Aims and learning outcomes

OCR's A Level in Geography will enable learners to:

- develop their knowledge of locations, places, processes and environments, at all geographical scales from local to global across the specification as a whole
- develop an in-depth understanding of the selected core and non-core processes in physical and human geography at a range of temporal and spatial scales, and of the concepts which illuminate their significance in a range of locational contexts
- recognise and be able to analyse the complexity of people-environment interactions at all geographical scales, and appreciate how these underpin understanding of some of the key issues facing the world today
- develop their understanding of, and ability to apply, the concepts of place, space, scale and environment, that underpin both the national curriculum and GCSE, including developing a more nuanced understanding of these concepts
- gain understanding of specialised concepts relevant to the core and non-core content. These must include the concepts of causality, systems, equilibrium, feedback, inequality, representation, identity, globalisation, interdependence, mitigation and adaptation, sustainability, risk, resilience and thresholds
- improve their understanding of the ways in which values, attitudes and circumstances have an impact on the relationships between people, place and environment, and develop the knowledge and ability to engage, as citizens, with the questions and issues arising
- become confident and competent in selecting, using and evaluating a range of quantitative and qualitative skills and approaches, (including observing, collecting and analysing geo-located data) and applying them as an integral part of their studies
- understand the fundamental role of fieldwork as a tool to understand and generate new knowledge about the real world, and become skilled at planning, undertaking and evaluating fieldwork in appropriate situations
- apply geographical knowledge, understanding, skills and approaches in a rigorous way to a range of geographical questions and issues, including those identified in fieldwork, recognising both the contributions and limitations of geography
- develop as critical and reflective learners, able to articulate opinions, suggest relevant new ideas and provide evidenced argument in a range of situations.

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1c. What are the key features of this specification?

The key features of OCR's A Level in Geography for you and your learners are:

- exciting content studied through a choice of topics giving rich learning opportunities
- choice of geographical debates to study giving learners a deep understanding of the contemporary challenges of the 21st century
- opportunities for learners to gain vital geographical, fieldwork and life skills
- an independent investigation giving learners resilience in self-sufficient study
- a simple assessment structure with clear and progressive study pathways
- co-teachability with OCR's AS Level in Geography to give flexibility in teaching and learning
- a glossary to explain key terms and clarify definitions (see Section 5d).

1d. How do I find out more information?

If you are already using OCR specifications you can contact us at: www.ocr.org.uk

If you are not already a registered OCR centre then you can find out more information on the benefits of becoming one at: www.ocr.org.uk

If you are not yet an approved centre and would like to become one go to: www.ocr.org.uk

Want to find out more?

Ask our Subject Specialists:

Email: Geography@ocr.org.uk

Teacher support: www.ocr.org.uk/qualifications/by-subject/geography/

Telephone: 01223 553998

Twitter: @OCR_Geography

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2 The specification overview

2a. OCR's A Level in Geography (H481)

Learners take all components: 01, 02, 03 and 04 OR 01, 02, 03 and 05 to be awarded the OCR A Level in Geography.

Content Overview	Assessment Overview	
• Landscape Systems • Earth's Life Support Systems • Geographical Skills	**Physical systems** (01) 72 marks 1 hour 45 minute written paper	**24%** of total A level
• Changing Spaces; Making Places • Global Connections • Geographical Skills	**Human interactions** (02) 72 marks 1 hour 45 minute written paper	**24%** of total A level
Optionality – study 2 of 5 • Climate Change • Disease Dilemmas • Exploring Oceans • Future of Food • Hazardous Earth • Geographical Skills	**Geographical debates** (03)* 96 marks 2 hours 30 minute written paper	**32%** of total A level
• Independent Investigation	**Investigative geography** (04/05)* 60 marks Non-examination assessment (NEA)	**20%** of total A level

*Indicates inclusion of synoptic assessment.

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2b. Content of A Level in Geography (H481)

"Where we come from, what we do, what we eat, how we move about and how we shape our future are all directly the province of the geographer. More than ever we need the geographer's skills and foresight to help us learn about the planet — how we use it and how we abuse it." – Michael Palin

The OCR A Level in Geography has been designed to give learners the knowledge, understanding and skills necessary to become engaged global citizens. Through the study of dynamic and contemporary content, learners can understand and interact with issues which affect people and places at a range of scales from local to global – and all that is in-between.

Components within the OCR A Level in Geography will consist of:

- Physical systems (01)
- Human interactions (02)
- Geographical debates (03)
- Investigative geography (04/05).

Through the study of Physical systems (01) learners will develop an understanding and appreciation of Landscape Systems, contextualised through either coastal landscapes, dryland landscapes or glaciated landscapes, and Earth's Life Support Systems, which encompasses the water and carbon cycles vital to our planet.

Learners will explore Human interactions (02) through the study of Global Connections, with a choice between focusing on the systems of trade or migration and the governance of human rights or sovereignty on a global scale, and Changing Spaces; Making Places, which gives learners an insight into the nature of places and the fluidity of their meanings and representations.

Geographical debates (03) allows teachers and learners to explore in depth two from a choice of five of the most challenging, dynamic and fascinating issues of the 21st century. With choices between such wide-ranging topic areas as climate change, disease, food security, oceans and tectonic hazards, there are debates to appeal to all with the implications on people and the environment being at the heart of this component.

The Investigative geography (04/05) component allows learners to undertake an independent investigation linked to any aspect of the specification to satisfy their intellectual curiosity. This component is designed to encourage learners to deepen their knowledge and understanding of their chosen topic whilst developing a number of geographical and study skills relevant to Higher Education or within the world of work.

The content has a simple structure with enquiry questions broken down into key ideas and content columns. The content column indicates what will be assessed. The content is studied, as appropriate, at a variety of scales from local to global. Where there are skills specific to a topic, they are listed at the end of that topic. Skills which can be applied across many areas of content are stated within Section 2(e) Geographical and Fieldwork Skills.

The content should be contextualised through case studies and exemplars where appropriate. Learners should have contextual knowledge of any countries from which case studies and exemplars are chosen. Case studies should be chosen from the 21st century.

Geography education should encourage learners to develop a sense of wonder about the world. Geography is potentially the most relevant subject for any learner in the 21st century and the OCR A Level in Geography aims to drive a passion and love of this dynamic subject through its exciting and engaging content.

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2c. Content of Physical systems (H481/01)

The Physical systems (01) component is built around two main topics, Landscape Systems and Earth's Life Support Systems. Learners will explore **one** chosen landscape from three options, coastal landscapes, glaciated landscapes and dryland landscapes, as well as the carbon and water cycles in a systems framework.

The inter-relationships between the land, oceans and atmosphere help learners to understand the processes, characteristics and impacts on these landscapes and cycles, which shape them over time and create a number of issues when attempting to manage them.

Learners will investigate examples and case studies at a range of scales to understand the dynamic nature of landscapes and the water and carbon cycles. Quantitative and qualitative fieldwork opportunities present themselves with this component helping learners to generate new knowledge and understanding about the real world.

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Topic 1.1 – Landscape Systems

"Life is like a landscape. You live in the midst of it but can describe it only from the vantage point of distance." – Charles Lindbergh

This topic introduces learners to the integrated study of earth surface processes, landforms and resultant landscapes within the conceptual framework of a systems approach.

An understanding of earth surface processes, together with their associated transfers of energy and movements of materials underpins the landscape systems topic.

Choosing **one** of either **Option A** coastal, **Option B** glaciated or **Option C** dryland landscapes, learners will explore how the landscape can be viewed as system, how landforms developed within their chosen landscape and the influences of both climate and human activity on this.

1.1.1 Option A – Coastal Landscapes

1. How can coastal landscapes be viewed as systems?	
Key Ideas	**Content**
1.a. Coastal landscapes can be viewed as systems.	• A conceptual overview of: o the components of coastal landscape systems (inputs, processes and outputs) o the flows of energy and material through coastal systems o sediment cells.
1.b. Coastal landscape systems are influenced by a range of physical factors.	• Potential influences on coastal landscape systems of: o winds (speed, direction and frequency) o waves (wave formation, development and breaking) o tides (tidal cycles and range) o geology (lithology and structure) o global pattern of ocean currents.
1.c. Coastal sediment is supplied from a variety of sources.	• The various sources of coastal sediment: o terrestrial (fluvial deposition, weathering and mass movement, marine erosion, aeolian deposition and longshore drift) o offshore (marine deposition) o human (beach nourishment).

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2. How are coastal landforms developed?	
Key Ideas	**Content**
2.a. Coastal landforms develop due to a variety of geomorphic processes.	• The influence of flows of energy and materials on geomorphic processes (weathering, mass movement, wave, fluvial and aeolian erosion, transportation and deposition). • The formation of distinctive landforms, predominantly influenced by erosion (bays, headlands, cliffs, shore platforms, geos, blow holes, caves, arches, stacks, stumps). • The formation of distinctive landforms, predominantly influenced by deposition (beaches, spits, on-shore bars, tombolos and salt marshes).
2.b. Coastal landforms are inter-related and together make up characteristic landscapes.	• **Case studies** of **one** high energy coastline (such as rocky) and **one** low energy coastline (such as estuarine) to illustrate: o the physical factors which influence the formation of landforms within the landscape system o the inter-relationship of a range of landforms within the characteristic landscape system o how and why the landscape system changes over time from millennia to seconds, such as cliff collapse in seconds, seasonal changes in beach profile and spit growth over millennia. At least **one** of the case studies must be from beyond the UK.

3. How do coastal landforms evolve over time as climate changes?	
Key Ideas	**Content**
3.a. Emergent coastal landscapes form as sea level falls.	• How landforms in emergent landscapes are influenced by falling sea levels due to a cooling climate, including: o climate changes that occurred during a previous time period and the resultant sea level fall o the influence of sea level fall and geomorphic processes in shaping landforms (raised beaches, marine terraces and abandoned cliffs) o the modification of these landforms by processes associated with present and future climate and sea level changes.
3.b. Submergent coastal landscapes form as sea level rises.	• How landforms in submergent landscapes are influenced by rising sea level due to a warming climate, including: o climate changes that occurred during a previous time period and the resultant sea level rise o the influence of sea level rise and geomorphic processes in shaping landforms (rias, fjords and shingle beaches) o the modification of these landforms by processes associated with present and future climate and sea level changes.

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4. How does human activity cause change within coastal landscape systems?	
Key Ideas	**Content**
4.a. Human activity intentionally causes change within coastal landscape systems.	• **Case study** of **one** coastal landscape that is being managed, including: o the management strategy being implemented and the reason for its implementation, such as groyne construction or off-shore dredging o their intentional impacts on the flows of material, processes and/or energy through the coastal system, such as their effect on the sediment budget o the effect of these impacts in changing coastal landforms, such as changes in beach profile o the consequence of these changes on the landscape, such as extension of the coastal landscape seawards.
4.b. Economic development unintentionally causes change within coastal landscape systems.	• **Case study** of **one** coastal landscape that is being used by people to illustrate: o the economic development taking place and the reasons for it taking place, such as trade and port development or tourist resort o their unintentional impacts on the flows of material, processes and/or energy through the coastal system, such as disturbance to the sediment cell balance o the effect of these impacts in changing coastal landforms, such as rates of erosion and deposition o the consequence of these changes on the landscape, such as coastal retreat or protection.

5. Topic-specific skills:

- observation skills
- measurement and geo-spatial mapping skills
- data manipulation and statistical skills applied to field measurements
- sediment budget calculations
- mass balance calculations.

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1.1.2 Option B – Glaciated Landscapes

1. How can glaciated landscapes be viewed as systems?	
Key Ideas	**Content**
1.a. Glaciated landscapes can be viewed as systems.	• A conceptual overview of: o the components of glaciated landscape systems (inputs, processes and outputs) o the flows of energy and material through glaciated systems o glacier mass balance.
1.b. Glaciated landscapes are influenced by a range of physical factors.	• Potential influences on glaciated landscape systems of: o climate (precipitation totals and patterns) o geology (lithology and structure) o latitude and altitude o relief and aspect on microclimate and glacier movement.
1.c. There are different types of glacier and glacier movement.	• The characteristics of different types of glacier and their movement, including: o the formation of glacier ice o valley glaciers and ice sheets o warm-based and cold-based glaciers o basal sliding and internal deformation.

2. How are glacial landforms developed?	
Key Ideas	**Content**
2.a. Glacial landforms develop due to a variety of interconnected climatic and geomorphic processes.	• The influence of flows of energy and materials on geomorphic processes (weathering, mass movement, glacial erosion, nivation, transportation and deposition). • The formation of distinctive landforms, predominantly influenced by erosion (corries, arêtes, pyramidal peaks, troughs, roche moutonnée, striations and ellipsoidal basins). • The formation of distinctive landforms, predominantly influenced by deposition (terminal, lateral and recessional moraines, erratics, drumlins and till sheets).
2.b. Glacial landforms are inter-related and together make up characteristic landscapes.	• **Case studies** of **one** landscape associated with the action of valley glaciers and **one** associated with the action of ice sheets to illustrate: o the physical factors which influence the formation of landforms within the landscape system o the inter-relationship of a range of landforms within the characteristic landscape system o how and why the landscape system changes over time from millennia to seconds, such as rock fall in seconds, seasonal changes in deposition rates and erosion of basins over millennia. At least **one** of the case studies must be from beyond the UK.

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3. How do glacial landforms evolve over time as climate changes?	
Key Ideas	**Content**
3.a. Glacio-fluvial landforms exist as a result of climate change at the end of glacial periods.	• How landforms in glaciated landscapes are influenced in post-glacial periods, including: o climate changes that occurred during a post-glacial period and the effect on resultant geomorphic processes o the influence of these processes in forming landforms (kames, eskers and outwash plains) o the subsequent modification of these landforms by processes associated with present and future climate changes.
3.b. Periglacial landforms exist as a result of climate change before and/or after glacial periods.	• How landforms in periglacial landscapes are influenced by climate change including: o climate changes that occurred during a previous time period and the effect on resultant geomorphic processes o the influence of these processes in forming landforms (patterned ground and pingos) o the subsequent modification of these landforms by processes associated with present and future climate changes.

4. How does human activity cause change within glaciated and periglacial landscape systems?	
Key Ideas	**Content**
4.a. Human activity causes change within periglacial landscape systems.	• **Case study** of **one** periglacial landscape that is being used by people, to illustrate: o the human activity taking place and the reasons for it taking place, such as resource extraction o the impacts on the flows of material, processes and/or energy through the periglacial system, such as increased heat produced by buildings o the effect of these impacts in changing glacial landforms, such as thawing of permafrost o the consequence of these changes on the landscape, such as development of thermokarst.
4.b. Human activity causes change within glaciated landscape systems.	• **Case study** of **one** glaciated landscape that is being used by people, to illustrate: o the human activity taking place and the reasons for it taking place, such as dam construction o the impacts on the flows of material, processes and/or energy through the glacial system, such as trapping of sediment o the effect of these impacts in changing glacial landforms, such as increased channel scour below dams o the consequence of these changes on the landscape, such as changes to valley floor.

5. Topic-specific skills:
- observation skills
- measurement and geo-spatial mapping skills
- data manipulation and statistical skills applied to field measurements
- sediment budget calculations
- mass balance calculations.

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1.1.3 Option C – Dryland Landscapes

1. How can dryland landscapes be viewed as systems?	
Key Ideas	**Content**
1.a. Dryland landscapes can be viewed as systems.	• A conceptual overview of: o the components of dryland landscape systems (inputs, processes and outputs) o the flows of energy and material through dryland systems o aridity index (UNEP).
1.b. Dryland landscapes are influenced by a range of physical factors.	• Potential influence on dryland systems of: o climate (precipitation totals and patterns) o geology (lithology and structure) o latitude and altitude o relief and aspect on microclimate o the availbility of sediment.
1.c. There are different types of dryland.	• The characteristics of different types of dryland landscapes: o polar drylands o mid- and low-latitude deserts o semi-arid environments.

2. How are landforms of mid and low latitude deserts developed?	
Key Ideas	**Content**
2.a. Dryland landscapes develop due to a variety of interconnected climatic and geomorphological processes.	• The influence of flows of energy and materials on geomorphological processes (weathering, mass movement, aeolian erosion, transportation and deposition). • The formation of distinctive landforms, predominantly influenced by erosion (wadis, canyons, pedestal rocks, ventifacts and desert pavements). • The formation of distinctive landforms, predominantly influenced by deposition (barchans, linear dunes, star dunes, alluvial fans and bajadas).
2.b. Dryland landforms are inter-related and together make up characteristic landscapes.	• **Case studies** of **one** mid-latitude desert and **one** low-latitude desert to illustrate: o the physical factors which influence the formation of landforms within the landscape system o the inter-relationship of a range of landforms within the characteristic landscape system o how and why the landscape system changes over time from millennia to seconds such as the impact of flash floods on alluvial fans in seconds, seasonal and ephemeral streams on canyons and pediment development over the millennia.

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3. How do dryland landforms evolve over time as climate changes?	
Key Ideas	**Content**
3.a. Fluvial landforms can exist in dryland landscapes as a result of earlier pluvial periods.	• How dryland landforms have been influenced by previous pluvial conditions, including: o climate changes that occurred during a previous time period and the resultant pluvial conditions o the influence of pluvial conditions and geomorphic processes in shaping landforms (inselbergs and pediments) o the subsequent modification of these landforms by more recent and future processes associated with climate changes.
3.b. Periglacial landforms can exist as a result of earlier colder periods.	• How dryland landscapes have been influenced by colder climatic conditions, including: o climate changes that occurred during a previous time period and the resultant colder conditions o the influence of colder climatic conditions and geomorphic processes in shaping landforms (frost shattered debris, nivation hollows and solifluction deposits) o the subsequent modification of these landforms by more recent and future processes associated with climate changes.

4. How does human activity cause change within dryland landscape systems?	
Key Ideas	**Content**
4.a. Water supply issues can cause change within dryland landscape systems.	• **Case study** of **one** dryland landscape that is being used by people, to illustrate: o the water supply issue taking place and the reasons for it taking place, such as water shortage due to drought o its impacts on the flows of material, processes and/or energy through the dryland landscape system, such as high rates of sediment trapping behind dams or modifying rivers to distribute and store water o the effect of these impacts in changing dryland landforms, such as decreased growth of wadis o the consequence of these changes on the landscape, such as reducing depositional landforms such as alluvial fans or slowing pediment development.
4.b. Economic activity can cause change within dryland landscape systems.	• **Case study** of **one** dryland landscape that is being used by people, to illustrate: o the economic activity taking place and the reasons for it taking place, such as tourism o its impacts on the flows of material and/or energy through the dryland landscape system, such as vegetation and cryptobiotic crust damage by dune buggy use o the effect of these impacts in changing dryland landforms, such as higher erosion rates on dunes o the consequence of these changes on the landscape, such as increased loess accumulation in marginal areas.

5. Topic-specific skills:

- observation skills
- measurement and geo-spatial mapping skills
- data manipulation and statistical skills applied to field measurements
- sediment budget calculations
- mass balance calculations.

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Topic 1.2 – Earth's Life Support Systems

"Just as human activity is upsetting the Earth's carbon cycle, our actions are altering the water cycle." – David Suzuki

Water and carbon support life on earth, utilised by flora, fauna and humans. 71% of the Earth's surface is covered in water however 68% of the freshwater is locked in ice and glaciers. Water is moved and stored beneath our feet and this 30% is critically important to life on Earth.

Water and carbon are cycled between the land, oceans and atmosphere in open and closed systems, the processes within these cycles are inter-related. Forests, soils, oceans and the atmosphere all store carbon and yet they are threatened and altered by human activity, this will be examined in detail through the Tropical Rainforest and the Arctic Tundra case studies as well as at a global scale.

Physical changes in these cycles occur over time, from seconds to millions of years, and these changes can be seen at a range of scales, from individual plants or trees to vast ecosystems. With research and monitoring it is clear there is an increased need for global and national solutions to protect 'Earth's life support systems'.

1. How important are water and carbon to life on earth?	
Key Ideas	**Content**
1.a. Water and carbon support life on earth and move between the land, oceans and atmosphere.	• The importance of water in supporting life on the planet, the uses of water for humans, flora and fauna. • Carbon is the building block of life on Earth. It is available for use in the natural world and by humans. • Water and carbon cycling between the land, oceans and atmosphere through open and closed systems.
1.b. The carbon and water cycles are systems with inputs, outputs and stores.	• The distribution and size of the major stores in the carbon and water systems, including the atmosphere, oceans, water bodies, ice (cryosphere), soil, vegetation and groundwater. • The characteristics of the main inputs and outputs of the water cycle, including precipitation and snowmelt (ablation) and evapotranspiration. • The characteristics of the main inputs and outputs of the carbon cycle, including precipitation, photosynthesis, decomposition, weathering (including main forms of chemical weathering) respiration and combustion.
1.c. The carbon and water cycles have distinctive processes and pathways that operate within them.	• The processes of the water cycle, including evaporation, transpiration, condensation (including cloud formation), precipitation, interception, ablation, runoff (overland flow and saturated overland flow), catchment hydrology (including infiltration, percolation, throughflow, groundwater flow and cryospheric processes). • The processes of the carbon cycle, including photosynthesis, respiration, decomposition, combustion (natural and fossil fuel use), natural sequestration in oceans, vegetation, sediments and weathering.

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2. How do the water and carbon cycles operate in contrasting locations?	
Key Ideas	**Content**
2.a. It is possible to identify the physical and human factors that affect the water and carbon cycles in a tropical rainforest.	• **Case study** of a tropical rainforest, including: o water and carbon cycles specific to tropical rainforests, including the rates of flow and distinct stores. How an individual tree through to the rainforest as a whole can influence these cycles o physical factors affecting the flows and stores in the water cycle including temperature, rock permeability and porosity and relief o physical factors affecting the flows and stores in the carbon cycle including temperature, vegetation, organic matter in soil and the mineral composition of rocks o for one drainage basin in the tropical rainforest, explore the changes to the flows and stores within the water cycle caused by natural and human factors such as deforestation and farming factors o the impact of human activity such as deforestation and farming, on carbon flows, soil and nutrient stores o strategies to manage the tropical rainforest such as afforestation and improved agriculture techniques that have positive effects on the water and carbon cycles.
2.b. It is possible to identify the physical and human factors that affect the water and carbon cycles in an Arctic Tundra area.	• **Case study** of the Arctic Tundra, including: o water and carbon cycles specific to Arctic Tundra, including the rates of flow and distinct stores o physical factors affecting the flows and stores in the cycles including temperature, rock permeability and porosity and relief o physical factors affecting the flows and stores in the carbon cycle including temperature, vegetation, organic matter in soil and the mineral composition of rocks o seasonal changes in the water and carbon cycles in the Arctic Tundra o the impact of the developing oil and gas industry on the water and carbon cycle o management strategies used to moderate the impacts of the oil and gas industry.

3. How much change occurs over time in the water and carbon cycles?	
Key Ideas	**Content**
3.a. Human factors can disturb and enhance the natural processes and stores in the water and carbon cycles.	• Dynamic equilibrium in the cycles and the balance between the stores and the flows. • Land use changes, such as growth in urban areas, farming and forestry, as a catalyst for altering the flows and stores in these cycles. • How water extraction, including surface extraction and sub-surface groundwater extraction (aquifers and artesian basins) impact the flows and stores in these cycles. • The impact of fossil fuel combustion and carbon sequestration on flows and stores of carbon. • Positive and negative feedback loops within and between the water and carbon cycles.
3.b. The pathways and processes which control the cycling of water and carbon vary over time.	• Short term changes to the cycles and the significance of these changes including diurnal and seasonal changes of climate, temperature, sunlight and foliage. • Long term (millions of years) changes in the water and carbon cycles, including changes to stores and flows. • The importance of research and monitoring techniques to identify and record changes to the global water and carbon cycles; reasons why this data is gathered.

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4. To what extent are the water and carbon cycles linked?	
Key Ideas	**Content**
4.a. The two cycles are linked and interdependent.	• The ways in which the two cycles link and are interdependent via oceans, atmosphere, cryosphere and vegetation. • How human activities cause changes in the availability of water and carbon (including fossil and terrestrial) stores, such as the use of these as resources. • The impact of long-term climate change on the water and carbon cycles.
4.b. The global implications of water and carbon management.	• Global management strategies to protect the carbon cycle as regulator of the earth's climate including afforestation, wetland restoration, improving agricultural practices and reducing emissions (carbon trading and international agreements). • Global management strategies to protect the water cycle including improving forestry techniques, water allocations for domestic, industrial and agricultural use, drainage basin planning (run off, surface stores and groundwater).

5. Topic-specific skills:

- hydrographs
- climate graphs
- simple mass balance
- rates of flow
- unit conversions
- analysis and presentation of field data.

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2c. Content of Human interactions (H481/02)

The Human interactions (02) component is built around two main topics, Global Connections and Changing Spaces; Making Places. It investigates the actions, interactions and spatial patterns of people in places. Learners will build a picture of how the world around them is shaped by humans, starting from the local and moving out to regional, national and international scales.

Through examples and case studies learners will explore a variety of contrasting places, unpicking the flows and connections that have made them what they are and the way in which global systems and governance have local consequences. The concepts of inequality, interdependence, representation, identity and globalisation are particularly relevant to this component and qualitative research and fieldwork opportunities complement it well.

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Topic 2.1 – Changing Spaces; Making Places

"Our lack of thinking about place and space risks turning challenges into crises." – Royal Town Planning Institute, UK

People are at the heart of places, living their lives, forming attachments and making connections. Places are dynamic, multi-layered and the history and culture of a nation can be found in their buildings, public spaces and towns and cities. Our environment includes a wide variety of places, from rural to urban, small streets to megacities and diversity exists not only between but also within all of these places.

Places are connected to other places and there are few left untouched by the forces of globalisation. Changing Spaces; Making Places allows learners to look through a local lens to understand global issues.

Starting from the local place in which learners live and moving outwards to the regional, national and global scale in order to understand the interconnections and dynamics of place. Investigating how shifting flows of people, money and resources are shaping places, whilst economic changes are contributing to a landscape of haves and have nots.

Exploration of the relationships and connections between people, the economy, and society and how these contribute to creating places. Placemaking projects are explored considering the meanings and representations created and attached to places. Placemaking projects can happen at a variety of levels from individual project, street level, cultural quarter or whole city level.

1. What's in a place?	
Key Ideas	**Content**
1.a. Places are multi-faceted, shaped by shifting flows and connections which change over time.	• **Case studies** of **two** contrasting place profiles at a local scale, including: o their demographic, socio-economic, cultural, political, built and natural characteristics that shape their place identity. o their past and present connections that shape the place identity and embed them in regional, national, international and global scales o how shifting flows of people (such as commuter, migration), resources (such as natural, technology), money and investment (such as EU funding, TNCs) and ideas (such as knowledge economy) have helped shape the demographic, socio-economic and cultural profile of these places over time.

2. How do we understand place?	
Key Ideas	**Content**
2.a. People see, experience and understand place in different ways, this can also change over time.	• The complexities that exist when trying to define place including the concept of space versus place. • How and why people perceive places in different ways based on their identity, including age, gender, sexuality, religion and role. • How level of emotional attachment to place can influence people's behaviour and activities in a place. • How time-space compression can alter our sense of place, creating feelings of familiarity or a sense of dislocation.
2.b. Places are represented through a variety of contrasting formal and informal agencies.	• How informal representations of a place differ through contrasting media such as TV, film, music, art, photography, literature, graffiti and blogs. • Identify how formal and statistical representations of a place, such as census and geospatial data, contrasts with informal representations.

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3. How does economic change influence patterns of social inequality in places?	
Key Ideas	**Content**
3.a. The distribution of resources, wealth and opportunities are not evenly spread within and between places.	• The concept of social inequality and how this can be measured through indices such as housing, healthcare, education, employment and access to services. • How and why spatial patterns of social inequalities vary both within and between places.
3.b. Processes of economic change can create opportunities for some while creating and exacerbating social inequality for others.	• The influence of global connections and globalisation in driving structural economic change in places, such as de-industrialisation and the rise of the service industry. • How structural economic change impacts patterns of social opportunities and inequality for people and places. • How cyclical economic change (booms and recessions) has varied impacts on social opportunities and inequality. • The role of government in reducing, reinforcing and creating patterns of social inequality in places through spending or cuts in key services such as availability and accessibility of education, healthcare, infrastructure and community services.
3.c. Social inequality impacts people and places in different ways.	• **Case studies** of **two** contrasting places to illustrate: o the types of evidence of social inequality that can be found there such as housing, environmental quality, crime rates, digital divide o the range of factors that influence peoples social inequality such as income, gender, age, health, personal mobility, ethnicity and education o how social inequality impacts upon people's daily lives in different ways.

4. Who are the players that influence economic change in places?	
Key Ideas	**Content**
4.a. Places are influenced by a range of players operating at different scales.	• The role of players in driving economic change including at least one of local and national government, MNCs or international institutions. • **Case study** of **one** country or region that has been impacted by structural economic change to include: o socio-economic, demographic, cultural and environmental characteristics of the place before the economic change o the economic change/changes that took place and the role of players involved in driving the change o socio-economic, demographic, cultural and environmental impacts on people and place.

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5. How are places created through placemaking processes?	
Key Ideas	**Content**
5.a. Place is produced in a variety of ways at different scales.	• The concept of placemaking and how governments and organisations attempt to present places to the wider world to attract inward investment and regeneration. • How architects and planners attempt to create meaningful and authentic places through design such as places that encourage mixed community use or the 24 hour city. • How local community groups shape the place they live for such as residents associations, heritage associations and social media.
5.b. The placemaking process of rebranding constructs a different place meaning through reimaging and regeneration.	• Why places rebrand through reimaging and regeneration to construct a different place meaning. • How a range of strategies can be used to rebrand places, such as sport, art, heritage, retail, architecture and food. These can be used singularly or in conjunction to change a place meaning. • A range of players and their role in placemaking, including government/EU funding, corporate bodies, not for profit organisations and community groups. • How and why some groups of people contest efforts to rebrand a place.
5.c. Making a successful place requires planning and design.	• **Case study** of **one** place that has undergone rebranding to include: o why the place needed to rebrand o strategy/strategies involved in the rebranding of the place o the role and influence of a range of players involved in the placemaking o how the rebranding has altered people's perception of that place o the relative success of the rebranding.

6. Topic-specific skills:

- appreciate how qualitative approaches actively create particular place representations
- analysing the impacts of different media on place meanings and perceptions
- the use of geospatial data to present place characteristics
- how quantitative data is used to present place characteristics.

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Topic 2.2 – Global Connections

"As the world becomes more interdependent, global governance, including global economic governance and the governance of the global commons, is increasingly relevant for achieving sustainable development." – United Nations System Task Team

This topic allows learners to explore the processes and flows that occur at the global level, and the ways in which these influence people, places and institutions. Through **two** overarching themes of global systems and global governance learners will investigate how these shape relationships between citizens, states and organisations around the world.

Global systems, including those that regulate and order trade, financial transactions and migration, create interdependencies, which produce uneven geographies of winners and losers. States and non-state organisations respond to these flows and global systems, which can sometimes act to promote stability, growth and development, but which can also be the cause of inequalities, conflicts and injustice.

Through case studies learners will build up a picture of how the world around them is shaped, the complexities associated with this and the resulting issues for people.

Learners must choose **one** of **Option A or B** within their study of Global Systems and **one** of **Options C or D** for their study of Global Governance.

2.2.1 Global Systems: Option A – Trade in the Contemporary World

1. What are the contemporary patterns of international trade?	
Key Ideas	**Content**
1.a. International trade involves flows of merchandise, services and capital which vary spatially.	• An understanding of the terms merchandise, services and capital as components of international trade. • Current spatial patterns in the direction and components of international trade, including examples of both inter-regional and intra-regional.
1.b. Current patterns of international trade are related to global patterns of socio-economic development.	• The relationship between patterns of international trade and socio-economic development using national indices such as 'value of exports' and 'Human Development Index'. • How international trade can promote stability, growth and development within and between countries. • How international trade causes inequalities, conflicts and injustices for people and places.

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2. Why has trade become increasingly complex?	
Key Ideas	**Content**
2.a. Access to markets are influenced by a multitude of inter-related factors.	• International trade has increased connectivity due to changes in the 21st century including: o technology, transport and communications have increased connectivity of global supply chains o increasing influence of MNCs in EDCs including outsourcing o role of regional trading blocs such as EU o growth of 'south-south' trade, between developing countries o growth of services in the global economy o increasing labour mobility and new international division of labour.
2.b. There is interdependence between countries and their trading partners.	• **Case study** of **one EDC** to illustrate: o direction and components of its current international trade patterns o changes in its international trade patterns over time o economic, political, social and environmental interdependence with trading partners o impacts of trade on the EDC including economic development, political stability and social equality.

3. What are the issues associated with unequal flows of international trade?	
Key Ideas	**Content**
3.a. International trade creates opportunities and challenges which reflect unequal power relations between countries.	• **Case study** of **one AC** to show how core economies have a strong influence and drive change in the global trade system to their own advantage. Illustrate through economic, political and social factors to explain: o its advantages for trade including patterns, partners, negotiations and agreements o opportunities, such as sustained economic growth o challenges, such as trade deficit. • **Case study** of **one LIDC** to show how peripheral economies exert limited influence and can only respond to change in the global trade system. Illustrate this through economic, political and social factors to explain: o trade components including patterns, partners, negotiations and agreements o why it has limited access to global markets o opportunities such as diversification of economic activity o challenges such as political instability.

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2.2.2 Global Systems: Option B – Global Migration

1. What are the contemporary patterns of global migration?	
Key Ideas	**Content**
1.a. Global migration involves dynamic flows of people between countries, regions and continents.	• Current spatial patterns in the numbers, composition and direction of international migrant flows including examples of both inter-regional and intra-regional.
1.b. Current patterns of international migration are related to global patterns of socio-economic development.	• The relationship between patterns of international migration and socio-economic development, using national indices such as 'value of migrant remittances' and 'Human Development Index'. • How global migration can promote stability, growth and development within and between countries. • How global migration causes inequalities, conflicts and injustices for people and places.

2. Why has migration become increasingly complex?	
Key Ideas	**Content**
2.a. Global migration patterns are influenced by a multitude of inter-related factors.	• Changes in the 21st century have increased the complexity of global migration including: o economic globalisation leading to the emergence of new source areas and host destinations o high concentration of young workers and female migrants o flows in South-South corridors are now equal in magnitude to those in North-South corridors o conflict and persecution have increased numbers of refugees o changes in national immigration and emigration policies o development of distinct corridors of bi-lateral flows.
2.b. Corridors of migrant flows create interdependence between countries.	• **Case study** of **one EDC** to illustrate: o current patterns of immigration and emigration o changes in immigration and emigration over time o economic, political, social and environmental interdependence with countries connected to the EDC by migrant flows o the impact of migration on the EDCs economic development, political stability and social equality.

3. What are the issues associated with unequal flows of global migration?	
Key Ideas	**Content**
3.a. Global migration creates opportunities and challenges which reflect the unequal power relations between countries.	• **Case study** of **one AC** to show it influences and drives change in the global migration system. Illustrate economic, political and social factors which explain: o patterns of emigration and immigration, migration policies, and interdependence with countries linked to it by migration o opportunities, such as labour supply o challenges, such as border issues. • **Case study** of **one LIDC** to show how it has limited influence over and restricted response to the global migration system. Illustrate economic, political and social factors which explain: o patterns of emigration and immigration, migration policies, and interdependence with countries linked to it by migration o opportunities, such as migrant remittances o challenges such as loss of skilled workers.

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2.2.3 Global Governance: Option C – Human Rights

1. What is meant by human rights?	
Key Ideas	**Content**
1.a. There is global variation in human rights norms.	• Understanding of what is meant by human rights. • Understand the terms of norms, intervention and geopolitics and how they are fundamental in appreciating that human rights are complex issues.
1.b. Patterns of human rights violations are influenced by a range of factors.	• Current spatial patterns of human rights issues including forced labour, maternal mortality rates and capital punishment. • Factors that influence global variations of forced labour, maternal mortality rates and capital punishment.

2. What are the variations in women's rights?	
Key Ideas	**Content**
2.a. The geography of gender inequality is complex and contested.	• Economic, political and social factors to explain variation in the patterns of gender inequality, including the challenges of educational opportunity, access to reproductive health services and employment opportunity. • **Case study** of women's rights in a country to illustrate: o the gender inequality issues that are apparent in that country o the consequences of gender inequality on society o evidence of changing norms and strategies to address gender inequality issues.

3. What are the strategies for global governance of human rights?	
Key Ideas	**Content**
3.a. Human rights violations can be a cause and consequence of conflict.	• How the violation of human rights can be a cause of conflict, such as access to education and discrimination. • How the violation of human rights can be a consequence of conflict and how this can be addressed through geopolitical intervention.
3.b. Global governance of human rights involves cooperation between organisations at scales from global to local, often in partnership.	• How human rights are promoted and protected by institutions, treaties, laws and norms. • **Case study** of strategies for global governance of human rights in **one area** of conflict to illustrate: o contributions and interactions of different organisations at a range of scales from global to local, including the United Nations, a national government and an NGO o consequences of global governance of human rights for local communities.

4. To what extent has intervention in human rights contributed to development?	
Key Ideas	**Content**
4.a. Global governance of human rights has consequences for citizens and places.	• How the global governance of human rights issues has consequences for citizens and places, including short term effects, such as immediate relief from NGOs, and longer term effects, such as changes in laws. • **Case study** of the impact of global governance of human rights in an **LIDC** to include: o the human rights issue/issues o the global governance strategy/strategies used o opportunities for stability, growth and development o challenges of inequality and injustice.

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2.2.4 Global Governance: Option D – Power and Borders

1. What is meant by sovereignty and territorial integrity?	
Key Ideas	**Content**
1.a. The world political map of sovereign nation-states is dynamic.	• Definitions of state, nation, sovereignty and territorial integrity and how they are fundamental in understanding the world political map. • Understand the terms of norms, intervention and geopolitics and how they are fundamental in appreciating that sovereignty and territorial integrity are complex issues.

2. What are the contemporary challenges to sovereign state authority?	
Key Ideas	**Content**
2.a. A multitude of factors pose challenges to sovereignty and territorial integrity.	• Erosion of sovereignty and loss of territorial integrity are influenced by economic, political, social and environmental factors, including the challenges of: o current political boundaries o transnational corporations (TNCs) o supranational institutions such as regional trading blocs o political dominance of ethnic groups. • **Case study** of **one** country in which sovereignty has been challenged, to include: o causes and challenges to the government o impacts on people and places.

3. What is the role of global governance in conflict?	
Key Ideas	**Content**
3.a. Global governance provides a framework to regulate the challenge of conflict.	• How challenges to sovereignty and territorial integrity can be a cause of conflict, such as access to natural resources. • The role of institutions, treaties, laws and norms which are significant in regulating conflict and in reproducing the global system of sovereign nation-states.
3.b. Global governance involves cooperation between organisations at scales from global to local, often in partnership.	• **Case study** of strategies for global governance in **one** area of conflict to illustrate: o interventions and interactions of organisations at a range of scales, including the United Nations, a national government and an NGO o consequences of global governance of the conflict for local communities.

4. How effective is global governance of sovereignty and territorial integrity?	
Key Ideas	**Content**
4.a. Global governance of sovereignty and territorial integrity has consequences for citizens and places.	• How the global governance of sovereignty issues has consequences for citizens and places, including short term effects, such as humanitarian aid, and longer term effects, such as changes in political regime. • How the global governance of territorial integrity issues has consequences for citizens and places, including short term effects, such as maintaining peace, and longer term effects, such as trade relationships. • **Case study** of the impact of global governance of sovereignty or territorial integrity in **one** LIDC to illustrate and explain: o the sovereignty or territorial integrity issue/issues o the global governance strategy/strategies used o opportunities for stability, growth and development o challenges of inequalities and injustices.

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2c. Content of Geographical debates (H481/03)

Geographical debates (03) takes some of the most dynamic issues the planet faces and encourages learners to engage with, reflect on and think critically about them. Learners will gain a deep understanding of their **two** chosen topics, exploring the interactions between people and the environment.

Each topic engages learners through an enquiry approach which enables them to articulate opinions and provide evidenced arguments across a range of situations. The concepts of inequality, mitigation and adaptation, sustainability, risk, resilience and threshold underpin the Geographical debates component.

There are five topic options for learners to choose from in the Geographical debates (03) component. Learners must choose **two** options out of the five.

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Topic 3.1 – Climate Change

"We often don't fully appreciate that climate change is a problem. We think it is a problem waiting to happen." – Kofi Annan

Climate change is considered by many to be the planets greatest threat, we know several of the likely consequences of climate change, most of which we are beginning to experience now. By the middle of the twenty-first century it is predicted that 200 million people may be permanently displaced due to rising sea levels, floods and drought.

The climate change topic explores variations in the Earth's climate and how both human and natural factors have influenced this. Learners are encouraged to explore why debates around this issue exist before considering its impact on people and the planet.

The future is uncertain and mitigation and adaptation strategies' to cope with climate change are evolving. Learners will consider a range of strategies' before asking 'can an international response to climate change ever work?'

1. How and why has climate changed in the geological past?	
Key Ideas	**Content**
1.a. The Earth's climate is dynamic.	• Methods used to reconstruct past climate, including marine and lake sediments, ice cores, tree rings and fossils. • Past climate to reveal periods of greenhouse and icehouse Earth, including: o long term, 100-million-year transition to colder global climate conditions o glaciation of Antarctica around 35 million years ago o quaternary glaciation o our present interglacial, the Holocene. • How natural forcing has driven climate change in the geological past, including: o plate tectonics including volcanic activity and continental drift o Milankovitch cycles o solar output o the role of natural atmospheric greenhouse gases.

2. How and why has the era of industrialisation affected global climate?	
Key Ideas	**Content**
2.a. Humans have influenced the climate system, leading to a new epoch, the Anthropocene.	• Evidence the world has warmed since the late-nineteenth century, including: o increases in surface, atmospheric and oceanic temperatures o shrinking of valley glaciers and ice sheets o rising sea level o increasing atmospheric water vapour o decreasing snow cover and sea ice. • Reasons why anthropogenic greenhouse gas emissions have increased since the pre-industrial era. • The balance of anthropogenic emissions around the world and how this has changed in recent history. • How additional greenhouse gases being added to the atmosphere will enhance the natural greenhouse effect. • How humans influence the global mean energy balance. • **Case studies** of **one** AC and **one** EDC to illustrate their contribution to anthropogenic greenhouse gas emissions over time.

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3. Why is there a debate over climate change?	
Key Ideas	**Content**
3.a. Debates of climate change are shaped by a variety of agendas.	• How humans have played a part in shaping the climate change debate, including: o historical background of the global warming debate and how it has evolved over time o the role of governments and international organisations, such as the EU or UN o role and possible bias of the media and different interest groups in shaping the public image of climate change.

4. In what ways can humans respond to climate change?	
Key Ideas	**Content**
4.a. An effective human response relies on knowing what the future will hold.	• Overview of climate modelling to illustrate: o importance of the carbon cycle o influence of positive and negative feedback o future emission scenarios, the resulting impacts on global temperatures and sea levels.
4.b. The impacts of climate change are global and dynamic.	• Implications of climate change currently being experienced for people and the environment, such as from changes to ecosystems, health and extreme weather, and how these are projected to change in the future. • The vulnerability of people and the environment to the impacts of climate change.
4.c. Mitigation and adaptation are complementary strategies for reducing and managing the risks of climate change.	• Mitigation strategies to cut global emissions of greenhouse gases, including: o energy efficiency and conservation o fuel shifts and low-carbon energy sources o carbon capture and storage o forestry strategies o geoengineering. • Adaptation strategies to reduce the vulnerability of human populations at risk, including: o framework of adaptation (retreat, accommodate, protect) and its implementation in response to possible future implications of climate change in a range of communities across the development continuum o what future homes, offices, cities, transport and economies will look like following adaptation throughout the twenty-first century. • **Case studies** of **two** contrasting countries at different stages of economic development to illustrate: o current socio-economic and environmental impacts and the opportunities and threats they present o technological, socio-economic and political challenges associated with effective mitigation and adaptation.

5. Can an international response to climate change ever work?	
Key Ideas	**Content**
5.a. Effective implementation depends on policies and co-operation at all scales.	• Geopolitics associated with the human response to climate change, including: o role of the Intergovernmental Panel on Climate Change in shaping policy making o success of international directives, such as the Kyoto Protocol o significance of carbon trading and carbon credits o evolution of national, and sub-national policy that extends beyond the vision of international directives.

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Topic 3.2 – Disease Dilemmas

"Infectious disease outbreaks, whether natural, intentional or accidental, are still among the foremost dangers to human health and the global economy. With patterns of global travel and trade, disease can spread nearly anywhere within 24 hours." - Tom Frieden, Director of the Center for Disease Control and Prevention

Diseases do not discriminate who becomes infected or develops symptoms. Diseases can be communicable and noncommunicable and a number of physical and human factors affect an individual's and a community's susceptibility to the risk. The global nature of some diseases in terms of their geographical spread and scale has encouraged international efforts to combat them.

The causes of disease are often complex and the impacts even more so especially when dealing with these at epidemic and pandemic levels. Continued research into diseases and developments in pharmaceuticals and 'our' understanding of diseases offers opportunities to combat diseases, however unequal access to drugs and information has implications for communities and countries.

1. What are the global patterns of disease and can factors be identified that determine these?	
Key Ideas	**Content**
1.a. Diseases can be classified and their patterns mapped. The spread of diseases is complex and influenced by a number of factors.	• Diseases can be classified to including infectious and non-infectious, communicable and noncommunicable, contagious and non-contagious, epidemic, endemic and pandemic. • Global distribution patterns of diseases including malaria, HIV, tuberculosis, diabetes and cardio-vascular disease. • Disease diffusion and spread to new areas (Hagerstrand model), including the phases of diffusion, physical and socio-economic barriers.
1.b. There is a relationship between physical factors and the prevalence of disease which can change over time.	• Global patterns of temperature, precipitation, relief and water sources and how they affect patterns of disease • Physical factors can influence vectors of disease such as the prevalence of mosquitoes in warm, humid areas close to water sources • The relationship between natural hazards and communicable diseases such as cholera, typhoid. • Seasonal variations in disease outbreaks such as periods of drought or monsoon rains.
1.c. Weather hazards can influence the outbreak and spread of disease	• **Case study** of **one** country which has experienced a weather hazard, such as drought or monsoon rains, and the implications this has on a named disease, such as cholera or typhoid: o geographical area covered by the hazard and its influence on the spread of disease o human factors affecting the spread of the disease such as population density, access to clean water, immunisation programmes o impacts of the disease on resident populations o strategies used to minimise the impacts of the disease at national and international scales.

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2 Is there a link between disease and levels of economic development?	
Key Ideas	**Content**
2.a. As countries develop economically the frequency of communicable diseases decreases, while the prevalence of noncommunicable diseases rises.	• Factors affecting the frequency of disease, including biological, environmental, socio-economic and public health programmes. • How rising standards of living, access to food and clean water impact upon susceptibility to disease and influence a country's epidemiological transition. • The reasons why LIDCs have a higher prevalence for communicable diseases (diseases of poverty) and ACs have a higher prevalence for noncommunicable diseases (diseases of affluence).

3 How effectively are communicable and noncommunicable diseases dealt with?	
Key Ideas	**Content**
3.a. Communicable diseases have causes and impacts with mitigation and response strategies which have varying levels of success.	• **Case study** of **one** communicable disease, such as malaria or tuberculosis, at a country scale, either an LIDC or EDC, to include: o environmental and human causes of the disease o prevalence, incidence and patterns of the disease o socio-economic impacts of the disease o direct and indirect strategies used by government and international agencies to mitigate against the disease and in response to outbreaks.
3.b. Noncommunicable diseases have causes and impacts with mitigation and response strategies which have varying levels of success.	• **Case study** of **one** noncommunicable disease, such as cardio – vascular disease or diabetes, at a country scale, either an AC or EDC, to include: o social, economic and cultural causes of the disease o prevalence, incidence and patterns of the disease o socio-economic impacts of the disease o direct and indirect strategies used by government and international agencies to mitigate against the disease.

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4 How far can diseases be predicted and mitigated against?	
Key Ideas	**Content**
4.a. Diseases can be predicted and data informs decision-making processes at a variety of scales.	• Techniques and technologies used to predict communicable and noncommunicable diseases. • How prediction data is used to inform decision makers at national and global levels. • Identify a disease outbreak at a global scale, such as H1N1, including its rate of spread and patterns of outbreak distribution.
4.b. Increasing global mobility impacts the diffusion of disease and the ability to respond to it, at a variety of scales.	• The role of international organisations, such as the World Heath Organization, in gathering data, research, support programmes and their work with agencies and governments. • International strategies used such as restricted travel or medical staff training to prevent the global spread of a disease outbreak. • Physical barriers, such as relief, natural hazards, excess water, remoteness of communities, have positive and negative effects on mitigation and response efforts in dealing with disease. • **Case study** of the role that **one** NGO has played in dealing with a disease outbreak within one country at national and local level.
4.c. Multiple agencies work to combat global pandemics.	• The advantages and disadvantages of the involvement of multiple agencies in global pandemic monitoring and strategic planning. • Mitigation strategies used by government and international agencies to combat the global HIV / AIDS pandemic, including screening, availability and funding of treatment and education programmes.

5. Can diseases ever be fully eradicated?	
Key Ideas	**Content**
5.a. Top down and bottom up strategies that deal with disease risk and eradication.	• Approaches to disease eradication at a range of scales, including global and national campaigns. • Impact of grassroots strategies in educating communities and combating disease risk.
5.b. The pharmaceutical industry is evolving and medical advances have increased life expectancy.	• **Case study** of the global impact of **one** pharmaceutical transnational, including scientific breakthroughs made, patents, drug manufacturing and their global flows for distribution. • Advances in medicine for communicable and noncommunicable diseases and how far they have impacted life expectancy.
5.c. Access to medical support and treatment is globally uneven and affected by a number of factors.	• Political and economic factors affecting access to medical support and treatment for disease such as immunisation programmes, patents and drugs to combat disease. • Global and national solutions to combat unequal access to pharmaceutical and medical support in dealing with disease risk.

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Topic 3.3 – Exploring Oceans

"The sea, the great unifier, is man's only hope. Now, as never before, the old phrase has literal meaning: we are all in the same boat." – Jacques Yves Cousteau

Oceans hold about 96.5% of all Earth's water and they are complex physical environments. Oceans have varying characteristics of relief, salinity, temperature and currents which impact upon the life supported there. Oceans and all that they contain provide valuable resources for a growing population, however use of these resources and impacts on them can have long-term consequences.

The governance of oceans is complex and sometimes contested making the management of these precious resource filled environments challenging. Evidence of climate change and the threat to oceans is becoming increasingly apparent and for those who live in island communities or low-lying coastlines, this requires an international effort to combat these threats.

There is a long history of oceans being used as global gateways for trade and the movement of people; this can provide both opportunities and challenges at national and international scales.

1. What are the main characteristics of oceans?	
Key Ideas	**Content**
1.a. The world's oceans are a distinctive feature of the Earth.	• The global distribution of the world's oceans, their areas and volumes. • The relief of ocean basins including continental shelf and slope, abyssal plain, ocean ridges and rifts, ocean trenches, guyots.
1.b. Water in the world's oceans varies horizontally and vertically.	• Horizontal and vertical variations in salinity and temperature • The global distribution of warm and cold surface currents. • The pattern of circulation in the North Atlantic including both surface and deep currents.
1.c. Changes in light, temperature and nutrient supply influence the biodiversity of oceans.	• How and why ocean ecosystems are influenced by changes in light, temperature and nutrient supply, which vary with latitude and depth. • A comparison of food chains, food webs and biodiversity in inter-tidal and deep-water ecosystems.

2. What are the opportunities and threats arising from the use of ocean resources?	
Key Ideas	**Content**
2.a. Biological resources within oceans can be used in sustainable or unsustainable ways.	• **Case study** of the management of **one** renewable biological resource within oceans, such as krill or whale, to include: o the use and management of this resource o how the values, attitudes, socio-economic status and political context of the stake holders influence the use and management of the resource o the resilience of the resource and key thresholds to initiate management.
2.b. The use of ocean energy and mineral resources is a contested issue.	• The use of ocean energy resources including: o oil and gas as examples of non-renewable resource use o wave and tidal energy as examples of flow resources (a type of renewable resource). • The use of sea-bed minerals including ferrous and non-ferrous minerals as examples of non-renewable resource use.
2.c. Governing the oceans poses issues for the management of resources.	• Oceans as part of the 'global commons', including the idea of the 'tragedy of the commons'. • There are a series of zones extending out from the land that aim to help manage the ocean, including territorial waters, contiguous zone, exclusive economic zone (EEZ), high seas.

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	• Resource management through frameworks such as the United Nations Convention on the Law of the Sea (UNCLOS) and marine reserves.

3. How and in what ways do human activities pollute oceans?	
Key Ideas	**Content**
3.a. There are a variety of pollutants that affect the ocean system.	• The major sources of pollutants to include combustion of fossil fuels, such as carbon dioxide, domestic and industrial pollutants, such as plastics, heavy metals or nuclear waste.
3.b. Off-shore oil production and transport poses threats for people and the environment.	• **Case study** of **one** oil spill to include: o impacts on the physical environment and marine ecosystems o impacts on human activities such as fishing and tourism o management of the oil spill and its impacts.
3.c. The pattern of global ocean currents can disperse and concentrate pollution.	• How pollution, such as plastic, can spread around the globe via oceanic circulation and its impact on marine ecosystems. • **Case study** of the accumulation of plastic in **one** ocean gyre such as in the North Pacific, to include: o causes of the accumulation o the impacts on marine ecosystems.

4. How is climate change impacting the ocean system?	
Key Ideas	**Content**
4.a. Climate change is altering the nature of the ocean's water.	• How acidification of oceans contributes to depleting fish stocks and has resulting impacts for people. • The rising temperature of the oceans and its threat to coral ecosystems, such as coral bleaching, loss in biodiversity and threats to local communities.
4.b. Climate change is altering sea level.	• The causes of sea level change due to climate change, the thermal expansion of water and the transfer of water from the land to the oceans. • **Case study** of **one** island community in either the Indian Ocean, Pacific Ocean or the Caribbean Sea to illustrate: o the threats to island communities o the impact on communities o the adaptations by governments and communities in both the short- and long-term.
4.c. Climate change is altering high latitude oceans.	• The impact of global warming on the extent of sea ice. The feedback between the extent of ice cover and the degree of warming. The concept of a threshold beyond which change becomes irreversible should be investigated in this context. • **Case study** of the Arctic region to include: o the geo-political implications of changes in ice-cover in the Arctic region o the impact on indigenous peoples o the threats and opportunities posed by the opening up of ocean route-ways and increasing access to ocean bed minerals o the management of the changing geography of the Arctic through international organisations.

Draft

5. How have socio-economic and political factors influenced the use of the oceans?	
Key Ideas	**Content**
5.a. Oceans have been and continue to be vital elements in the process of globalisation.	• The pattern of principal shipping routes across the oceans to include the influence of changes in the scale of ocean shipping. • The direction and type of trade across the oceans.
5.b. Oceans are important spaces where countries challenge each other.	• The use of oceans by countries to exert their influence including: o the distribution of naval strongholds for one country, such as USA, Russia or China, including its home and overseas ports o a marine conflict zone where countries dispute ocean territory areas.
5.c. Oceans present hazardous obstacles to human activities.	• The distribution of 21st century piracy and its management. • The use of oceans as escape routes for migrants such as South-east Asia to Australia or North Africa to Europe.

Draft

Topic 3.4 – Future of Food

"In the past year, we have seen food riots on three continents, food inflation has rocketed and experts predict that by 2050, if things don't change, we will see mass starvation across the world." – BBC, 'The Future of Food'

Food is both a celebrated and contested issue. It is predicted that 805 million people go to bed hungry each night, while others consume and waste far more than their fair share. Across the planet food security varies both within and between countries at all levels of the development spectrum.

This topic explores the spatial patterns and complex causes of food security, from the physical influences on food systems and how humans create and exacerbate food security issues. Learners will investigate the impacts of food systems on people and the environment before considering management strategies at a range of scales including an in-depth case study of one country's efforts to improve food security.

1. What is food security and why is it of global significance?	
Key Ideas	**Content**
1.a. The concept of food security is complex and varies spatially.	• Defining what it means to be food secure and understanding that the concept of food security is built on three pillars of food access, food affordability and food use. • Food security can be viewed as a spectrum from food secure to famine. • Current trends in global food security using data such as undernourishment and hunger statistics and the Global Food Security Index. • How the pattern of food security is dynamic and varies both between and within countries.
1.b. Globalisation is changing the food industry.	• The influence of globalisation on the food industry such as increased demand and global tastes. • Globalisation of the food industry creates a number of issues including food miles, inequality between TNCs and small suppliers, obesity and price crisis. • Globalisation of the food industry creates a number of opportunities including technological innovation, short-term food relief and consumer choice.

2. What are the causes of inequality in global food security?	
Key Ideas	**Content**
2.a. A number of interrelated factors can influence food security.	• How food production varies from intensive to extensive and subsistence to commercial. • Understand the range of physical and human challenges that affect food production and supply. • The social, economic, environmental and political factors affecting food security and how these vary from place to place. • Theoretical positions on food security including Malthusian and Boserupian scenarios. • **Case study** of **one** place to illustrate how human and physical factors are/have combined to cause issues with food security.

Draft

3. What are the threats to global food security?	
Key Ideas	**Content**
3.a. Risks to food security can be identified to highlight the most vulnerable societies.	• Regions, countries and people whose food security is most at risk across the development spectrum. • How natural hazards, such as wild-fire, floods, and drought, affect the risks to food security. • The causes of desertification and how this changes ecosystems to increase risk to food security. • **Case study** of **one** dryland area to include: o food security risks and vulnerability are influenced by the specific ecosystem, climate and hydrology o worsening factors such as population change, landgrabbing and climate change.

4. How do food production and security issues impact people and the physical environment?	
Key Ideas	**Content**
4.a. Imbalance in the global food system has physical and human impacts.	• How attempts to increase food production and security can impact the physical environment including: o irrigation and salinisation o deforestation and the impacts on biodiversity o changing landscapes o water quality from agrochemicals. • How food security issues impacts people including: o health issues associated with food shortages o health issues associated with food surpluses and poor diet o harmful impacts on human health as a result of the increased use of chemicals and pesticides. • **Case studies** of **two** places at contrasting levels of economic development to illustrate the implications of poor food security on the lives of people.

Draft

5. Is there hope for the future of food?	
Key Ideas	**Content**
5.a. Food is a geopolitical commodity; a number of key players will continue to influence the global food system.	• The opportunities **between** countries to ensure food security including: o agricultural trading policies o the role of the World Trade Organization o appropriate aid. • Investigate the role and responsibilities of the following in influencing the global food system: o agribusiness o Trans-National Corporations such as Unilever o food retailers such as Tesco o fair trade organisations.
5.b. There is a spectrum of strategies that exist to ensure and improve food security.	• Approaches to increasing food security can vary from short term relief to capacity building and long term system redesign. • The effectiveness and sustainability of a range of techniques that exist to improve food security from large scale technological techniques down to small scale bottom up and appropriate approaches. • **Case studies** of **two** contrasting places at different levels of development and the strategies and techniques that have been used to ensure or improve food security.

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Topic 3.5 – Hazardous Earth

"Every year, natural disasters affect one in thirty people on Earth. Whether developing or industrialised, all nations are at risk, and the field of natural hazards is today one of the fastest growing areas of research in the Earth and Climate Sciences." – University College London, Earth Sciences Department

Movement of the Earths land masses, from Pangaea to present day are evidence that forces beneath our feet are at work. Seismic and volcanic activity creates hazards as populations have grown and inhabited more of the Earth. Although hazardous, earthquakes and volcanoes create new landforms and can support life on Earth from flora and fauna to populations.

As technology has evolved, the capacity to predict and mitigate against tectonic hazard events has improved although the impact of an event can leave communities and countries devastated. Risks from tectonic hazards varies spatially and over time, with continued research and development there may be a point in the future when it will be possible to mitigate against the vulnerability to risks.

Currently there are a number of strategies which help the international community, governments and individuals cope with the risks associated with tectonic hazards however there are varying global levels of resilience and ability to adapt to the risks presented.

1. What is the evidence for continental drift and plate tectonics?	
Key Ideas	**Content**
1.a. There is a variety of evidence for the theories of continental drift and plate tectonics.	• Theories of continental drift and plate tectonics including: o the basic structure of the earth including the lithosphere, asthenosphere and the role of convection currents o evidence for sea-floor spreading; paleomagnetism; the age of sea floor rocks o evidence from ancient glaciations o fossil records.
1.b. There are distinctive features and processes at plate boundaries.	• Earth's crustal features and processes, including: o the global pattern of plates and plate boundaries o the features and processes associated with divergent (constructive) plate boundaries o the features and processes associated with convergent plate boundaries to include oceanic-continental, oceanic-oceanic (destructive) and continental-continental (collision) boundaries o the features and processes associated with conservative plate boundaries.

2. What are the main hazards generated by volcanic activity?	
Key Ideas	**Content**
2.a. There is a variety of volcanic activity and resultant landforms and landscapes.	• Different types of volcanoes to investigate their causes and features including: o explosive eruptions (higher viscosity magma) located at convergent (destructive) plate boundaries o effusive eruptions (lower viscosity magma) and landforms located at divergent (constructive) plate boundaries o eruptions not at plate boundaries (hot spots) such as the Hawaiian chain and the East African Rift Valley o size and shape of different types of volcanoes, including super-volcanoes o the volcanic explosive index (VEI) measure of assessing volcanic activity.
2.b. Volcanic eruptions generate distinctive hazards.	• Different types of volcanic eruptions and the different types of hazards they generate including: o lava flows, pyroclastic flows, gas emissions, tephra and ash o lahars and flooding associated with the melting of ice o tsunamis associated with explosive eruption.

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3. What are the main hazards generated by seismic activity?	
Key Ideas	**Content**
3.a. There is a variety of earthquake activity and resultant landforms and landscapes.	• Earthquake characteristics to investigate their causes and features including: o shallow-focus earthquakes o deep-focus earthquakes o the different measures of assessing earthquake magnitude (Richter, moment magnitude scale, modified Mercalli intensity scale) o the effects earthquakes have on landforms and landscapes including the development of escarpments and rift valleys.
3.b. Earthquakes generate distinctive hazards.	• Hazards generated by earthquakes, including: o ground shaking and ground displacement o liquefaction o landslides and avalanches o tsunamis associated with sea-bed uplift and underwater landslides o flooding.

4. What are the implications of living in tectonically active locations?	
Key Ideas	**Content**
4.a. There are a range of impacts people experience as a result of volcanic eruptions.	• **Case studies** of **two** countries at contrasting levels of economic development to illustrate: o reasons why people choose to live in tectonically active locations o the impacts people experience as a result of volcanic eruptions o economic, environmental and political impacts on the country.
4.b. There are a range of impacts people experience as a result of earthquake activity.	• **Case studies** of **two** countries at contrasting levels of economic development to illustrate: o reasons why people choose to live in tectonically active locations o the impacts people experience as a result of earthquake activity o economic, environmental and political impacts on the country.

Draft

5. What measures are available to help people cope with living in tectonically active locations?	
Key Ideas	**Content**
5.a. There are various strategies to manage hazards from volcanic activity.	• **Case studies** of **two** countries at contrasting levels of economic development to illustrate strategies used to cope with volcanic activity including: o attempts to mitigate against the event, such as lava diversion channels o attempts to mitigate against vulnerability such as community preparedness o attempts to mitigate against losses, such as rescue and emergency relief.
5.b. There are various strategies to manage hazards from earthquakes.	• **Case studies** of **two** countries at contrasting levels of economic development to illustrate strategies used to cope with hazards from earthquakes including: o attempts to mitigate against the event such as land-use zoning o attempts to mitigate against vulnerability such as building design o attempts to mitigate against losses such as insurance.
5.c. The exposure of people to risks and their ability to cope with tectonic hazards changes over time.	• How and why have the risks from tectonic hazards changed over time; o changes in the frequency and impacts of tectonic hazards over time o the degree of risk posed by a hazard and the probability of the hazard event occurring (the disaster risk equation) o possible future strategies to cope with risks from tectonic hazards. • The relationship between disaster and response including the Park model.

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2d. Content of Investigative geography (H481/04,05)

This specification will be updated once the arrangements for non-exam assessment have been finalised. The following statement has been agreed by all awarding organisations.

The A level non-exam assessment comprises an Independent Investigation. It is a compulsory requirement of the course of study and accounts for 20% of the qualification grade.

Awarding organisations are working together to agree common principles for the guidance and arrangements for task setting, task taking, and the declarations required to show that work is authentic and meets specification requirements.

The final requirements for non-exam assessment will be consistent across all awarding organisations. The accredited specifications will be updated in autumn 2015 to include this information.

Investigative geography (04/05) gives learners the opportunity to undertake an independent investigation which is of particular interest to them, which can be related to any area of the specification.

An independent investigation in A Level Geography provides learners with the opportunity to develop a wide range of skills and abilities which are applicable not only to study in Higher Education but also within the world of work and life, which, amongst others, include:

- the structure and enquiry process
- extended writing
- innovation in investigating and presenting data
- self-directed study
- research techniques
- making synoptic links between the real world, geographical theory, the learners own research and the specification.

The independent investigation will consist of a written report which will assess the process of enquiry and investigation. The report must be an independent investigation but data collection can be conducted within a group. Independence will come from the definition of the enquiry and the interrogation of the findings.

The independent investigation must:

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

The report must contain a clear structure and continuous prose, and if the report includes digital material then this must be referenced to or evidenced through weblinks and/or screenshots. The report must include the collection of primary and secondary data. Primary data is defined here as unmanipulated data, either collected in the field or a raw dataset.

Learning hours are not specified because the process of writing the report is an iterative and independent process, however a length of between 3000 and 4000 words is recommended. Each learner will work at their own pace and time should be made available to explain to learners what is required before they undertake the initial stages of research.

Investigative geography (04/05) is internally assessed and externally moderated. The independent investigation will be marked by the centre using the marking criteria grid provided by OCR in Section 3f Non-exam Assessment – Investigative geography (04/05).

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2e. Geographical and fieldwork skills

Geographical and fieldwork skills are fundamental to the study, practice and discipline of geography. They are integrated into all aspects of the subject. The skills listed on the following pages provide a basis for further study and research across a range of subjects as well as being core skills for the world of work. Learning these skills in the context of the A level content will stimulate learners to 'think geographically'. It will also provide them with opportunities to apply the skills in a wide range of curriculum or learning contexts.

Learners will be able to apply the skills listed in this section to familiar and novel contexts. Teaching and learning should embed and contextualise the topic-specific skills and the listed geographical skills on the following pages into the content of Physical systems (01), Human interactions (02) and Geographical debates (03). Learners should utilise geographical and fieldwork skills within their independent investigation as appropriate. Learners are not limited by the exemplification given within this specification for their Investigative geography (04/05) as long as learners fulfil the requirements of the mark scheme for that assessment.

Learners should use the geographical skills to collect, analyse and interpret geographical information throughout their studies, whilst gaining the ability to understand and apply suitable analytical approaches. These analytical approaches could be utilised within study of the specified content and their own independent investigation. Learners will acquire the geographical and fieldwork skills to be able to investigate geographical questions and issues, interpret, analyse and evaluate data and evidence and to construct arguments and draw conclusions.

Competence in using geographical skills should be developed during study of the content, not as a separate theme or topic. While the relative balance of quantitative and qualitative methods and skills will differ between components, learners must be introduced to a roughly equal balance of quantitative and qualitative approaches across the specification as a whole.

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4. Geographical Skills

4.1 Geographical information:

With respect to geographical information, learners should:

a) understand what makes data geographical
b) understand the ethical and socio-political implications of collecting, studying and representing geographical data, especially with regard to human communities
c) understand the nature of and use different types of geographical information, including:
   - qualitative and quantitative
   - primary and secondary
   - images, maps, diagrams and graphical representations
   - factual text and discursive/creative material
   - digital data
   - numerical and spatial data
   - innovative forms of data, including crowd-sourced and 'big data'.
d) collect, analyse and interpret such information, and demonstrate the ability to understand and apply suitable analytical approaches for the different information types
e) undertake informed and critical questioning of data sources, analytical methodologies, data reporting and presentation, including the ability to identify sources of error in data and to identify the misuse of data
f) communicate and evaluate findings, draw well-evidenced conclusions informed by wider theory, and construct extended written argument about geographical matters.

4.2 Geo-located data:

With respect to geo-located data, learners should:

a) demonstrate an ability to collect and to use digital data through the use of geospatial technologies, such as smart phones and tablet devices
b) understand the opportunities and benefits of presenting and analysing geographical data through the use of Geographical Information Systems (GIS).

4.3 Qualitative skills:

With respect to qualitative skills, learners should:

a) use and understand a mixture of methodological approaches, including using interviews
b) interpret, analyse and evaluate a range of source material including textual and visual sources
c) understand the opportunities and limitations of qualitative techniques such as coding and sampling.

4.4 Quantitative skills:

With respect to quantitative skills, learners should understand the purposes and difference between the following and be able to use them in appropriate contexts:

a) mean, median, mode, range, interquartile range and standard deviation
b) significance tests, such as Chi-squared, Spearman's rank, Mann-Whitney U test and T-test
c) lines of best fit and correlation on graphical representations
d) measurement, measurement errors, and sampling.

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5. Fieldwork skills

Fieldwork is essential to geography, with a defining characteristic of geographers being the ability to conduct investigations in order to test ideas, build evidence, reflect on and create new geographical knowledge. The value of fieldwork goes beyond the aim of collecting primary data. The understanding generated from experiencing geographical concepts, processes and issues in the real world can be illuminating for learners and help to contextualise content to enrich learning experiences.

The assessment of fieldwork skills will be within Investigative geography (04/05) and there will be no assessment of fieldwork skills within the examinations for components Physical systems (01), Human interactions (02) and Geographical debates (03). Specific details of the assessment for the requirements of Investigative geography (04/05) can be found in Section 3f Non-exam Assessment – Investigative geography (04/05).

There are specific elements of fieldwork which learners are required to study within the A Level Geography course, and these are exemplified further within the marking criteria for Investigative geography (04/05).

With respect to fieldwork skills, A Level Geography requires learners to:

a) define the research questions which underpin field investigations
b) research relevant literature sources and understand and write up the theoretical or comparative context for a research question
c) observe and record phenomena in the field and devise and justify practical approaches taken in the field including frequency/timing of observation, sampling, and data collection approaches
d) demonstrate practical knowledge and understanding of appropriate field methodologies
e) implement chosen methodologies to collect data/information of good quality and relevant to the topic under investigation
f) demonstrate knowledge and understanding of the techniques appropriate for analysing field data and information and for representing results, and show ability to select suitable quantitative or qualitative approaches and to apply them
g) demonstrate the ability to interrogate and critically examine field data in order to comment on its accuracy and/or the extent to which it is representative, and use the experience to extend geographical understanding
h) apply existing knowledge, theory and concepts to order and understand field observations
i) show the ability to write up field results clearly and logically, using a range of presentation methods
j) evaluate and reflect on fieldwork investigations, explain how the results relate to the wider context and show an understanding of the ethical dimensions of field research
k) demonstrate the ability to write a coherent analysis of fieldwork findings in order to answer a specific geographical question and to do this drawing effectively on evidence and theory to make a well-argued case.

Fieldwork is required to be undertaken for at least **four** days throughout the A level course, including in relation to **both** physical and human geography subject matter.

This allows learners to understand processes and approaches they can utilise within their own independent investigation, as well as contextualise aspects of the content through their experiences.

Fieldwork undertaken for the independent investigation may contribute to the four days fieldwork requirement. The fieldwork which is part of the individual investigation may be either human, physical or integrated.

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Fieldwork Written Statement

Centres must provide a written **fieldwork statement** to OCR detailing that at least **four** days of geographical fieldwork have been undertaken by all learners being submitted for entry within that year's set of assessments.

The fieldwork statement must confirm that geographical fieldwork has been undertaken in relation to **both physical** and **human** geography subject matter.

Centres must provide the fieldwork statement by **15 May in the year of entry**. Any failure by a centre to provide a fieldwork statement to OCR in a timely manner will be treated as malpractice and/or maladministration (under General Condition A8 (*Malpractice and maladministration*).

2f. Prior knowledge, learning and progression

There are no prior qualification requirements for this specification.

Learners in England who are beginning an A level course are likely to have followed a Key Stage 4 programme of study. No prior knowledge of this subject is required. The specification builds on, but does not depend on, the knowledge, understanding and skills specified for GCSE (9–1) Geography.

This qualification provides the ideal foundation for learners to progress to Higher Education for study in Geography or a number of other subjects due to the skills gained.

There are a number of Geography specifications at OCR. Find out more at www.ocr.org.uk

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3 Assessment of A Level in Geography

3a. Forms of assessment

For OCR's A Level in Geography learners must take all components.

A Level in Geography (H481)	
Component 01 Physical systems	
24% of the A Level 1 hour 45 minutes Written paper 72 marks	This question paper has **two** sections. • Section A: Questions on Landscape Systems, answering questions on either Option A, B or C. • Section B: Questions on Earth's Life Support Systems. A separate Resource Booklet is provided with the question paper. The component is externally assessed. Marks associated with geographical skills will be assessed within this component.
Component 02 Human interactions	
24% of the A Level 1 hour 45 minutes Written paper 72 marks	This question paper has **two** sections. • Section A: Questions on Changing Spaces; Making Places • Section B: Questions on Global Connections, answering questions on either Option A or B and Option C or D. A separate Resource Booklet is provided with the question paper. The component is externally assessed. Marks associated with geographical skills will be assessed within this component.
Component 03 Geographical debates	
32% of the A Level 2 hour 30 minutes Written paper 96 marks	This question paper has **two** sections. • Section A: Data response questions on all topics (Climate Change, Disease Dilemmas, Exploring Oceans, Future of Food and Hazardous Earth) • Section B: Extended reponse questions on all topics (Climate Change, Disease Dilemmas, Exploring Oceans, Future of Food and Hazardous Earth). Learners answer questions from **two** topics. A separate Resource Booklet is provided with the question paper. The component is externally assessed. Marks associated with geographical skills will be assessed within this component.
Component 04/05 Investigative geography	
20% of the A Level Non-exam assessment 60 marks	The independent investigation may relate to any aspect of the specification. It is a written report with a recommended length of between 3000 and 4000 words. Learning hours are not specified because the process of writing the report is iterative and independent. The assessment will be marked by the centre using a marking criteria grid provided by OCR. This component is internally marked by the centre and externally moderated by OCR.

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Within the question papers for the components Physical systems (01) and Human interactions (02) there will be a combination of short answer questions which carry a low tariff, medium length questions of 8 marks and higher tariff extended response questions of 18 marks.

Within the question paper for the Geographical debates (03) component there will be a combination of medium length questions of 10 marks and extended response questions of 38 marks.

3b. Assessment objectives (AO)

There are three Assessment Objectives in OCR's A Level in Geography. These are detailed in the table below.

Learners are expected to:

	Assessment Objective
AO1	Demonstrate knowledge and understanding of places, environments, concepts, processes, interactions and change, at a variety of scales.
AO2	Apply knowledge and understanding in different contexts to interpret, analyse and evaluate geographical information and issues.
AO3	Use a variety of relevant quantitative, qualitative and fieldwork skills to: • investigate geographical questions and issues • interpret, analyse and evaluate data and evidence • construct arguments and draw conclusions.

Please see Section 5e in the Appendices of this Specification for detailed Ofqual guidance on the breakdown of the assessment objectives for A Level Geography.

AO weightings in A Level in Geography

The relationship between the assessment objectives and the components are shown in the following table:

Component	**% of overall A level in Geography (H481)**		
	AO1	**AO2**	**AO3**
Physical systems (H481/01)	12	8	4
Human interactions (H481/02)	12	8	4
Geographical debates (H481/03)	10	20	2
Investigative geography (H481/04,05)	0	0	20
Total	34%	36%	30%

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3c. Assessment availability

There will be one examination series available each year in May/June to **all** learners.

All examined components must be taken in the same examination series at the end of the course

This specification will be certificated from the June 2018 examination series onwards.

3d. Retaking the qualification

Learners can retake the qualification as many times as they wish. They retake all examined components of the qualification.

Learners can choose either to retake the non-exam component or to carry forward their mark for the non-exam component by using the carry forward entry option (see Section 4d).

3e. Assessment of extended response

The assessment materials for this qualification provide learners with the opportunity to demonstrate their ability to construct and develop a sustained and coherent line of reasoning and marks for extended responses are integrated into the marking criteria.

There is assessment of extended responses within components Physical systems (01), Human interactions (02) and Geographical debates (03).

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3f. Non-exam assessment – Investigative geography (H481/04, 05)

This specification will be updated once the arrangements for non-exam assessment have been finalised. The following statement has been agreed by all awarding organisations.

The A level non-exam assessment comprises an Independent Investigation. It is a compulsory requirement of the course of study and accounts for 20% of the qualification grade.

Awarding organisations are working together to agree common principles for the guidance and arrangements for task setting, task taking, and the declarations required to show that work is authentic and meets specification requirements.

The final requirements for non-exam assessment will be consistent across all awarding organisations. The accredited specifications will be updated in autumn 2015 to include this information.

The A Level Geography component Investigative geography (04/05) is an independent investigation consisting of a written report, recommended to be between 3000 and 4000 words in length.

All learners will be expected to complete an independent investigation which is of their particular personal interest related to any area of the specification – this could be one of the options within Physical systems (01), Human interactions (02) or Geographical debates (03) which they are not studying as part of their teacher-led course.

The independent investigation will consist of a written report which will assess the process of enquiry and investigation. Learning hours are not specified because the process of writing the report is an iterative and independent process, however a length of between 3000 and 4000 words is recommended. Each learner will work at their own pace and time should be made available to explain to learners what is required before they undertake the initial stages of research.

A learner will not be penalised for exceeding the recommended length; however, any response that significantly differs from the recommended length will be self-penalising either by not demonstrating the expectations of the marking criteria to the required level or through lacking coherence and concision.

There will be 60 marks available for the investigation, broken down into six sections. These sections consist of:

1. planning purpose and introduction
2. data, information collection methods and sampling framework
3. data and information representation techniques
4. data analysis and explanation
5. conclusions and investigation
6. overall quality and communication of written work.

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Non-exam assessment guidance

This specification will be updated once the arrangements for non-exam assessment have been finalised. The following statement has been agreed by all awarding organisations.

The A level non-exam assessment comprises an Independent Investigation. It is a compulsory requirement of the course of study and accounts for 20% of the qualification grade.

Awarding organisations are working together to agree common principles for the guidance and arrangements for task setting, task taking, and the declarations required to show that work is authentic and meets specification requirements.

The final requirements for non-exam assessment will be consistent across all awarding organisations. The accredited specifications will be updated in autumn 2015 to include this information.

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Non-exam assessment marking criteria for Investigative geography (H481/04, 05)

There are a total of 60 marks available for component Investigative Geography (04/05). A mark should be awarded for each of the six sections and added together to reach a total out of 60 marks. It is possible that learners may achieve very different marks for each area: allocate the mark according to the level of competency demonstrated for each area individually.

An answer does not have to meet all the requirements of a level descriptor before being placed in that level. The extent to which it meets all of the requirements of a level descriptor will determine its placement within that level. The extent to which the statements within the level have been achieved should be the only criteria used when deciding the mark within a level.

Marking Criteria

Section 1: Planning, purpose and introduction. (8 marks)

Level 3	**6–8 marks** • There is a clear, well focused plan, appropriately designed to include aims or questions or hypotheses linked to the geographic purpose of the investigation. • The plan is based on an individual geographical topic or issue, which is accurately and appropriately defined and within a research framework. • There is a justification for the investigation provided in the introduction and valid contextualisation of fieldwork and research. • The location is precise and geo-located, using geo-spatial techniques, at appropriately different scales. • There is clear evidence of valid and individual literature research that defines and contextualises the investigation through an appropriate combination of wider geographical links, comparisons, models and theory.
Level 2	**3–5 marks** • There is a mostly clear plan, appropriately designed to include aims or questions or hypotheses linked to the geographic purpose of the investigation. • The plan is based on an individual geographical topic or issue, within a research framework, which is partially defined. • There is some justification for the investigation provided in the introduction and an attempt to contextualise the fieldwork and research. • The location is clear, using geo-spatial techniques, and at different scales. • There is some evidence of individual research that supports the investigation through an appropriate combination of wider geographical links, comparisons, models and theory.
Level 1	**1–2 marks** • There is a partial or incomplete attempt to include a plan with aims or questions or hypotheses which are not clearly linked to the geographic purpose of the investigation. • The plan is based on an individual geographical topic or issue, within a research framework, but definitions are incomplete or absent. • There is no justification for the investigation provided in the introduction and no meaningful attempt to contextualise the fieldwork and research. • The location is unclear with few relevant or appropriate geo-spatial techniques. • There is limited evidence of research that supports the investigation through wider geographical links, comparisons, models or theory.
0 marks	• No response or no response worthy of credit.

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Section 2: Data, information collection methods and sampling framework. (7 marks)

Level 3	**6–7 marks** • There is good knowledge and understanding of a range of data collection methodologies, including both quantitative and qualitative approaches, which are justified with limitations outlined, appropriate to the investigation and explained in detail. • There is clear evidence of personalised methodologies and approaches to observe and record primary data and phenomena in the field and to incorporate secondary data and/or evidence, collected individually or in groups. • There is clear evidence of the ability to collect and use digital, geo-located data. • The data design framework (sampling, frequency, range and location choice) is appropriate, coherent and justified. • Addresses and shows an understanding of the ethical and socio-political dimensions of the methodologies chosen.
Level 2	**3–5 marks** • There is some knowledge and understanding of a range of data collection methodologies, including both quantitative and qualitative approaches, which are partially justified with some limitations outlined, mostly appropriate to the investigation with some explanation. • There is limited evidence of personalised methodologies and approaches to observe and record primary data and phenomena in the field and to incorporate secondary data and/or evidence, collected individually or in groups. • There is limited evidence of the ability to collect and use digital, geo-located data. • The data design framework (sampling, frequency, range and location choice) is mostly appropriate but with limited justification. • Attempts to address and show an understanding of the ethical and socio-political dimensions of the methodologies chosen.
Level 1	**1–2 marks** • There is limited knowledge and understanding of data collection methodologies which are sometimes appropriate but lack explanation. • There is little or no evidence of personalised methodologies and approaches to observe and record primary data and phenomena in the field and/or incorporate secondary data and/or evidence, collected individually or in groups. • There is little or no evidence of the ability to collect and use digital, geo-located data. • The data design framework (sampling, frequency, range and location choice) is weak or absent and with no relevant justification. • Makes no attempt to address or understand the ethical and socio-political dimensions of the methodologies chosen.
0 marks	• No response or no response worthy of credit.

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Section 3: Data presentation techniques. (9 marks)

Level 3	**7–9 marks** • There is appropriate and selective presentation of the most influential data collected directly related to the investigation. • The range of data presentation techniques is appropriate and well selected, with good knowledge and understanding of the relevant techniques for representing results clearly. • There is an appropriate balance of simple and more sophisticated data representation methods, relevant to the topic.
Level 2	**4–6 marks** • There is some selective presentation of the most influential data collected directly related to the investigation. • The range of data presentation methods is mostly well selected, with some knowledge and understanding of the relevant techniques for representing results. • There is an attempt to balance the simple and more sophisticated data representation methods, relevant to the topic.
Level 1	**1–3 marks** • There is no evidence of selective presentation of the most influential data collected directly related to the investigation. • The range of data presentation methods is poorly selected, with limited knowledge and understanding of the relevant techniques for representing results. • There is no attempt to balance the simple and more sophisticated data representation methods, relevant to the topic.
0 marks	• No response or no response worthy of credit.

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Section 4: Data analysis and explanation. (14 marks)

Level 4	**12–14 marks** • Data and information collected is analysed and interpreted in an effective and coherent manner, with evidence of independence, demonstrating the knowledge and understanding of the techniques appropriate for analysing and explaining data and information. • When appropriate to the topic, statistical analysis and significance testing are used accurately and proficiently for both the data and topic of investigation. • When appropriate to the topic, qualitative and non-numerical analysis techniques are successfully and individually developed and used to support explanations and findings from data and information collected. • The analysis and explanation are relevant and link effectively to the stated aims or questions or hypotheses. • There is effective use of appropriate knowledge, theory and geographical concepts to help explain findings.
Level 3	**8–11 marks** • Data and information collected is analysed and interpreted in a relevant manner, with evidence of independence, demonstrating the knowledge and understanding of the techniques appropriate for analysing and explaining data and information. • When appropriate to the topic, statistical analysis and significance testing are used with some accuracy for both the data and topic of investigation. • When appropriate to the topic, qualitative and non-numerical analysis techniques are developed and used to support explanations and findings from data and information collected. • The analysis and explanation link to the stated aims or questions or hypotheses. • There is use of appropriate knowledge, theory and geographical concepts to help explain findings.
Level 2	**4–7 marks** • Data and information collected is analysed and interpreted in a relevant manner, with evidence of independence, demonstrating partial knowledge and understanding of the techniques appropriate for analysing and explaining data and information. • When appropriate to the topic, statistical analysis and significance testing are attempted when appropriate but with limited accuracy for both the data and topic of investigation. • When appropriate to the topic, qualitative and non-numerical analysis techniques are used but with limited success in relation to the overall purpose of the investigation. • The analysis and explanation show only a partial link to the stated aims or questions or hypotheses. • There is some attempt to use appropriate knowledge, theory and geographical concepts to help explain findings.
Level 1	**1–3 marks** • There is limited evidence of relevant independent analysis and interpretation of data and information. • When appropriate to the topic, statistical analysis and significance testing are absent or largely irrelevant to both the data and topic of investigation. • When appropriate to the topic, qualitative and non-numerical analysis techniques are absent or largely irrelevant to the overall purpose of the investigation. • The analysis and explanation show a poor or irrelevant link to the stated aims or questions or hypotheses. • There are limited or no element of appropriate knowledge, theory and geographical concepts to help explain findings.
0 marks	• No response or no response worthy of credit.

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Section 5: Conclusions and investigation evaluation. (12 marks)

Level 4	**10–12 marks** • There are clear, accurate and thorough conclusions linked to the aims or questions or hypotheses, communicated by means of extended writing. • Draw effectively on primary and secondary evidence and, where appropriate, theory to provide a very well-argued case and shape conclusions. • There is convincing evidence that conducting the investigation extended geographical understanding with clear reference to the wider geographical context of the investigation. • There is a strong evaluation of the overall success of the investigation with reference to the reliability of data sources, data collection methods (including sampling), the accuracy of data collected and the extent to which it is representative, and the validity of the analysis and conclusions. • There is a thorough understanding of the ethical and socio-political dimensions of field research and data presentation.
Level 3	**7–9 marks** • There are clear conclusions linked to the aims or questions or hypotheses, communicated by means of extended writing. • Draw on primary and secondary evidence and, where appropriate, theory to make a well-argued case and shape conclusions. • There is some evidence that conducting the investigation extended geographical understanding with reference to the wider geographical context of the investigation. • There is an evaluation of the overall success of the investigation with reference to the data sources, data collection methods, the accuracy of data collected and the extent to which it is representative, and validity of the analysis and conclusions. • There is a reasonable understanding of the ethical and socio-political dimensions of field research and data presentation.
Level 2	**4–6 marks** • There is a limited attempt to reach conclusions which are linked to the aims or questions or hypotheses, communicated by limited means of extended writing • Elements of primary and secondary evidence and, where appropriate, theory link to the argument and conclusions. • There is limited evidence that conducting the investigation extended geographical understanding with limited reference to the wider reference to the wider geographical context of the investigation. • There is an evaluation of the investigation through reference to isolated aspects of the investigation. • There are basic comments on the ethical and socio-political dimensions of field research and data presentation.
Level 1	**1–3 marks** • Basic, often unsupported conclusions which have few links to the aims or questions or hypotheses. • Limited elements of primary and/or secondary evidence linked to arguments and conclusions. • There is no evidence that conducting an investigation extended geographical understanding with no reference to the wider geographical context of the investigation. • The evaluation is very limited to the identification of a few basic errors and problems. • There is no comment on the ethical and socio-political dimensions of field research and data presentation.
0 marks	• No response or no response worthy of credit.

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Section 6: Overall quality and communication of written work. (10 marks)

Level 3	**8–10 marks** • There is a high standard of communication that is relevant to the geographic purpose of the investigation. • Arguments are clear, demonstrating a strong degree of individuality. • Written work is very well structured, logical, concise, and includes good presentation with text and figures appropriately integrated. • Sources and literature references are clearly stated and accurately referenced throughout the investigation. • Geographical terminology is technical, used appropriately, and written language errors are rare.
Level 2	**4–7 marks** • There is a variable standard of communication that has some relevance to the geographic purpose of the investigation. • Arguments are present showing elements of individuality. • Written work is generally well structured, logical, concise and presentation is adequate with text and figures mostly integrated. • Sources and literature references are mostly referenced throughout the investigation. • Geographical terminology is present, but there are some written language errors.
Level 1	**1–3 marks** • There is basic communication that has limited relevance to the geographic purpose of the investigation. • Arguments are absent or simplistic. • The work is poorly or partially structured and lacks a logical order. Presentation is often poor with little attempt to integrate text and figures. • Sources and literature references are mostly excluded from the investigation or not relevant. • Geographical terminology isolated or absent and there are frequent written language errors.
0 Marks	• No response or no response worthy of credit.

Assessment Grid for non-exam assessment – Investigative geography (04/05)

	AO1	AO2	AO3	Total
Section 1	**0**	**0**	**8**	**8**
Section 2	**0**	**0**	**7**	**7**
Section 3	**0**	**0**	**9**	**9**
Section 4	**0**	**0**	**14**	**14**
Section 5	**0**	**0**	**12**	**12**
Section 6	**0**	**0**	**10**	**10**
Total	**0**	**0**	**60**	**60**

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3g. Synoptic assessment

Synoptic assessment allows learners to demonstrate their understanding of the connections between different aspects of the subject. It involves the explicit drawing together of knowledge, skills and understanding within different parts of the A level course. The emphasis of synoptic assessment is to encourage the understanding of Geography as a discipline.

Synoptic assessment is embedded within the A Level, although particularly evident in the Geographical debates (03) component and the non-exam assessment, Investigative geography (04/05).

3h. Calculating qualification results

A learner's overall qualification grade for A Level in Geography will be calculated by adding together their marks from the four components taken to give their total weighted mark.

This mark will then be compared to the qualification level grade boundaries for the entry option taken by the learner and for the relevant exam series to determine the learner's overall qualification grade.

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4 Admin: what you need to know

The information in this section is designed to give an overview of the processes involved in administering this qualification so that you can speak to your exams officer. All of the following processes require you to submit something to OCR by a specific deadline.

More information about these processes, together with the deadlines, can be found in the OCR *Admin Guide and Entry Codes: 14–19 Qualifications*, which can be downloaded from the OCR website: www.ocr.org.uk

4a. Pre-assessment

Estimated entries

Estimated entries are your best projection of the number of learners who will be entered for a qualification in a particular series. Estimated entries should be submitted to OCR by the specified deadline. They are free and do not commit your centre in any way.

Final entries

Final entries provide OCR with detailed data for each learner, showing each assessment to be taken. It is essential that you use the correct entry code, considering the relevant entry rules and ensuring that you choose the entry option for the moderation you intend to use.

Final entries must be submitted to OCR by the published deadlines or late entry fees will apply.

All learners taking an A Level in Geography must be entered for one of the following entry options:

Entry option		**Components**		
Entry code	**Title**	**Code**	**Title**	**Assessment type**
H481 A	Geography Option A	01	Physical systems	External Assessment
		02	Human interactions	External Assessment
		03	Geographical debates	External Assessment
		04	Investigative geography	Non-exam assessment (Repository)
H481 B	Geography Option B	01	Physical systems	External Assessment
		02	Human interactions	External Assessment
		03	Geographical debates	External Assessment
		05	Investigative geography	Non-exam assessment (Postal)
H481 C*	Geography Option C	01	Physical systems	External Assessment
		02	Human interactions	External Assessment
		03	Geographical debates	External Assessment
		80	Investigative geography (Carried forward)	Non-exam assessment (Carried forward)

*Entry option H481 C should only be selected for learners who are retaking the qualification who want to carry forward their mark for the non-exam assessment. Ofqual to confirm details of Carry Forward.

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4b. Special consideration

Special consideration is a post–assessment adjustment to marks or grades to reflect temporary injury, illness or other indisposition at the time the assessment was taken.

Detailed information about eligibility for special consideration can be found in the JCQ publication *A guide to the special consideration process.*

4c. External assessment arrangements

Regulations governing examination arrangements are contained in the JCQ *Instructions for conducting examinations*.

4d. Admin of non-exam assessment

This specification will be updated once the arrangements for non-exam assessment have been finalised. The following statement has been agreed by all awarding organisations.

The A level non-exam assessment comprises an Independent Investigation. It is a compulsory requirement of the course of study and accounts for 20% of the qualification grade.

Awarding organisations are working together to agree common principles for the guidance and arrangements for task setting, task taking, and the declarations required to show that work is authentic and meets specification requirements.

The final requirements for non-exam assessment will be consistent across all awarding organisations. The accredited specifications will be updated in autumn 2015 to include this information.

Approval of tasks

This specification will be updated once the arrangements for non-exam assessment have been finalised. The following statement has been agreed by all awarding organisations.

The A level non-exam assessment comprises an Independent Investigation. It is a compulsory requirement of the course of study and accounts for 20% of the qualification grade.

Awarding organisations are working together to agree common principles for the guidance and arrangements for task setting, task taking, and the declarations required to show that work is authentic and meets specification requirements.

The final requirements for non-exam assessment will be consistent across all awarding organisations. The accredited specifications will be updated in autumn 2015 to include this information.

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Authentication of learners' work

This specification will be updated once the arrangements for non-exam assessment have been finalised. The following statement has been agreed by all awarding organisations.

The A level non-exam assessment comprises an Independent Investigation. It is a compulsory requirement of the course of study and accounts for 20% of the qualification grade.

Awarding organisations are working together to agree common principles for the guidance and arrangements for task setting, task taking, and the declarations required to show that work is authentic and meets specification requirements.

The final requirements for non-exam assessment will be consistent across all awarding organisations. The accredited specifications will be updated in autumn 2015 to include this information.

Moderation

This specification will be updated once the arrangements for non-exam assessment have been finalised. The following statement has been agreed by all awarding organisations.

The A level non-exam assessment comprises an Independent Investigation. It is a compulsory requirement of the course of study and accounts for 20% of the qualification grade.

Awarding organisations are working together to agree common principles for the guidance and arrangements for task setting, task taking, and the declarations required to show that work is authentic and meets specification requirements.

The final requirements for non-exam assessment will be consistent across all awarding organisations. The accredited specifications will be updated in autumn 2015 to include this information.

The purpose of moderation is to bring the marking of internally-assessed components in all participating centres to an agreed standard. This is achieved by checking a sample of each centre's marking of learners' work.

Following internal standardisation, centres submit marks to OCR and the moderator. If there are fewer than 10 learners, all the work should be submitted for moderation at the same time as marks are submitted.

Once marks have been submitted to OCR and your moderator, centres will receive a moderation sample request. Samples will include work from across the range of attainment of the learners' work.

There are two ways to submit a sample:

Moderation via the OCR Repository – Where you upload electronic copies of the work included in the sample to the OCR Repository and your moderator accesses the work from there. Please refer to the OCR *Admin guide: 14–19 qualifications* for details about how to submit files using the OCR Repository.

Postal moderation – Where you post the sample of work to the moderator.

The method that will be used to submit the moderation sample must be specified when making entries. The relevant entry codes are given in Section 4.1.

All learners' work must be submitted using the same entry option. It is not possible for centres to offer both options within the same series.

Centres will receive the outcome of moderation when the provisional results are issued. This will include:

Moderation Adjustments Report – Listing any scaling that has been applied to internally-assessed components.

Moderator Report to Centres – A brief report by the moderator on the internal assessment of learners' work.

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Carrying forward non-exam assessment

Details to be confirmed by Ofqual.

4e. Results and certificates

Grade Scale

A level qualifications are graded on the scale: A*, A, B, C, D, E, where A* is the highest. Learners who fail to reach the minimum standard for E will be Unclassified (U). Only subjects in which grades A* to E are attained will be recorded on certificates.

Results

Results are released to centres and learners for information and to allow any queries to be resolved before certificates are issued.

Centres will have access to the following results information for each learner:

- the grade for the qualification
- the raw mark for each component
- the total weighted mark for the qualification.

The following supporting information will be available:

- raw mark grade boundaries for each component
- weighted mark grade boundaries for each entry option.

Until certificates are issued, results are deemed to be provisional and may be subject to amendment.

A learner's final results will be recorded on an OCR certificate. The qualification title will be shown on the certificate as 'OCR Level 3 Advanced GCE in Geography'.

4f. Post-results services

A number of post-results services are available:

- **Enquiries about results** – If you are not happy with the outcome of a learner's results, centres may submit an enquiry about results.
- **Missing and incomplete results** – This service should be used if an individual subject result for a learner is missing, or the learner has been omitted entirely from the results supplied.
- **Access to scripts** – Centres can request access to marked scripts.

4g. Malpractice

Any breach of the regulations for the conduct of examinations and non exam assessment work may constitute malpractice (which includes maladministration) and must be reported to OCR as soon as it is detected.

Detailed information on malpractice can be found in the JCQ publication *Suspected Malpractice in Examinations and Assessments: Policies and Procedures*.

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5 Appendices

5a. Grade descriptors

Details to be confirmed by Ofqual.

5b. Overlap with other qualifications

There is overlap between the content of this specification and that of the OCR AS Level Geography specification in order that these qualifications may be co-taught alongside one another, if necessary.

There is no significant overlap between the content of this specification and those for other Advanced GCE qualifications.

5c. Accessibility

Reasonable adjustments and access arrangements allow learners with special educational needs, disabilities or temporary injuries to access the assessment and show what they know and can do, without changing the demands of the assessment. Applications for these should be made before the examination series. Detailed information about eligibility for access arrangements can be found in the JCQ *Access Arrangements and Reasonable Adjustments.*

The A level qualification and subject criteria have been reviewed in order to identify any feature which could disadvantage learners who share a protected characteristic as defined by the Equality Act 2010. All reasonable steps have been taken to minimise any such disadvantage.

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5d. Glossary of terms from the specification content

Advanced countries (AC)	Countries which share a number of important economic development characteristics including well-developed financial markets, high degrees of financial intermediation and diversified economic structures with rapidly growing service sectors. 'ACs' are as classified by the IMF.
Emerging and developing countries (EDC)	Countries which neither share all the economic development characteristics required to be advanced or are eligible for the Poverty Reduction and Growth Trust. 'EDCs' are as classified by the IMF.
Low-income developing countries (LIDC)	Countries which are eligible for the Poverty Reduction and Growth Trust (PRGT) from the IMF. 'LIDCs' are as classified by the IMF.
Geographical Information System (GIS)	A digital system for capturing, storing, checking and displaying data related to positions on the Earth's surface. GIS can show many different kinds of data on one map, such as streets, buildings, and vegetation. These additional layers enable people to more easily see, analyse and understand patterns and relationships.
Local scale	A local scale can be either local to the learner or another small scale location. A local place may be a locality, neighbourhood or small community, either urban or rural.
Regional scale	A region is an area of land that has common features. These features can be identified by dialect, language, religion, industry or administrative boundaries. Features can also be natural such as climate or landscape.
Primary data	Unmanipulated data, either collected in the field or an untouched dataset.

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5e. Ofqual guidance on Assessment Objectives

AO1: Demonstrate knowledge and understanding of places, environments, concepts, processes, interactions and change, at a variety of scales. **30–40%**
Interpretations and definitions
• **Places, environments, concepts, processes, interactions and change** are aspects of subject content. • **Scales** relate to places, environments, concepts, processes, interactions and change. There is not a specific defined set of scales, but they should range, as appropriate, from local to global in each set of assessments. • We do not expect every set of assessments to cover each aspect of subject content across all scales, or every aspect of subject content at the same scale.

AO2: Apply knowledge and understanding in different contexts to interpret, analyse and evaluate geographical information and issues. **30–40%**
Interpretations and definitions

• **Different contexts** relates to situations and sets of circumstances or combinations of these. This will include a context or more than one context not in the specification.
• **Analyse** means finding connections and causes and/or effects as well as deconstructing concepts, information and/or issues.
• **Interpret** means ascribing meaning.
• **Evaluate** means appraising and judging utility (that is usefulness, particularly with respect to suitability for a particular function) and validity, synthesising information, and coming to rational conclusions that are evidence based.
• **Geographical information and issues** are aspects of subject content.
• The emphasis in this assessment objective is on application. For each set of assessments, this should involve the Learner working with their knowledge and understanding as well as showing critical thinking skills, by:
  o relating them to novel situations that are not clearly indicated in the specification
  o developing further material that is covered in the specification or
  o making links between such types of material, which are not signalled in the specification.

AO3: Use a variety of relevant quantitative, qualitative and fieldwork skills to: • **investigate geographical questions and issues** • **interpret, analyse and evaluate data and evidence** • **construct arguments and draw conclusions.** **20–30%**
Interpretations and definitions
• The emphasis in this assessment objective is on the use of geographical skills – these can be overarching methods and/or specific techniques. • **Interpret, analyse and evaluate** are intrinsically linked in this assessment objective; taken together they mean to critically investigate. • In this assessment objective, **data and evidence** means stimulus materials collected by, or provided for, the learner. • There are a number of ways in which arguments and conclusions can be communicated. This may include written responses or data responses.

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