
AS GEOGRAPHY

(7036)

Specification

For teaching from September 2016 onwards
For exams in 2017 onwards

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Contents

1 Introduction	5
1.1 Why choose AQA for AS Geography	5
1.2 Support and resources to help you teach	5
2 Specification at a glance	7
2.1 Subject content	7
2.2 Assessments	8
3 Subject content	9
3.1 Physical geography	9
3.2 Human geography	13
3.3 People and the environment	15
3.4 Geography fieldwork investigation	19
3.5 Geographical skills checklist	19
4 Scheme of assessment	23
4.1 Aims	23
4.2 Assessment objectives	24
4.3 Assessment weightings	24
5 General administration	27
5.1 Entries and codes	27
5.2 Overlaps with other qualifications	27
5.3 Awarding grades and reporting results	27
5.4 Resits and shelf life	27
5.5 Previous learning and prerequisites	28
5.6 Access to assessment: diversity and inclusion	28
5.7 Working with AQA for the first time	28
5.8 Private candidates	29

Are you using the latest version of this specification?

- You will always find the most up-to-date version of this specification on our website at aqa.org.uk/7036
- We will write to you if there are significant changes to the specification.

1 Introduction

1.1 Why choose AQA for AS Geography

Our new specification will excite your students' minds, challenge perceptions and stimulate their investigative and analytical skills.

Whilst new units have been added to reflect the world today, you'll see it's retained much of the topics you and your students enjoy.

We created it with help of experienced teachers, so we're confident you'll find it practical to teach too. Content enables you to teach AS simultaneously with the first year of A-level, allowing for maximum flexibility in lesson timetabling and teaching resources.

We want to make the transition to this new qualification as smooth for you as possible, so we've created a number of resources. These include clear and inspiring schemes of work, lesson plans and a toolkit designed to help you with the new fieldwork requirements.

All of this will help you provide your students with the knowledge, skills and enthusiasm sought by higher education and employers. If you have any queries or concerns, our subject experts are just an email or phone call away.

You can find out about all our Geography qualifications at

1.2 Support and resources to help you teach

We've worked with experienced teachers to provide you with a range of resources that will help you confidently plan, teach and prepare for exams.

Teaching resources

Visit aqa.org.uk/7036 to see all our teaching resources. They include:

- dedicated student textbooks approved by AQA
- specimen question papers and mark schemes to show you what the exam will look like
- enhanced schemes of work to provide you with a range of suggestions for lesson activities, resources and more
- fieldwork toolkit to support your delivery of this key element of the specification
- training courses to help you deliver AQA Geography qualifications
- subject expertise courses for all teachers, from newly-qualified teachers who are just getting started to experienced teachers looking for fresh inspiration.

Preparing for exams

Visit aqa.org.uk/7036 for everything you need to prepare for our exams, including:

- past papers, mark schemes and examiners' reports
- sample papers and mark schemes for new courses
- Exampro: a searchable bank of past AQA exam questions
- example student answers with examiner commentaries.

Analyse your students' results with Enhanced Results Analysis (ERA)

Find out which questions were the most challenging, how the results compare to previous years and where your students need to improve. ERA, our free online results analysis tool, will help you see where to focus your teaching. Register at aqa.org.uk/era

For information about results, including maintaining standards over time, grade boundaries and our post-results services, visit aqa.org.uk/results

Keep your skills up-to-date with professional development

Wherever you are in your career, there's always something new to learn. As well as subject-specific training, we offer a range of courses to help boost your skills.

- Improve your teaching skills in areas including differentiation, teaching literacy and meeting Ofsted requirements.
- Prepare for a new role with our leadership and management courses.

You can attend a course at venues around the country, in your school or online – whatever suits your needs and availability. Find out more at coursesandevents.aqa.org.uk

Help and support available

Visit our website for information, guidance, support and resources at aqa.org.uk/7036

If you'd like us to share news and information about this qualification, sign up for emails and updates at

Alternatively, you can call or email our subject team direct.

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2 Specification at a glance

This qualification is linear. Linear means that students will sit all their exams and submit all their non-exam assessment at the end of the course.

2.1 Subject content

Physical geography

1. [Water and carbon cycles](#) (page 9)
2. [Coastal systems and landscapes](#) (page 10)
3. [Glacial systems and landscapes](#) (page 11)

Human geography

4. [Changing places](#) (page 13)

People and the environment

5. [Hazards](#) (page 15)
6. [Contemporary urban environments](#) (page 17)

Geography fieldwork investigation

7. [Geography fieldwork investigation](#) (page 19)

Geographical skills

8. [Geographical skills checklist](#) (page 19)

2.2 Assessments

Component 1: Physical geography and people and the environment

What's assessed

Section A: either Water and carbon cycles **or** Coastal systems and landscapes **or** Glacial systems and landscapes

Section B: either Hazards **or** Contemporary urban environments

How it's assessed

- Written exam: 1 hour 30 minutes
- 80 marks
- 50% of AS

Questions

- Section A: answer either question 1 or question 2 or question 3 (40 marks)
- Section B: answer either question 4 or question 5 (40 marks)
- Question types: multiple-choice, short answer, levels of response and extended prose



Component 2: Human geography and geography fieldwork investigation

What's assessed

Section A: Changing places

Section B: Geography fieldwork investigation and geographical skills

How it's assessed

- Written exam: 1 hour 30 minutes
- 80 marks
- 50% of AS

Questions

- Section A: answer all questions (40 marks)
- Section B: answer question 2. Answer either question 3 or question 4 (40 marks)
- Question types: multiple-choice, short answer, levels of response and extended prose

3 Subject content

3.1 Physical geography

3.1.1 Water and carbon cycles

This section of our specification focuses on the major stores of water and carbon at or near the Earth's surface and the dynamic cyclical relationships associated with them. These are major elements in the natural environment and understanding them is fundamental to many aspects of physical geography.

This section specifies a systems approach to the study of water and carbon cycles. The content invites students to contemplate the magnitude and significance of the cycles at a variety of scales, their relevance to wider geography and their central importance for human populations. The section offers the opportunity to exercise and develop geographical skills, including observation, measurement and geospatial mapping skills, together with data manipulation and statistical skills, including those associated with and arising from fieldwork.

3.1.1.1 Water and carbon cycles as natural systems

Systems in physical geography: systems concepts and their application to the water and carbon cycles inputs – outputs, energy, stores/components, flows/transfers, positive/negative feedback, dynamic equilibrium.

3.1.1.2 The water cycle

Global distribution and size of major stores of water – lithosphere, hydrosphere, cryosphere and atmosphere.

Processes driving change in the magnitude of these stores over time and in space, including flows and transfers: evaporation, condensation, cloud formation, causes of precipitation and cryospheric processes, at hill slope, drainage basin and global scales with reference to varying timescales involved.

Drainage basins as open systems – inputs and outputs, to include precipitation, evapo-transpiration and runoff; stores and flows, to include: interception, surface, soil water, groundwater and channel storage; stemflow, infiltration overland flow and channel flow. Concept of water balance.

Runoff variation and the flood hydrograph.

Changes in the water cycle over time to include natural variation including storm events, seasonal changes and human impact including farming practices, land use change and water abstraction.

3.1.1.3 The carbon cycle

Global distribution, and size of major stores of carbon – lithosphere, hydrosphere, cryosphere biosphere, atmosphere.

Factors driving change in the magnitude of these stores, over time and in space, including flows and transfers at plant, sere and continental scales. Photosynthesis, respiration, decomposition, combustion, carbon sequestration in oceans and sediments, weathering.

Changes in the carbon cycle over time, to include natural variation (including wild fires, volcanic activity) and human impact (including hydrocarbon fuel extraction and burning, farming practices, deforestation, land use changes).

The carbon budget and the impact of the carbon cycle upon land, ocean and atmosphere, including global climate.

3.1.1.4 Water, carbon, climate and life on Earth

The key role of the carbon and water stores and cycles in supporting life on Earth with particular reference to climate. The relationship between the water cycle and carbon cycle in the atmosphere. The role of feedbacks within and between cycles and their link to climate change and implications for life of Earth.

Human interventions in the carbon cycle designed to influence carbon transfers and mitigate the impacts of climate change.

3.1.1.5 Quantitative and qualitative skills

Students must engage with a range of quantitative and relevant qualitative skills, within the theme water and carbon cycles. Students must specifically understand simple mass balance, unit conversions and the analysis and presentation of field data.

3.1.1.6 Case studies

Case study of a tropical rainforest setting to illustrate and analyse key themes in water and carbon cycles and their relationship to environmental change and human activity.

Case study of a river catchment(s) at a local scale to illustrate and analyse the key themes above, engage with field data and consider the impact of precipitation upon drainage basin stores and transfers and implications for sustainable water supply and/or flooding.

3.1.2 Coastal systems and landscapes

This section of our specification focuses on coastal zones, which are dynamic environments in which landscapes develop by the interaction of winds, waves, currents and terrestrial and marine sediments. The operation and outcomes of fundamental geomorphological processes and their association with distinctive landscapes are readily observable. In common with water and carbon cycles, a systems approach to study is specified.

Student engagement with subject content fosters an informed appreciation of the beauty and diversity of coasts and their importance as human habitats. The section offers the opportunity to exercise and develop observation skills, measurement and geospatial mapping skills, together with data manipulation and statistical skills, including those associated with and arising from fieldwork.

3.1.2.1 Coasts as natural systems

Systems in physical geography: systems concepts and their application to the development of coastal landscapes – inputs, outputs, energy, stores/components, flows/transfers, positive/negative feedback, dynamic equilibrium. The concepts of landform and landscape and how related landforms combine to form characteristic landscapes.

3.1.2.2 Systems and processes

Sources of energy in coastal environments: winds, waves (constructive and destructive), currents and tides. Low energy and high energy coasts.

Sediment sources, cells and budgets.

Geomorphological processes: weathering, mass movement, erosion, transportation and deposition.

Distinctively coastal processes: marine: erosion – hydraulic action, wave quarrying, corrosion/abrasion, cavitation, solution, attrition; transportation: traction, suspension (longshore/littoral drift) and deposition; sub-aerial weathering, mass movement and runoff.

3.1.2.3 Coastal landscape development

This content must include study of a variety of landscapes from beyond the UK but may also include UK examples.

Origin and development of landforms and landscapes of coastal erosion: cliffs and wave cut platforms, cliff profile features including caves, arches and stacks; factors and processes in their development.

Origin and development of landforms and landscapes of coastal deposition. Beaches, simple and compound spits, tombolos, offshore bars, barrier beaches and islands and sand dunes; factors and processes in their development.

Estuarine mudflat/saltmarsh environments and associated landscapes; factors and processes in their development.

Eustatic, isostatic and tectonic sea level change: major changes in sea level in the last 10,000 years.

Coastlines of emergence and submergence. Origin and development of associated landforms: raised beaches, marine platforms; rias, fjords, Dalmatian coasts.

Recent and predicted climatic change and potential impact on coasts.

The relationship between process, time, landforms and landscapes in coastal settings.

3.1.2.4 Coastal management

Human intervention in coastal landscapes. Traditional approaches to coastal flood and erosion risk: hard and soft engineering. Sustainable approaches to coastal flood risk and coastal erosion management: shoreline management/integrated coastal zone management.

3.1.2.5 Quantitative and qualitative skills

Students must engage with a range of quantitative and relevant qualitative skills, within the theme landscape systems. These should include observation skills, measurement and geospatial mapping skills, and data manipulation and statistical skills applied to field measurement.

3.1.2.6 Case studies

Case study(ies) of coastal environment(s) at a local scale to illustrate and analyse fundamental coastal processes, their landscape outcomes as set out above and engage with field data and challenges represented in their sustainable management.

Case study of a contrasting coastal landscape beyond the United Kingdom (UK) to illustrate and analyse how it present risks and opportunities for human occupation and development, and evaluate human responses of resilience, mitigation and adaptation.

3.1.3 Glacial systems and landscapes

This section of our specification focuses on glaciated landscapes. These are dynamic environments in which landscapes continue to develop through contemporary processes but which

mainly reflect former climatic conditions associated with the Pleistocene era. The operation and outcomes of fundamental geomorphological processes and their association with distinctive landscapes are readily observable. In common with water and carbon cycles, a systems approach to study is specified.

Student engagement with subject content fosters an informed appreciation of the beauty and diversity of glaciated regions and the challenges they present for human habitation. The section offers the opportunity to exercise and develop observation skills, measurement and geospatial mapping skills, together with data manipulation and statistical skills, including those associated with and arising from fieldwork.

3.1.3.1 Glaciers as natural systems

Systems in physical geography: systems concepts and their application to the development of glaciated landscapes – inputs, outputs, energy, stores/components, flows/transfers, positive/negative feedback, dynamic equilibrium. The concepts of landform and landscape and how related landforms combine to form characteristic landscapes.

3.1.3.2 The nature and distribution of cold environments

The global distribution of cold environments.

Physical characteristics of cold environments. Climate, soils and vegetation (and their interaction).

The global distribution of past and present cold environments (polar, alpine, glacial and periglacial) and of areas affected by the Pleistocene glaciations.

3.1.3.3 Systems and processes

Glacial systems including glacial budgets.

Ablation and accumulation – historical patterns of ice advance and retreat.

Warm and cold based glaciers: characteristics and development.

Geomorphological processes – weathering: frost action, nivation; ice movement: internal deformation, rotational, compressional, extensional and basal sliding; erosion: plucking, abrasion; transportation and deposition.

Fluvioglacial processes: meltwater erosion, transportation and deposition.

Periglacial features and processes: permafrost, active layer, mass movement.

3.1.3.4 Glaciated landscape development

This content must include study of a variety of landscapes from beyond the UK and may also include UK examples.

Origin and development of glaciated landscapes.

Erosional and depositional landforms: corries, arêtes, glacial troughs, hanging valleys, truncated spurs, roches moutonnées. Characteristic glaciated landscapes.

Origin and development of landforms and landscapes of glacial deposition: drumlins, erratics, moraines, till plains. Characteristic glaciated landscapes.

Fluvioglacial landforms of erosion and deposition: meltwater channels, kames, eskers, outwash plains. Characteristic fluvioglacial landscapes.

Periglacial landforms: patterned ground, ice wedges, pingos, blockfields, solifluction lobes, terracettes, thermokarst. Characteristic periglacial landscapes.

The relationship between process, time, landforms and landscapes in glaciated settings: characteristic glaciated and periglacial landscapes.

3.1.3.5 Human impacts on cold environments

Concept of environmental fragility. Human impacts on fragile cold environments over time and at a variety of scales. Recent and prospective impact of climate change. Management of cold environments at present and in alternative possible futures.

3.1.3.6 Quantitative and qualitative skills

Students must engage with a range of quantitative and relevant qualitative skills, within the theme landscape systems. These should include observation skills, measurement and geospatial mapping skills and data manipulation and statistical skills applied to field measurement.

3.1.3.7 Case studies

Case study(ies) of glaciated environment(s) at a local scale to illustrate and analyse fundamental glacial processes, their landscape outcomes as set out above and engage with field data.

Case study of a contrasting glaciated landscape beyond the UK to illustrate and analyse how it presents challenges and opportunities for human occupation and development and evaluate human responses of resilience, mitigation and adaptation.

3.2 Human geography

3.2.1 Changing places

This section of our specification focuses on people's engagement with places, their experience of them and the qualities they ascribe to them, all of which are of fundamental importance in their lives. Students acknowledge this importance and engage with how places are known and experienced, how their character is appreciated, the factors and processes which impact upon places and how they change and develop over time. Through developing this knowledge, students will gain understanding of the way in which their own lives and those of others are affected by continuity and change in the nature of places which are of fundamental importance in their lives.

Study of the content must be embedded in two contrasting places, one to be local. The local place may be a locality, neighbourhood or small community either urban or rural. A contrasting place is likely to be distant – it could be in the same country or a different country but it must show significant contrast in terms of economic development and/or population density and/or cultural background and/or systems of political and economic organisation.

The place studies complement the requirement to embed the study of content in two contrasting places. Study of this section offers particular opportunities to exercise and develop qualitative (and quantitative) investigative techniques and practice-related observation, measurement and various mapping skills, together with data manipulation and statistical skills including those associated with and arising from fieldwork.

3.2.1.1 The nature and importance of places

The concept of place and the importance of place in human life and experience.

Insider and outsider perspectives on place.

Categories of place:

- near places and far places
- experienced places and media places.

Factors contributing to the character of places:

- Endogenous: location, topography, physical geography, land use, built environment and infrastructure, demographic and economic characteristics.
- Exogenous: relationships with other places.

3.2.1.2 Changing places – relationships, connections, meaning and representation

In relation to the local place within which students live or study and then at least one further contrasting place and encompassing local, regional, national, international and global scales:

- the ways in which the following factors: relationships and connections, meaning and representation, affect continuity and change in the nature of places and our understanding of place

and

- the ways in which students' own lives and those of others are affected by continuity and change in the nature of places and our understanding of place.

3.2.1.2.1 Relationships and connections

The impact of relationships and connections on people and place with a particular focus on:

either

changing demographic and cultural characteristics

or

economic change and social inequalities.

- How the demographic, socio-economic and cultural characteristics of places are shaped by shifting flows of people, resources, money and investment, and ideas at all scales from local to global.
- The characteristics and impacts of external forces operating at different scales from local to global, including **either** government policies **or** the decisions of multinational corporations **or** the impacts of international or global institutions.
- How past and present connections, within and beyond localities, shape places and embed them in the regional, national, international and global scales.

3.2.1.2.2 Meaning and representation

The importance of the meanings and representations attached to places by people with a particular focus on people's lived experience of place in the past and at present.

- How humans perceive, engage with and form attachments to places and how they present and represent the world to others, including the way in which everyday place meanings are bound up with different identities, perspectives and experiences.
- How external agencies, including government, corporate bodies and community or local groups make attempts to influence or create specific place-meanings and thereby shape the actions and behaviours of individuals, groups, businesses and institutions.
- How places may be represented in a variety of different forms such as advertising copy, tourist agency material, local art exhibitions in diverse media (eg film, photography, art, story,

song etc) that often give contrasting images to that presented formally or statistically such as cartography and census data.

- How both past and present processes of development can be seen to influence the social and economic characteristics of places and so be implicit in present meanings.

3.2.1.3 Quantitative and qualitative skills

Students must engage with quantitative and qualitative approaches across the theme as a whole. Quantitative data, including the use of geospatial data, must be used to investigate and present place characteristics, particular weight must be given to qualitative approaches involved in representing place, and to analysing critically the impacts of different media on place meanings and perceptions. The use of different types of data should allow the development of critical perspectives on the data categories and approaches.

3.2.1.4 Place studies

Local place study exploring the developing character of a place local to the home or study centre.

Contrasting place study exploring the developing character of a contrasting and distant place.

Place studies must apply the knowledge acquired through engagement with prescribed specification content and thereby further enhance understanding of the way students' own lives and those of others are affected by continuity and change in the nature of places. Sources must include qualitative and quantitative data to represent places in the past and present.

Both place studies must focus equally on:

- people's lived experience of place in the past and present
- and either**
- changing demographic and cultural characteristics
- or**
- economic change and social inequalities.

Suitable data sources could include:

- statistics, such as census data
- maps
- geo-located data
- geospatial data, including geographic information systems (GIS) applications
- photographs
- text, from varied media
- audio-visual media
- artistic representations
- oral sources, such as interviews, reminiscences, songs, etc.

3.3 People and the environment

3.3.1 Hazards

This optional section of our specification focuses on the lithosphere and the atmosphere, which intermittently but regularly present natural hazards to human populations, often in dramatic and sometimes catastrophic fashion. By exploring the origin and nature of these hazards and the various ways in which people respond to them, students are able to engage with many dimensions

of the relationships between people and the environments they occupy. Study of this section offers the opportunity to exercise and develop observation skills, measurement and geospatial mapping skills, together with data manipulation and statistical skills, including those associated with and arising from fieldwork.

3.3.1.1 The concept of hazard in a geographical context

Nature, forms and potential impacts of natural hazards (geophysical, atmospheric and hydrological). Hazard perception and its economic and cultural determinants. Characteristic human responses – fatalism, prediction, adjustment/adaptation, mitigation, management, risk sharing – and their relationship to hazard incidence, intensity, magnitude, distribution and level of development. The Park model of human response to hazards. The Hazard Management Cycle.

3.3.1.2 Plate tectonics

Earth structure and internal energy sources. Plate tectonic theory of crustal evolution: tectonic plates; plate movement; gravitational sliding; ridge push, slab pull; convection currents and sea-floor spreading.

Destructive, constructive and conservative plate margins. Characteristic processes: seismicity and vulcanicity. Associated landforms: young fold mountains, rift valleys, ocean ridges, deep sea trenches and island arcs, volcanoes.

Magma plumes and their relationship to plate movement.

3.3.1.3 Volcanic hazards

The nature of vulcanicity and its relation to plate tectonics: forms of volcanic hazard: nuées ardentes, lava flows, mudflows, pyroclastic and ash fallout, gases/acid rain, tephra. Spatial distribution, randomness, magnitude, frequency, regularity and predictability of hazard events.

Impacts: primary/secondary, environmental, social, economic, political. Short and long-term responses: risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation.

Impacts and human responses as evidenced by a recent volcanic event.

3.3.1.4 Seismic hazards

The nature of seismicity and its relation to plate tectonics: forms of seismic hazard: earthquakes, shockwaves, tsunamis, liquefaction, landslides. Spatial distribution, randomness, magnitude, frequency, regularity, predictability of hazard events.

Impacts: primary/secondary; environmental, social, economic, political. Short and long-term responses; risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation.

Impacts and human responses as evidenced by a recent seismic event.

3.3.1.5 Storm hazards

The nature of tropical storms and their underlying causes. Forms of storm hazard: high winds, storm surges, coastal flooding, river flooding and landslides. Spatial distribution, magnitude, frequency, regularity, predictability of hazard events.

Impacts: primary/secondary, environmental, social, economic, political. Short and long-term responses: risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation.

Impacts and human responses as evidenced by two recent tropical storms in contrasting areas of the world.

3.3.1.6 Fires in nature

Nature of wildfires. Conditions favouring intense wild fires: vegetation type, fuel characteristics, climate and recent weather and fire behaviour. Causes of fires: natural and human agency. Impacts: primary/secondary, environmental, social, economic, political. Short and long-term responses; risk management designed to reduce the impacts of the hazard through preparedness, mitigation, prevention and adaptation.

Impact and human responses as evidenced by a recent wild fire event.

3.3.1.7 Case studies

Case study of a multi-hazardous environment beyond the UK to illustrate and analyse the nature of the hazards and the social, economic and environmental risks presented, and how human qualities and responses such as resilience, adaptation, mitigation and management contribute to its continuing human occupation.

Case study at a local scale of a specified place in a hazardous setting to illustrate the physical nature of the hazard and analyse how the economic, social and political character of its community reflects the presence and impacts of the hazard and the community's response to the risk.

3.3.2 Contemporary urban environments

This optional section of our specification focuses on urban growth and change which are seemingly ubiquitous processes and present significant environmental and social challenges for human populations. The section examines these processes and challenges and the issues associated with them, in particular the potential for environmental sustainability and social cohesion. Engaging with these themes in a range of urban settings from contrasting areas of the world affords the opportunity for students to appreciate human diversity and develop awareness and insight into profound questions of opportunity, equity and sustainability. Study of this section offers the opportunity to exercise and develop observation skills, measurement and geospatial mapping skills, together with data manipulation and statistical skills, including those associated with and arising from fieldwork.

3.3.2.1 Urbanisation

Urbanisation and its importance in human affairs. Global patterns of urbanisation since 1945. Urbanisation, suburbanisation, counter-urbanisation, urban resurgence. The emergence of megacities and world cities and their role in global and regional economies.

Economic, social, technological, political and demographic processes associated with urbanisation and urban growth.

Urban change: deindustrialisation, decentralisation, rise of service economy.

Urban policy and regeneration in Britain since 1979.

3.3.2.2 Urban forms

Contemporary characteristics of mega/world cities. Urban characteristics in contrasting settings. Physical and human factors in urban forms. Spatial patterns of land use, economic inequality, social segregation and cultural diversity in contrasting urban areas, and the factors that influence them.

New urban landscapes; town centre mixed developments, cultural and heritage quarters, fortress developments, gentrified areas, edge cities. The concept of the post-modern western city.

3.3.2.3 Social and economic issues associated with urbanisation

Issues associated with economic inequality, social segregation and cultural diversity in contrasting urban areas.

Strategies to manage these issues.

3.3.2.4 Urban climate

The impact of urban forms and processes on local climate and weather.

Urban temperatures: the urban heat island effect. Precipitation: frequency and intensity. Fogs and thunderstorms in urban environments. Wind: the effects of urban structures and layout on wind speed, direction and frequency. Air quality: particulate and photo-chemical pollution.

Pollution reduction policies.

3.3.2.5 Urban drainage

Urban precipitation, surfaces and catchment characteristics; impacts on drainage basin storage areas; urban water cycle: water movement through urban catchments as measured by hydrographs.

Issues associated with catchment management in urban areas. The development of sustainable urban drainage systems (SUDS).

River restoration and conservation in damaged urban catchments with reference to a specific project. Reasons for and aims of the project; attitudes and contributions of parties involved; project activities and evaluation of project outcomes.

3.3.2.6 Urban waste and its disposal

Urban physical waste generation: sources of waste: industrial and commercial activity, personal consumption. Relation of waste components and waste streams to economic characteristics, lifestyles and attitudes. The environmental impacts of alternative approaches to waste disposal: unregulated, recycling, recovery, incineration, burial, submergence and trade.

Comparison of incineration and landfill approaches to waste disposal in relation to a specified urban area.

3.3.2.7 Other contemporary urban environmental issues

Environmental problems in contrasting urban areas: atmospheric pollution, water pollution and dereliction.

Strategies to manage these environmental problems.

3.3.2.8 Sustainable urban development

Impact of urban areas on local and global environments. Ecological footprint of major urban areas. Dimensions of sustainability: natural, physical, social and economic. Nature and features of sustainable cities. Concept of liveability.

Contemporary opportunities and challenges in developing more sustainable cities.

Strategies for developing more sustainable cities.

3.3.2.9 Case studies

Case studies of two contrasting urban areas to illustrate and analyse key themes set out above, to include:

- patterns of economic and social well-being
- the nature and impact of physical environmental conditions.

with particular reference to the implications for environmental sustainability, the character of the study areas and the experience and attitudes of their populations.

3.4 Geography fieldwork investigation

All students are required to undertake fieldwork in relation to processes in both physical and human geography. Students must undertake a minimum of two days of fieldwork during their AS course. Fieldwork can be completed in a number of ways: locally or further afield, on full days or on part days. Schools and colleges will be required to confirm that all AS geography students have been given an opportunity to fulfil this requirement.

Schools and colleges are required to provide a fieldwork statement which confirms each student has undertaken two days of geographical fieldwork in relation to processes in both physical and human geography. Schools and colleges must provide the fieldwork statement by 15 May in the year of entry. Any failure to provide this statement in a timely manner will be treated as malpractice or maladministration (under Ofqual's General Condition A8 (Malpractice and maladministration)).

Students will not be asked to hand in a completed enquiry although, for the exam, they do need to be familiar with all the stages of fieldwork-based enquiry. Students must be taught and may be asked questions on any of the following.

- Preparation for fieldwork, including background reading, drawing up aims and objectives for the enquiry, planning research in the field and from secondary sources, using data sampling techniques and carrying out health and safety procedures.
- Collection of primary data in the field and using secondary data sources.
- Processing and presenting data using relevant graphical and cartographical techniques.
- Analysing data, including using statistical techniques where relevant.
- Drawing conclusions related back to the original aims and objectives and linking these conclusions to both the place studied and the general ideas forming the basis of the enquiry.
- Reviewing the success, or otherwise, of all stages of the enquiry.
- Considering how the enquiry could be further developed.

Questions in the exam could be asked so as to test the students' general understanding of the fieldwork enquiry process or they could ask for specific details of each student's own individual fieldwork enquiry.

It is accepted that some schools or colleges will need to carry out data collection in groups. However, examiners will expect candidates to show that they have been personally involved in all the stages of the enquiry and have had opportunities to use their own initiative, at all stages, to develop their enquiries.

3.5 Geographical skills checklist

Competence in geographical skills should be developed during study of the course content, in an integrated way and not as a separate theme or topic. While the relative balance of quantitative and qualitative methods and skills will differ between each of the core elements and the options,

students must be introduced to an appropriate balance of quantitative and qualitative across the specification as a whole.

As applicable to their chosen specification content AS students should:

- understand the nature and use of different types of geographical information, including qualitative and quantitative data, primary and secondary data, images, factual text and discursive/creative material, digital data, numerical and spatial data and other forms of data, including crowd-sourced and big data
- collect, analyse and interpret such information, and demonstrate the ability to understand and apply suitable analytical approaches for the different information types
- 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
- communicate and evaluate findings, draw well-evidenced conclusions informed by wider theory, and construct extended written arguments about geographical matters.

Students at AS are required to demonstrate, as appropriate, the skills and approaches detailed below.

The level of accuracy, sophistication and detail are all expected to be greater at AS than at GCSE, and similarly between AS and A-level.

3.5.1 Qualitative skills and quantitative skills

Students should develop the following with respect to **qualitative data**:

- use and understanding of a mixture of methodological approaches, including interviews
- interpretation and evaluation of a range of source material including textual and visual sources
- understanding of the opportunities and limitations of qualitative techniques such as coding and sampling, and appreciation of how they actively create particular geographical representations
- understanding of the ethical and socio-political implications of collecting, studying and representing geographical data about human communities.

Students should develop the following with respect to **quantitative data**:

- understanding of what makes data geographical and the geospatial technologies (eg GIS) that are used to collect, analyse and present geographical data
- an ability to collect and to use digital and geo-located data, and understanding of a range of approaches to use and analyse such data
- understanding of the purposes and difference between the following and be able to use them in appropriate contexts:
 - descriptive statistics of central tendency and dispersion
 - descriptive measures of difference and association, inferential statistics and the foundations of relational statistics
 - measurement, measurement errors, and sampling
 - understanding of the ethical and socio-political implications of collecting, studying and representing geographical data about human communities.

3.5.2 Specific skills

The following sections identify specific qualitative and quantitative skills to be developed.

3.5.2.1 Core skills

- Use and annotation of illustrative and visual material: base maps, sketch maps, OS maps (at a variety of scales), diagrams, graphs, field sketches, photographs, geospatial, geo-located and digital imagery.
- Use of overlays, both physical and electronic.
- Literacy – use of factual text and discursive/creative material and coding techniques when analysing text.
- Numeracy – use of number, measure and measurement.
- Questionnaire and interview techniques.

3.5.2.2 Cartographic skills

- Atlas maps.
- Weather maps – including synoptic charts (if applicable).
- Maps with located proportional symbols.
- Maps showing movement – flow lines, desire lines and trip lines.
- Maps showing spatial patterns – choropleth, isoline and dot maps.

3.5.2.3 Graphical skills

- Line graphs – simple, comparative, compound and divergent.
- Bar graphs – simple, comparative, compound and divergent.
- Scatter graphs, and the use of best fit line.
- Pie charts and proportional divided circles.
- Triangular graphs.
- Graphs with logarithmic scales.
- Dispersion diagrams.

3.5.2.4 Statistical skills

- Measures of central tendency – mean, mode, median.
- Measures of dispersion – range, inter-quartile range and standard deviation.
- Inferential and relational statistical techniques to include Spearman's rank correlation and application of significance tests.

3.5.2.5 ICT skills

- Use of remotely sensed data (as described above in Core skills).
- Use of electronic databases.
- Use of ICT to generate evidence of many of the skills provided above such as producing maps, graphs and statistical calculations.

4 Scheme of assessment

Find past papers and mark schemes, and specimen papers for new courses, on our website at aqa.org.uk/pastpapers

This specification is designed to be taken over one or two years.

This is a linear qualification. In order to achieve the award, students must complete all assessments at the end of the course and in the same series.

AS exams and certification for this specification are available for the first time in May/June 2017 and then every May/June for the life of the specification.

All materials are available in English only.

Our AS exams in Geography include questions that allow students to demonstrate their ability to:

- draw together their skills, knowledge and understanding from across the full course of study
- provide extended responses.

For example, Sections A and B of Components 1 and 2 contain extended response questions. An 'extended response' is evidence of sufficient length generated to allow students to demonstrate their ability to construct and develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured.

4.1 Aims

Courses based on this specification should encourage students 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.

4.2 Assessment objectives

Assessment objectives (AOs) are set by Ofqual and are the same across all AS Geography specifications and all exam boards.

The exams and non-exam assessment will measure how students have achieved the following assessment objectives.

- AO1: Demonstrate knowledge and understanding of places, environments, concepts, processes, interactions and change, at a variety of scales (30–40%).
- AO2: Apply knowledge and understanding in different contexts to interpret, analyse and evaluate geographical information and issues (30–40%).
- 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%).

Assessment objective weightings for AS Geography

Assessment objectives (AOs)	Component weightings (approx %)		Overall weighting (approx %)
	Component 1	Component 2	
AO1	20–25	15–18	30–40
AO2	15–20	15–18	30–40
AO3	0–10	10–20	20–30
Overall weighting of components	50	50	100

4.3 Assessment weightings

The marks awarded on the papers will be scaled to meet the weighting of the components. Students' final marks will be calculated by adding together the scaled marks for each component. Grade boundaries will be set using this total scaled mark. The scaling and total scaled marks are shown in the table below.

Component	Maximum raw mark	Scaling factor	Maximum scaled mark
Component 1: Physical geography and people and the environment	80	x1	80
Component 2: Human geography and geography fieldwork investigation	80	x1	80
Total scaled mark:			160

5 General administration

You can find information about all aspects of administration, as well as all the forms you need, at aqa.org.uk/examsadmin

5.1 Entries and codes

You only need to make one entry for each qualification – this will cover all the question papers, non-exam assessment and certification.

Every specification is given a national discount (classification) code by the Department for Education (DfE), which indicates its subject area.

If a student takes two specifications with the same discount code, further and higher education providers are likely to take the view that they have only achieved one of the two qualifications. Please check this before your students start their course.

Qualification title	AQA entry code	DfE discount code
AQA Advanced Subsidiary GCE in Geography	7036	3910 for post-16, RF4 for 14–16

This specification complies with:

- Ofqual *General conditions of recognition* that apply to all regulated qualifications
- Ofqual GCE qualification level conditions that apply to all GCEs
- Ofqual GCE subject level conditions that apply to all GCEs in this subject
- all other relevant regulatory documents.

The Ofqual qualification accreditation number (QAN) is 601/8971/X.

5.2 Overlaps with other qualifications

There is overlapping content in the AS and A-level Geography specifications. This helps you teach the AS and A-level together.

5.3 Awarding grades and reporting results

The AS qualification will be graded on a five-point scale: A, B, C, D and E.

Students who fail to reach the minimum standard for grade E will be recorded as U (unclassified) and will not receive a qualification certificate.

5.4 Resits and shelf life

Students can resit the qualification as many times as they wish, within the shelf life of the qualification.

5.5 Previous learning and prerequisites

There are no previous learning requirements. Any requirements for entry to a course based on this specification are at the discretion of schools and colleges.

However, we recommend that students should have the skills and knowledge associated with a GCSE Geography course or equivalent.

5.6 Access to assessment: diversity and inclusion

General qualifications are designed to prepare students for a wide range of occupations and further study. Therefore our qualifications must assess a wide range of competences.

The subject criteria have been assessed to see if any of the skills or knowledge required present any possible difficulty to any students, whatever their ethnic background, religion, sex, age, disability or sexuality. If any difficulties were encountered, the criteria were reviewed again to make sure that tests of specific competences were only included if they were important to the subject.

As members of the Joint Council for Qualifications (JCQ) we participate in the production of the JCQ document *Access Arrangements and Reasonable Adjustments: General and Vocational qualifications*. We follow these guidelines when assessing the needs of individual students who may require an access arrangement or reasonable adjustment. This document is published on the JCQ website at jcq.org.uk

5.6.1 Students with disabilities and special needs

We can make arrangements for disabled students and students with special needs to help them access the assessments, as long as the competences being tested are not changed. Access arrangements must be agreed **before** the assessment. For example, a Braille paper would be a reasonable adjustment for a Braille reader but not for a student who does not read Braille.

We are required by the Equality Act 2010 to make reasonable adjustments to remove or lessen any disadvantage that affects a disabled student.

If you have students who need access arrangements or reasonable adjustments, you can apply using the Access arrangements online service at aqa.org.uk/eaqa

5.6.2 Special consideration

We can give special consideration to students who have been disadvantaged at the time of the assessment through no fault of their own – for example a temporary illness, injury or serious problem such as the death of a relative. We can only do this **after** the assessment.

Your exams officer should apply online for special consideration at aqa.org.uk/eaqa

For more information and advice about access arrangements, reasonable adjustments and special consideration please see aqa.org.uk/access or email accessarrangementsqueries@aqa.org.uk

5.7 Working with AQA for the first time

If your school or college has not previously offered any AQA specification, you need to register as an AQA centre to offer our specifications to your students. Find out how at aqa.org.uk/becomeacentre

5.8 Private candidates

This specification is available to private candidates.

A private candidate is someone who enters for exams through an AQA-approved school or college but is not enrolled as a student there.

A private candidate may be self-taught, home-schooled or have private tuition, either with a tutor or through a distance learning organisation. You must be based in the UK.

If you have any queries as a private candidate, you can:

- speak to the exams officer at the school or college where you intend to take your exams
- visit our website at aqa.org.uk/privatecandidates
- email: privatecandidates@aqa.org.uk

Get help and support

Visit our website for information, guidance, support and resources at aqa.org.uk/7036

You can talk directly to the Geography subject team:

E: geography@aqa.org.uk

T: 01483 477 791