Specification

Edexcel GCSE in Geography B (1313) First examination 2003 November 2000



Edexcel is one of the leading examining and awarding bodies in the UK and throughout the world. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers.

Through a network of UK and overseas offices, Edexcel's centres receive the support they need to help them deliver their education and training programmes to learners.

For further information please call our Customer Response Centre on 0870 240 9800, or visit our website at www.edexcel.org.uk

Acknowledgements

This specification has been produced by Edexcel on the basis of consultation with teachers, examiners, consultants and other interested parties. Edexcel recognises and values all those who contributed their time and expertise to the development of GCSE specifications.

Authorised by Sue Parker

Publications Code UG008972

All the material in this publication is copyright
© Edexcel Foundation 2000

Contents

Introduction	1
Key features	1
Summary of the specification content	1
Summary of scheme of assessment	2
Availability of external assessment	2
Prior learning and progression	2
Forbidden combinations and links with other subjects	3
Specification aims and assessment objectives	4
National Qualifications Framework criteria	4
Aims	4
Assessment objectives	4
Scheme of assessment	5
Entry tiers	5
Papers 1F and 3H	5
Papers 2F and 4H	5
Internal assessment moderation procedures	6
Relationship of assessment objectives to external assessment	6
Quality of written communication	6
Awarding, reporting and equivalence	7
Assessment language	7
Students with particular requirements	7
Private candidates	7
Specification content	8
Specification structure	8
The layout of the content pages	9
Geographical and transferable skills	10
Using the specification in Wales and Northern Ireland	10
Unit A1 (core): Providing for population change – population dynamics	12
Unit A2 (core): Planning for change	14
Unit A3 (core): Coping with environmental change	16
Unit B4 (option): Use and abuse of the environment – Water	18

Unit B5 (option): Use and abuse of the environment – Weather and	
climate	19
Unit C6 (option): Use and abuse of the environment – Farming	20
Unit C7 (option): Use and abuse of the environment – Recreation antourism	d 21
Internal assessment	22
Introduction	22
Designing and planning the coursework	22
Incorporating ICT in coursework	23
The presentation of the completed investigation	24
The assessment of the coursework	24
Return of coursework	30
Grade descriptions	31
The wider curriculum	33
Key skills	33
Spiritual, moral, ethical, social and cultural issues	33
Education for citizenship	33
Information and communication technology	34
Environmental education, health and safety education and the Euro and global dimension	pean 34
Textbooks and other teaching resources	35
Support and training	36
Support	36
Training	36
Website	36
Edexcel publications	37
Regional offices and Customer Response Centre	37
Appendices	39
Appendix 1 – Key skills	41
Appendix 2 – Procedures for moderation of internal assessment	57
Appendix 3 – Individual candidate record sheet (ICRS)	63

Introduction

Edexcel GCSE Geography B provides students with the opportunity to investigate many of the major issues that currently face today's citizens, and it looks ahead to the changes that are likely to affect students as the citizens of the future. There is a strong focus on the ideas of sustainability, environmental responsibility and decision making.

Edexcel's GCSE Geography specification A is also available, and offers an alternative thematic approach to the subject.

Key features

- Emphasises a balanced understanding of physical, human and environmental geography.
- Includes core units which focus on contemporary issues and future changes.
- Offers a choice of optional units which focus on the theme of 'The use and abuse of the environment'.
- Designed to have a clear and manageable case study requirement.
- Encourages a study of geography through people-environment interrelationships.
- Supports an enquiry-based approach to learning.
- Includes a decision-making exercise based on pre-released resources.
- Allows a free choice of coursework topic.
- Uses geographical study to develop a wide range of skills, including opportunities to develop all six key skills.
- Provides strong support and links with centres through senior examiners, local advisers and Edexcel regional offices.

Summary of the specification content

Core units (compulsory)	
Unit A1: Providing for population change	Pages 12-13
Unit A2: Planning for change	Pages 14-15
Unit A3: Coping with environmental change	Pages 16-17
Optional units:	
The use and abuse of the environment (choose one B unit and one C unit)	
Unit B4: Water	Page 18
Unit B5: Weather and climate	Page 19
Unit C6: Farming	Page 20
Unit C7: Recreation and tourism	Page 21

Summary of scheme of assessment

The scheme of assessment is in two tiers. Foundation Tier candidates take Papers 1F and 2F, and submit one item of coursework. This tier is targeted at grades C to G. Higher Tier candidates take Papers 3H and 4H and also submit one item of coursework. This tier is targeted at grades A* to D.

Paper/component	Mode of assessment	Weighting	Length
1F or 3H	Decision-making exercise based on pre-released resources	25%	1hour 15 mins
2F or 4H	Written examination	50%	2 hours
Coursework	Investigation based on primary data collection	25%	

Availability of external assessment

First assessment of this specification will be in June 2003. Assessment will be available in each summer examination session thereafter.

Prior learning and progression

This specification builds on the knowledge, understanding and skills established by the National Curricula for England, Wales and Northern Ireland at Key Stages 1, 2 and 3.

In particular, it builds on the four aspects of geography identified in the English National Curriculum:

- geographical skills and enquiry
- knowledge and understanding of places
- knowledge and understanding of patterns and processes
- knowledge and understanding of environmental change and sustainable development and the three strands of geography identified in the Welsh National Curriculum:
- geographical enquiry and skills
- places
- themes.

It provides a foundation for further study of Geography and related subjects at levels 2 and 3 in the National Qualifications Framework, including Vocational GCSEs, AS and Advanced GCEs, and VCEs. Subjects where the knowledge, understanding and skills developed through this GCSE will be particularly relevant include Geology, Environmental Sciences, Travel & Tourism and Leisure & Recreation.

In addition, completion of a GCSE course can lead directly into employment, often with work-related training.

Forbidden combinations and links with other subjects

Every specification is assigned to a national classification code indicating the subject area to which it belongs. Centres should be aware that students who enter for more than one GCSE qualification with the same classification code will have only one grade (the highest) counted for the purpose of the school and college performance tables.

The classification code for this specification is 3910.

Candidates entering for this specification may not, in the same series of examinations enter for any other specification with the title 'Geography'.

There are complementary links with other qualifications at levels 1 and 2 of the National Qualifications Framework, particularly the Foundation and Intermediate GNVQs in Land & Environment and in Leisure & Tourism. These qualifications offer Geography students the opportunity of applying in a different context some of the knowledge, understanding and skills developed through study of this specification.

Specification aims and assessment objectives

National Qualifications Framework criteria

This specification is based on the common criteria and the GCSE criteria, which are prescribed by the regulatory authorities including QCA and are mandatory for all awarding bodies. It is also derived from the prescribed subject criteria for Geography.

Aims

The specification gives students opportunities to:

- acquire knowledge and understanding of a range of places, environments and geographical patterns at a range of scales from local to global, as well as an understanding of the physical and human processes, including decision-making, which affect their development
- develop a sense of place and an appreciation of the environment, as well as awareness of the
 ways in which people and environments interact, the importance of sustainable development
 in those interactions, and the opportunities, challenges and constraints that face people in
 different places
- develop an understanding of global citizenship and the ways in which places and environments are interdependent
- appreciate that the study of geography is dynamic, not only because places, geographical features, patterns and issues change, but also because new ideas and methods lead to new interpretations
- acquire and apply the skills and techniques including those of mapwork, fieldwork and
 information and communication technology (ICT) needed to conduct geographical study
 and enquiry.

Assessment objectives

Candidates must demonstrate their ability to

- AO1 show knowledge of places, environments and themes at a range of scales from local to global
- **AO2** show understanding of the specified content
- AO3 apply their knowledge and understanding in a variety of physical and human contexts
- **AO4** select and use a variety of skills and techniques appropriate to geographical studies and enquiry.

Scheme of assessment

Entry tiers

Candidates for this qualification must be entered for one of two tiers. The Higher Tier is targeted at grades A* to D, and the Foundation Tier is targeted at grades C to G. A safety net is provided for candidates entered for the Higher Tier in this specification, and an allowed grade E can be awarded on the Higher Tier. Candidates failing to achieve grade E on the Higher Tier will be reported as Unclassified.

Assessment of the specification consists of:

- For Higher Tier candidates the decision making exercise (Paper 3H, 1 hour 15 minutes), a written paper (Paper 4H, 2 hours) and one piece of coursework
- For Foundation Tier candidates the decision making exercise (Paper 1F, 1 hour 15 minutes), a written paper (Paper 2F, 2 hours) and one piece of coursework.

Papers 1F and 3H

Decision making exercise, 1 hour 15 minutes

These papers will be taken ahead of the main examination period, normally in the second week of May. They are decision making exercises and will focus on an issue arising from one of the specification core units (Units A1, A2 and A3.) The same resources will be used for both papers and candidates will be provided with the resource booklets 21 days before the examination is due to take place. Teachers have the opportunity to work through the resources with their students, making sure that the students understand what the resources show, and what the text means. This allows students to become familiar with the materials and assimilate the information. Candidates will not be allowed to take the original resource booklet into the examination room but will be provided with a fresh set for the examination. The examination papers will consist of a series of short, structured questions, with an incline of difficulty leading up to a piece of extended writing in which the student comes to a decision and justifies his/her choice. Differentiation will be achieved by:

- task, with more demanding tasks set in Paper 3H; and
- outcome, since there will be some common questions for which the mark schemes will credit different levels of response.

Papers 2F and 4H

Written paper, 2 hours

These papers will consist of three sections.

- **Section A** will consist of **two** compulsory questions, testing two of Units A1, A2 and A3. Each question will be marked out of 30. The unit which formed the focus of the decision making exercise (Paper 1F or 3H) will not be tested again in Paper 2F or 4H.
- **Section B** will consist of **two** questions, testing Units B4 and B5. Candidates choose **one** question from this section.

• **Section** C will consist of **two** questions, testing Units C6 and C7. Candidates choose **one** question from this section.

All questions will be structured with an incline of difficulty, and will offer opportunities for extended writing.

Differentiation will be achieved by:

- task stimulus material may differ between the tiers, and more demanding tasks will be set in Paper 4H; and
- outcome since there will be some common questions for which the mark schemes will credit different levels of response.

A variety of resources will be made available in the examination, which will include a 1:50,000 Ordnance Survey map extract, and may include maps at other scales, diagrams, newspaper articles and photographs.

Internal assessment moderation procedures

Candidates are required to submit one piece of coursework, which must be a geographical investigation supported by fieldwork. Full details can be found in the *Internal assessment* section (page 22). To assist centres and to provide all the information required within this document, detailed internal assessment moderation procedures are given in *Appendix 2*. If it proves necessary to amend these procedures in any way in the future, centres will receive separate notification.

Relationship of assessment objectives to external assessment

Assessment objective	Papers 1F/3H	Papers 2F/4H	Coursework	Total
Knowledge	5	15	0	20
Understanding	5	15	0	20
Application of knowledge and understanding	5	10	5	20
Skills	10	10	20	40
Total	25	50	25	100

This table shows the intended weightings for each assessment component. However, in any particular examination series, the weightings for the examination papers may vary very slightly.

Quality of written communication

The quality of written communication will be assessed in all papers, wherever a question requires a response in extended writing, and in the coursework, as part of assessment objective AO4. Candidates will be assessed on their ability to:

- present relevant information in a form that suits its purpose
- ensure that text is legible and that spelling, punctuation and grammar are accurate, so that meaning is clear
- use a suitable structure and style of writing.

Awarding, reporting and equivalence

The grading, awarding and certification of this specification will comply with the requirements of the GCSE and GCE A/AS Code of Practice for courses starting in September 2001, which is published by QCA. Qualifications will be graded and certificated on an eight grade scale from A* to G

GCSEs have broad equivalence to General National Vocational Qualifications in the following terms:

- two GCSEs at grade D to G and two GCSEs at grade A* to C are equivalent to one threeunit GNVQ at Foundation and Intermediate level respectively
- four GCSEs at grades D to G and four GCSEs at grade A* to C are equivalent to one sixunit GNVQ at Foundation and Intermediate level respectively.

Assessment language

Assessment of this specification will be available in English only. Assessment materials will be published in English only and all written and spoken work submitted for examination and moderation must be produced in English.

Students with particular requirements

Regulations and guidance relating to students with special requirements are published annually by the Joint Council for General Qualifications and are circulated to examinations officers. Further copies of guidance documentation may be obtained from the following address or by telephoning 0870 240 9800.

Edexcel will assess whether or not special consideration or concession can be made for students with particular requirements. Requests should be addressed to:

Special Requirements Edexcel Foundation Stewart House 32 Russell Square London WC1B 5DN

Private candidates

This specification is not available to private candidates.

Specification content

The specification content is set out in detail on pages 12-21. It is formulated within the framework provided by the Geography subject criteria. Teachers have the freedom to construct their own teaching programme based upon this specification, but any programme must fulfil the following requirements:

- the study of a range of themes which, taken together, involve work at different scales (local, regional, national, international, global), in different parts of the world and in different types of environment; contexts for thematic studies must include the United Kingdom (and for centres in Wales, Scotland or Northern Ireland, a focus on their home region), the European Union and countries in various states of development
- the development of a range of skills used in geographical study and enquiry (including the use of ICT), namely:
 - acquisition and use of geographical vocabulary
 - identification of geographical questions and issues and establishing appropriate sequences of investigation
 - identification and collection of evidence required, from primary sources (including fieldwork), secondary sources (including maps at a variety of scales, photographs, satellite images, statistical data) and ICT-based sources, and recording and presenting it (including use of maps, graphs and diagrams)
 - description, analysis and interpretation of evidence, making decisions, drawing and justifying conclusions and communicating findings in ways appropriate to the task and audience
 - evaluation of the methods of collecting, presenting and analysing evidence, as well as the validity and limitations of evidence and conclusions.

Specification structure

The specification is made up of three core units:

- Unit A1 Providing for population change
- Unit A2 Planning for change
- Unit A3 Coping with environmental change

and four optional units, which address the theme of 'The use and abuse of the environment':

- Unit B4 Water
- Unit B5 Weather and climate
- Unit C6 Farming
- Unit C7 Recreation and tourism.

Students should study **all** parts of the core units, and **one** of the 'B' option units, and **one** of the 'C' option units. The core units are designed to be of approximately equal length, and each requires about 12 weeks' teaching, while the optional units are designed to be of half the length of a core unit. Sample teaching programmes are published in the Specification Guide which accompanies this specification.

The layout of the content pages

Enquiry questions and *focus case studies*

Each unit is divided into a number of enquiry questions which address the main issues involved. The 'focus case studies' are those which **must** be studied in the teaching of the unit; these are the **only** case studies that students may be specifically asked to recall in the examination. For each of these studies candidates will be expected to demonstrate good locational knowledge. In this way, the case study requirement is made absolutely clear, and is kept to a manageable level.

Key questions

Each enquiry question is broken down into a number of key questions. These should form the basis of the teaching programme, and are designed to give a focus to the enquiry-based learning of one lesson or small group of lessons. The terminal examination papers are based on these key questions.

Content

This specifies what must be studied in relation to each key question. Issues should be studied in the context of a range of real places. Candidates will not be required to refer to these places in the examination, although such references would be credited if offered.

Guidance

The guidance column does not specify extra content, but

- provides further non-mandatory detail of the material in the Content column
- helps clarify the depth to which the content and focus case studies should be covered
- suggests appropriate contexts and case studies.

Scale

The scale column (S) indicates the scale at which the content should be covered in order to answer questions set in the examination. Not all the content can be related to a particular scale, however.

Key skills

The key skills column (K/S) suggests where there may be opportunities to develop key skills evidence. These opportunities are more fully developed in *Appendix 1* at the back of this specification.

(Note: Throughout the specification content on pages 12-21, More Economically Developed Countries are referred to as MEDCs, and Less Economically Developed Countries as LEDCs.)

Geographical and transferable skills

Throughout their course, students should develop and learn to select from a range of geographical and transferable skills. These should be acquired both through fieldwork and the writing-up of the investigation, and through other exercises using secondary data. Specifically, candidates entered for the examination will be expected to be able to:

- use a range of source materials, including maps at a variety of scales (a 1:50,000 Ordnance Survey map will be included in the examination); photographs (taken at ground level, and vertical and oblique aerial photographs); satellite images; simple statistical data (including tables, graphs, proportional symbols and other diagrams)
- depict information in simple map and diagrammatic form, eg drawing/completing line graphs, bar graphs, (including divided bars), scattergraphs, flow lines, annotated sketch maps and diagrams, field sketches
- use appropriate vocabulary, including geographical vocabulary, in written work.

Using the specification in Wales and Northern Ireland

Where reference is made to studies in the context of the United Kingdom, centres in Wales and Northern Ireland should focus particularly on their home region. Examples suggested in the 'Guidance' column of the specification include some from Wales and Northern Ireland, but there are many alternative ways in which centres can develop programmes of study which focus on their home region.

For centres in Wales there are opportunities to build on the Curriculum Cymreig and the Geography requirements of the Welsh National Curriculum, when appropriate. For example, there is a requirement that students should learn how decisions made at different levels have an influence on developments in Wales. This can be met by choosing a trans-national corporation with operations in Wales in Unit 2.4, and by studying the impact of EU policies on farming in Wales in Unit 6.1.

Unit A1 (core): Providing for population change – population dynamics

	Z	well as the more obvious challenges. NGOs involved might be Population Concern, Oxfam, Save the Children and Age Concern. Much of this information is available through websites and CD ROMs, eg, 'The population and development database' CD ROM (Population Concern, 1998).	and health provision. The roles of governments, individuals and NGOs.	ageing population?	population change in an MEDC and an LEDC
II	z z	These questions could be examined in the context of the two countries chosen for 3.2, but this time students may be asked to refer to case study material in the examination. Both the LEDC (eg. China, India) and the MEDC (eg, UK, Italy) studies offer students the chance to look for the opportunities involved, as	 a) Dependency ratios, and issues such as family planning and education. The roles of governments, individuals and NGOs. b) Dependency ratios, and issues of welfare 	a) How do LEDCs cope with a growing number of young people?b) How do MEDCs deal with an	 1.3 What are the social and economic implications of population change? Implications of
z	Z Z	reasons why birth rates, death rates and natural increase vary between countries at different states of development. Reasons for differences may include health, education, religion, standard of living, government attitudes. It would help if the effects of migration were studied in the context of contrasting countries, but students will not be asked to refer to case study material in the examination.	 a) The role of birth and death rates and an explanation of why these differ between countries in different states of development. The use of population pyramids to show details of structure. b) The impact of international migration, both emigration and immigration, on a country's total population and structure. 	a) what factors contribute to natural changes in population size and structure? b) How does migration contribute to these changes?	population changing?
Z	z o	The time scale considered is long enough for the exponential nature of the growth to be evident. Case studies of individual countries/regions are not required in the exam, but will help make students aware that growth rates vary from rapid increase through static to actual declines in some areas.			
K/S	N.	Guidance	Content	Key questions	Enquiry questions and focus case studies

Unit A1 (continued): Population and resources

	•		:	מ	SIZE
and focus case studies	rey quesuous	Contract	Guidance	٥	Ž
1.4 What are resources?	a) What are the differences between renewable and non-renewable resources?	a) The characteristics of renewable and non-renewable resources.	It would be helpful to look at the characteristics of some examples of resources in each category, as well as definitions of the terms used in the content.		
	b) What are the advantages and disadvantages of each?	b) The issues of exploitation, conservation and sustainability, with reference to renewable and non-renewable resources.	Knowledge of case studies will not be required in the examination, but the case studies used with 1.6 below could be introduced here.		
1.5 What are the resource implications of population change?	a) Will there be enough resources to support future generations?	a) The Malthusian link between population growth and resources.	The link could be illustrated by a graph showing population growth against growth in resources. The evaluation could be based around a consideration of	z Q	С
F 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	b) How certain can we be?	b) An evaluation of this theory.	why the predictions have not come true yet, alternative theories and how different attitudes in the future (eg to recycling and sustainability) might have an effect.		
1.6 How are energy resources being used?	How can energy be produced?	a) Thermal energy production at a national scale in an MEDC, and a small scale renewable project in an LEDC.	The MEDC study could be the importance of coal-fired power stations in Germany or the UK; the LEDC project could be producing electricity (eg.	Z	
 One thermal energy source in an MEDC 	b) How sustainable are these energy supplies?	b) An evaluation of the sustainability of each energy supply.	solar energy in Tanzania) or could be a project to use traditional sources more effectively (eg. biogas digesters in India). 'Sustainability' gives the	• ← ฉ	
• One small-scale renewable project in an LEDC	c) What impact does exploitation of these resources have on the environment?	c) The positive and negative impacts at a variety of scales, from local to global	opportunity to make links with Unit 1.4 above. Impacts could range from the benefits of reduced deforestation (in relation to biogas) to local pollution and contribution to global warming (in relation to the thermal scheme).	t	

Unit A2 (core): Planning for change

Enquiry questions and focus case studies	Key questions	Content	Guidance	S	K/S
2.1 Where shall we build new homes?	a) How is demand for housing growing?b) Should we build on greenfield sites or brownfield sites?	 a) An overview of the demand for new homes in the UK. b) The nature of urban sprawl and greenfield sites. The nature of brownfield sites. Reasons for and against such developments 	This issue links with the population change topic (Unit AI). The UK faces a problem of finding locations for new homes. This could be considered through comparing census data (which would provide an opportunity to integrate ICT, with the use of the SCAMP CD ROM), newspaper cuttings or	R Z	N
		зиси сохонориюна.	planning proposals. In any city there is a debate about whether to use brownfield or greenfield sites. The brownfield/greenfield debate offers the opportunity to consider a range of opinions. Case studies of such developments will not be required for the exam.	L	С
2.2 How is rapid growth affecting cities in LEDCs?	a) Why are cities in LEDCs growing so fast?	 a) Reasons for growth – rural to urban migration, and high rates of natural increase 	Appropriate LEDC cities to study in relation to the three key questions could include Mexico City, Jakarta or Mumbai. The main push and pull factors	Ι	
One named city in an LEDC	b) What are the effects of such rapid urban growth?	b) Opportunities and problems created by urban growth in terms of housing, services, employment and quality of life.	could include living standards, employment opportunities and changing rural economies. The age profile of the migrants contributes to a high rate of natural increase.	L	
	c) How can we improve quality of life in squatter settlements?	c) A scheme to improve existing squatter settlements or relocate them.	The scheme to improve squatter settlements may be initiated from above by city authorities or may be a self-help scheme.	L	
2.3 Can urban areas be made more sustainable?	a) Can we solve urban traffic problems?	a) The need for changes in both local authority and individual decision-making. Roles of public transport, restrictions on car use and landuse planning	The key questions should be investigated in the context of a named town/city or two separate named towns/cities. If wished, these could be the LEDC town/city studied in 2.2, and/or the MEDC town/city studied in 2.5	L	PS
management in a named town/city	b) How should we deal with waste?	b) Individual and corporate strategies for dealing with household waste. Disposal via incineration and landfill sites v more sustainable approach of reducing, reusing and recycling waste.	The individual and corporate approach gives the opportunity for students to consider the potential for individuals and/or groups of citizens to contribute to solving the problems, as well as the 'top-down' strategies of local authorities	R/ L	

Unit A2 (continued): Employment

	7		
and focus case studies	Ney questions	Content	Guidance
2.4 How is the global workplace changing?	a) How have employment patterns changed?	a) The shift in employment from primary to secondary and tertiary sectors. The general relationship between development and employment structure.	It would be helpful to study this in the context of particular countries, but case studies will not be required for the exam.
• One named TNC	b) What are trans-national corporations (TNCs), and where do they operate?	b) The reasons for distribution of headquarters and manufacturing sites for one trans-national corporation (TNC)	A global overview of the location of the chosen TNC, eg, Unilever, Ford, to consider the influencing factors, particularly the benefits of trans-nationality to the
• A campaign against one of	c) What are the impacts in a host	c) The advantages and disadvantages of a	individual company. Advantages may include employment opportunities,
– child labour	country'?	trans-national corporation (TNC) to host countries and employees.	investment, improved infrastructure, increased GNP. Disadvantages may include outflow of wealth, poor
 unfair trade 			working conditions, possibility of company pulling out. A located case study will not be required in the exam.
	d) How can campaigns be used to combat unfair work	d) There are campaigns to make the global workplace fairer. These usually involve	In some circumstances, workers are exploited. Campaigns have been launched to address this. Organizations such as Oxfam and the International
		fund raising.	Labour Organisation (<u>www.ilo.org</u>) are active in this field. It is possible for individuals to contribute to such campaigns.
2.5 What is the impact of new job opportunities in	a) Where are the new jobs?	a) The growth of employment opportunities on the urban-rural fringe.	The focus case study requires that these key questions be studied in the context of a named urban area in an MEDC, which could be the home town. The range of
MEDCs? • Changing employment in	b) What are the advantages of the urban-rural fringe for businesses?	b) Advantages of accessibility and land availability.	employment opportunities could include new shopping and leisure centres, light manufacturing, distribution centres and call centres.
one named town/city in an MEDC	c) How has this changed the urban – rural fringe?	 c) This has resulted in changes in landuse, new transport infrastructure and urban sprawl. 	The particular transport links available for the chosen area will provide a context for studying accessibility. Changes could have taken place already, or may still be at the planning stage.
	d) How might central business districts fight back?	d) The decline in shopping and employment opportunities. The response of local authorities and businesses to attract jobs and customers back.	Strategies for attracting shoppers back to the town centres may include free parking, new malls, pedestrian precincts and other leisure facilities. Local authorities may relax planning controls and offer tax incentives. New transport links may be built.

Unit A3 (core): Coping with environmental change

3. St a E	Enquiry questions and focus case studies 3.1 How do physical processes help to create coastal management concerns?	kee a)	a) What physical processes operate at the coast? b) What is the impact of these processes?	a) Marine processes of wave erosion, longshore drift and deposition; sub-aerial processes of weathering, wind action and mass movement. b) How these processes can lead to cliff retreat, with a consequent threat to coastal	Guidance The focus case study requires students to have studied one located stretch of coastline to illustrate the management issues related to coastal defence. The study should be chosen so that it covers the ideas stated in the content column (eg, Holderness, North Norfolk, Purbeck). Hard and soft engineering may include revenuents, stations and managed retreat. In	×	K/S
	cousume	c)	Why do physical processes need to be managed?	farmland. c) Simple ideas of cost-benefit to evaluate the need for and type of management, including both hard and soft options. An evaluation of the success and impact of the management, both in the immediate area and in the wider context.	effects of marine and sub-aerial processes operating along the coast must be studied. The emphasis is on management, and a detailed knowledge of specific landforms is not required.	R/ L	
3.2	2 How do human activities help to create coastal	a)	Why are coasts such a magnet for development?	 a) The coast can be used for recreation, settlement and industry. 	The focus case study requires students to have studied one stretch of coastline to illustrate the need for management of human activities. The chosen	R/ L	
•	management concerns? One stretch of	b)	What impact do these activities have on the coast?	b) These activities have a variety of impacts on the coastal environment, including visitor pressures, building houses and industries, pollution.	for management of human activities. The chosen coast must illustrate the range of uses stated in the content, and could be the same stretch of coastline as used in 3.1. ('Industry' can be interpreted widely to include examples such as farming or docks.)		
	coastline	c)	Why is management of land uses needed at the coast?	c) There are differences of opinion as to how to reconcile these different activities, and different users may have different views on how to manage the impact of the natural processes.	Differences could be illustrated by comparing groups such as RSPB and rock climbers on the Purbeck coast, or farmers and the local authority on Holderness. Owners of cliff-top properties may want a different type and degree of coastal protection compared to hotel owners who want to attract tourists		

Unit A3 (continued): Hazards

)	
Enquiry questions and focus case studies	Key questions	Content	Guidance	V.	N. S.
3.3 How can tectonic movements create hazards?	a) How do the processes operating at plate boundaries cause tectonic hazards?	a) The earth's surface can be sub-divided into a number of plates. Plate boundaries can be constructive, destructive or	Studying the processes of plate movements enables the links between such movements and both volcanic activity and earthquake activity to be understood.	G	
Either - one located study of a		conservative. Movement at these boundaries can lead to volcanic eruptions and earthquakes.		T R	
volcanic eruption or	b) What are the effects of a tectonic hazard?	 b) The effects of a volcanic eruption or earthquake on the people living in the area 	The focus case study requires students to develop a knowledge and understanding of one volcanic eruption (eg. Montserrat 1997) or one example of an	ΓÄ	
 one located study of an earthquake 	c) What management issues result from tectonic hazards?	c) Various management strategies are used, both to plan for future events, and to cope with the aftermath.	earthquake (eg, Turkey 1999), to include causes, effects and the management issues involved.		
3.4 What are the risks associated with flooding?	a) How do physical processes lead to flooding, and how do human activities increase the risk?	a) The physical processes and human factors contributing to two actual and/or potential floods.	Suitable floodplains include Ganges/Brahmaputra for the LEDC, and Rhine or Mississippi for the MEDC study. If relevant, the wider causes might need to be considered, for example, the additional	r ← Ω	
One located floodplain area in an MEDC	b) How can the flood risk be managed?	b) Strategies used to manage flooding in the two chosen studies. Contrasts	threat from the sea. The contrasting studies allow students to appreciate that MEDCs are more able to 'manage' these	Z	
• One located floodplain in an LEDC		between the strategies implemented in the MEDC and the LEDC.	hazards than LEDCs, and consider why this is so. The management of the hazard includes precautions taken and coping with an actual event. Information about the Mississippi can be found at www.mvs.usace.army.mil/engr/river/en01.htm	R/	
	c) Why do people continue to live in areas at risk from flooding?	c) Reasons why people continue to live in one of the chosen areas.	Reasons include the positive (eg, the attractiveness of the area for agriculture) and the negative (eg, the economic inability to move).		

Unit B4 (option): Use and abuse of the environment - Water

II	t	The issue of the balance between supply and demand for water is best looked at in a variety of contexts. Case studies will not be required in the examination	b) If the supply and demand for water get out of balance, it can lead to over-extraction and depletion of supplies.	b) Can water supplies run out?	TIVET OF MAKE
	R L R	The focus case study requires that one river or lake should be chosen to show the causes of pollution, and the strategies for cleaning it up. The study could look at either the ongoing management of pollution, or could concentrate on just one pollution incident and its aftermath.	a) Industry, agriculture, transport and leisure uses of rivers and lakes can lead to their pollution. There are strategies for dealing with this pollution.	a) How are we spoiling our water supplies?	4.3 How sustainable is our use of water?Pollution in ONE
TI	R	detail. This could be a multi-purpose scheme as long as one of its aims is to improve water supply for some purpose (eg, irrigation, HEP). Suitable studies include the Three Gorges Dam (R. Yangtse), Sobradinho Dam (R. Sao Francisco), Kielder Water (R.N.Tyne) and Aswan High Dam (R.Nile). Physical factors could include landscape, geology and climate; human factors could include land use and population density. The precise impacts will depend on the scheme chosen, and may be different from the suggestions in the content, but any study chosen must cover impacts on people and the environment	supply, including large scale river management schemes. c) The physical and human factors influencing the siting of a large scale river management scheme, together with the main impacts, including drowning of land (which can lead to loss of settlements, loss of farmland and loss of biodiversity) and downstream effects. There are conflicts between the different interest groups involved.	increased? c) What are the impacts of river management on people and the environment?	river management scheme to improve water supply
C	G/ I	Contrasting countries will give an opportunity to study a wide range of reasons. Links can be made with population growth in Unit A1. Strategies for improving supply may include reservoir construction, exploitation of groundwater, recycling of sewage water, 'virtual water' and desalination. Only a large-scale river management scheme must be studied in	a) Improved standards of living and hygiene leading to increased domestic use for a growing world population; increased demand for agriculture; industrialisation; urbanisation. b) There are various methods of increasing water	a) Why is the demand for water increasing? b) How can water supplies be	4.2 What happens when people try to improve their water supply?One large scale
Z	Z L O O	The water cycle should be studied in outline. The emphasis is on knowing the stores and their relative global importance. This key question gives students a context in which to develop familiarity with maps and graphs showing the information. Links can be made to the case study chosen for 4.3b. Data will help students to appreciate the different purposes and amounts of water use in contrasting 'water rich' and 'water poor' countries. Links can be made with 4.2a.	 a) Rain as the primary source; fresh water stores (groundwater, lakes, rivers, ice). b) Global rainfall patterns – variations in annual totals from place to place, distribution throughout the year, and reliability. c) Water is used for domestic, industrial, agricultural and leisure purposes. Levels of consumption and patterns of use vary between countries at different states of economic development. 	a) Where do fresh water supplies come from?b) Why do supplies vary?c) What is the water used for?	4.1 What issues affect the supply of fresh water?
K/S	N.	Guidance	Content	Key questions	Enquiry questions and focus case studies

Unit B5 (option): Use and abuse of the environment - Weather and climate

Specific case study knowledge will not be required in the examination, but the three key questions invite students to investigate the ways that the weather and climate can contribute towards the economic success of an area. A coastal resort area like Florida or Ibiza, and a ski resort like Chamonix or Colorado would be appropriate. For agriculture, simple contrasts can be made between, eg, the length of growing seasons in different parts of Britain, and between, eg, three harvests a year in tropical regions, against one harvest in temperate latitudes. Particular places have advantages for electricity generation by wind, solar and hydro electric power. An overview of farmers' attempts to influence the weather. These may include irrigation, glasshouses, windbreaks or cloud seeding. Case studies will not be required in the examination. There are opportunities for links with Unit C6. The focus case study requires one of the modifications to be studied in depth, while an overview is sufficient for the second.
T R T R S

Unit C6 (option): Use and abuse of the environment – Farming

Unit C7 (option): Use and abuse of the environment – Recreation and tourism

Internal assessment

Introduction

It is a requirement of the GCSE Subject Criteria for Geography that all candidates should undertake geographical investigations supported by fieldwork. This will involve a process of enquiry that demonstrates their understanding and skills within a geographical context. Unlike the written papers, there are no entry tiers for coursework. All candidates will be assessed against the same criteria and will have an equal opportunity to show what they can do.

Candidates are required to use ICT at various stages of their investigation. See the section *Incorporating ICT in coursework* below.

Designing and planning the coursework

Candidates are required to submit **one** item of coursework. It must take the form of an investigation which will involve candidates in the following stages of a geographical enquiry:

- 1 **the planning of the topic for study** can be developed from observation, discussion, reading or previous study, and should be approached in terms of a question or problem to be investigated, a hypothesis to be tested, or a combination of these
- 2 the defining of the aims of the enquiry; the more specific the aims, the more likely is the candidate's attention to be directed to the purpose of the enquiry and specific problems or questions arising from it
- 3 the planning and decision making about what data is relevant to the study and how this data can best be obtained; the general format and development of the study should also be agreed at this stage
- 4 the candidate should be able to demonstrate the skills of **data refining and presentation** by presenting the material in a variety of forms appropriate to the nature of the particular study, eg maps, diagrams and charts, sketches and annotated photographs
- 5 **interpretation and analysis**, where the candidate should consider the significance of the collected data, leading to a formulation of conclusions relating to the original aims of the study.

The teacher must ensure that the nature and intention of this section of the specification is clearly understood by the candidate, and that the work undertaken is appropriate to the level of ability of individual candidates. Differentiation can be achieved either by task or by outcome.

- The coursework investigation should take the form of **one** in-depth study.
- The coursework must have involved the individual candidate in primary data collection through direct fieldwork, although appropriate secondary sources may also be used.
- The coursework can either relate directly to the specific content in the specification, or the content can be taken as a starting point for further investigation.

- The teacher should give guidance to the candidates with stages 1-3, mentioned above but must **not** assist in the data refining and presentation beyond giving help with the choice of technique. The teacher must not assist in the direct interpretation and analysis of the data and the formulation of the conclusions.
- If a group of candidates undertake a study relating to a common topic, it is important that each individual candidate is encouraged to show some originality of input. This could be by extension of the group's work; by the use of some original data presentation methods; or by the individuality of the analysis and conclusions.
- Candidates should avoid submitting coursework that is either extremely brief or of great length. It is recommended that approximately 2000 words should be the maximum length.

Incorporating ICT in coursework

There are three important considerations relating to the use of ICT in producing coursework:

- it must be used appropriately
- its use must enhance the investigation
- it should be properly integrated into the finished study ('built in', not 'bolt on').

Candidates' use of ICT is assessed in three of the five coursework assessment criteria.

- It is assessed as part of **Data collection**. Candidates should use ICT in some form as part of the overall data collection process. This could be research supporting secondary data, collecting primary data, or collating the data collected. Appropriate uses of ICT could include:
 - researching related geographical theory from the Internet or CD ROM, to help with the analysis and conclusions
 - using satellite images (eg, from 'Window on the World' CD ROM)
 - downloading location maps from CD ROMs (eg, Encarta) or websites (eg, www.streetmap.co.uk)
 - capturing images of the fieldwork on digital camera
 - using data loggers to help with collection of, eg, weather data
 - collating group data with the use of spreadsheet or database software.
- It is assessed as part of **Data presentation**. Appropriate uses of ICT could include:
 - printouts of spreadsheets in the form of tables, charts, graphs
 - annotated digital camera images
 - graphics packages to plot river or beach profiles from data collected in the field
 - annotated maps and satellite images.
- It is assessed as part of **Planning and organisation**. As part of this criterion, candidates will be assessed on the overall contribution that ICT has made to the study, particularly the extent to which they have been successful in using ICT appropriately, and the extent to which the use has been integrated into the finished study. Candidates should still be encouraged to produce hand-drawn diagrams where this is likely to be the more effective method for example for annotated sketch maps.

The Specification Guide (which accompanies this specification) contains additional guidance on incorporating ICT into coursework.

The presentation of the completed investigation

- The completed coursework should consist of text supported by relevant maps, diagrams, tables, photographs and other illustrations appropriate to the nature of the enquiry. Video tapes, audio tapes and other media may be submitted, but candidates should be advised that their use is no substitute for the required text.
- The work should be submitted on A4 paper secured in a simple, lightweight folder. Plastic wallets and ring binders should not be used.
- Centre and candidate names and numbers should be clearly written on the front cover.

The assessment of the coursework

Coursework is centre-assessed, using the criteria on pages 25-29, and externally moderated by Edexcel. To assist centres and to provide all the information required within this document, detailed procedures for the submission of marks and the moderation of coursework are given in *Appendix 2*. If it proves necessary to amend these details in any way in the future, centres will receive separate notification.

A copy of the Individual Candidate Record Sheet (see *Appendix 3*) should be completed for each candidate.

In assessing the coursework the following criteria are to be applied:

Assessment criteria		Mark
1	Introduction and aims	6
2	Data collection	15
3	Data presentation	15
4	Analysis and conclusions	15
5	Planning and organisation	12
	Total marks	63

Assessment Criterion 1 – Introduction and aims (6 marks)

- a introduce the broad purpose of the study
- b refer to the specific questions/problems/hypotheses being investigated
- c identify the location of the investigation.

Level One	An outline of the purpose of the study and/or some of the aims. There is sufficient detail for the reader to know what the study is about, and where it is located, however the question or issue is only briefly identified. The sequence of work is uncertain.	1 – 2
Level Two	A clear statement of the broad purpose of the study, its aims and location. The question or issue is made clear and the sequence of work is identified.	3 – 4
Level Three	The broad purpose of the study, its aims and location are given in some detail . Questions and issues are thoroughly identified and an effective sequence of investigation is established. (This is particularly important where the investigation is based on group work.)	5 – 6

Assessment Criterion 2 – Data collection (15 marks)

- a state the nature of the information/data required
- b describe, explain and justify the methods used to collect the data
- c show evidence of the data collected, in the form of tables, etc
- d pass comment on any problems encountered and what attempts were made to overcome them.

	I	
Level One	The data required and the methods used to collect and record it are described . At the top of this mark range it is quite clear from the description how the data was collected. If secondary data is used, there should be an indication of the origin of that data.	1 – 5
	ICT: Within this mark range, the highest mark (5) can only be achieved by those candidates using ICT.	
Level Two	In addition to description, there is some explanation of the methods used to collect and record the data. If secondary data is used, there is a comment on why that particular data was chosen or how it was obtained.	6 – 10
	ICT: Within this mark range, the highest marks (9-10) can only be achieved by those candidates using ICT.	
Level Three	This level is characterised by clear explanation of the methods used to collect and record the data, and there should be some justification of the methods. There may be justification of the data required, in addition to a statement. If secondary data is used, there is a comment on why that particular data was chosen and how it was obtained. Where relevant, there is some reference to any limitations of the data, and/or problems encountered in its collection.	11 – 15
	ICT: Within this mark range, the highest marks (13-15) can only be achieved by those candidates using ICT.	

Assessment Criterion 3 – Data presentation (15 marks)

- a select data for presentation which is relevant to the stated aims of the study
- b select a variety and range of appropriate presentation techniques for this data and for the purpose of the enquiry. (The emphasis should be on 'appropriate' rather than variety for the sake of it, but this criterion carries a high mark weighting and students should be encouraged to attempt techniques beyond basic graphs and tables, and consider whether techniques such as sketch-maps, density shading, annotated sketches/photographs, proportional symbols, composite and overlay diagrams, flow lines, isolines, etc would be appropriate.)
- c demonstrate the skills of the candidate by using the presentational techniques chosen neatly and accurately.

Level One	Uses a limited range of basic methods (eg bar charts) to present the data. At the lower end of this mark range, some of the required information (eg, scales, keys) may be incomplete and skills of construction/presentation weak.	1 – 5
	ICT: Within this mark range, the highest mark (5) can only be achieved by those candidates using ICT.	
Level Two	Uses a variety of appropriate conventional methods to present the data. At the upper end of this mark range, diagrams should be neat and accurate, with titles, scales, keys etc in place.	6 – 10
	ICT: Within this mark range, the highest marks (9-10) can only be achieved by those candidates using ICT.	
Level Three	Accurately uses a wide variety of appropriate methods to present the data. The candidate may have attempted some original methods of presentation. There may be some justification of the methods chosen. The methods chosen present the data in a particularly clear and effective way.	11 – 15
	ICT: Within this mark range, the highest marks (13-15) can only be achieved by those candidates using ICT.	

Assessment Criterion 4 – Analysis and conclusions (15 marks)

- a describe what the data shows
- b include analytical comments that relate the data to the original aim(s)
- c identify, where appropriate, any links or relationships between different data sets
- d where relevant, consider the values and attitudes of people involved
- e return to the original aim(s), and consider to what extent the question has been answered, the problem solved or the hypothesis proved
- f show an appreciation of the limitations of the study and suggest how it could be improved or taken further.

Level One	Makes statements describing the data. If relevant, there is some awareness of the different attitudes of some of the individuals and groups involved. There are some general concluding comments which have a link with the original aim(s).	1 – 5
Level Two	The data is described in detail , and at the upper end of this mark range there is some genuinely analytical comment. If relevant, some links/relationships between data sets, and/or the different attitudes of many of the individuals or groups involved, are identified . Concluding comments derive from the data collected , and there may be some awareness of the inherent limitations of the study and/or suggestions for taking the study further.	6 – 10
Level Three	Data is analysed in detail, making links, where relevant, to appropriate geographical theory . If quantitative analysis is attempted, it is used accurately and appropriately. Identifies and shows relevance of any links/relationships between data sets and/or the attitudes and values of most of the parties involved. Draws sound conclusions, explicitly supported by evidence , clearly related to the objectives of the study. Shows an awareness that explanations may be incomplete , and suggests how the study could be improved/taken further.	11 – 15

Assessment Criterion 5 – Planning and organisation (12 marks)

The candidate should:

- a organise and integrate material in a logical order which aids understanding.
- b demonstrate an ability to present relevant information in a form that suits its purpose, including appropriate use of ICT, pagination, contents, titles, headings, cross-referencing and bibliography.
- c ensure that the text is legible and that spelling, punctuation and grammar are accurate, so that meaning is clear.

Level One	The study includes some relevant items, but they have not been organised into a logical sequence. It may be incomplete and lack particular sections. There may be page numbers and a contents page and some titles and headings. Candidates spell, punctuate and use the rules of grammar with some accuracy. ICT: For the highest mark at this level (4) some aspect of ICT must have been used as part of the investigation.	1 – 4
Level Two	The content is organised in a clear and logical way. Pagination and contents are likely to be complete. Appropriate use is made of titles, headings etc. Candidates spell, punctuate and use the rules of grammar with reasonable accuracy. ICT: For the highest marks at this level (7-8) ICT must have been	5 – 8
	used appropriately to enhance the investigation.	
Level Three	The organisation of the study makes it easy to read and use. Diagrams are well integrated into the text, and appropriate use is made of subheadings and cross-references. Candidates spell and punctuate with considerable accuracy, and use a range of grammatical constructions.	9-12
	ICT: For the highest marks at this level (10-12) ICT must have been used appropriately to enhance the investigation, and have been well integrated into the study.	

Quality of written communication

Quality of written communication is assessed as part of assessment criterion 5.

The relationship between coursework assessment criteria and assessment objectives

Assessment	Assessment objectives		Total
criteria	Application of knowledge and understanding	Skills	marks
Introduction and aims	Identification of the purpose of the investigation (6)		6
Data collection		Identification, collection and recording of data (15)	15
Data presentation		Choice of methods, presentation (15)	15
Analysis and conclusions	Application of concepts to data collected (6)	Description, analysis and interpretation of evidence, drawing conclusions, evaluation (9)	15
Planning and organisation		Logical sequence, cross referencing, technical details (eg, pagination, bibliography), use of ICT, quality of written communication (12)	12
TOTAL MARKS	12	51	63
Component weighting	5%	20%	25%

Authentication of coursework

The teacher responsible for internal standardisation of the coursework (see *Appendix 2*) must sign the bottom of the optically-read teacher-examiner mark sheet (Optems) to confirm that the work presented for assessment is, to the best of his/her knowledge, the candidate's own. Sufficient work should therefore take place under appropriate supervision to allow this confirmation to be given.

No credit should be given for work known to have been copied directly from textbooks or from any other sources or from other students. Edexcel must be notified if substantial amounts of copied work are submitted unacknowledged, and this may result in disciplinary action.

Return of coursework

The coursework inspected by Edexcel will be returned to each centre after the publication of results. All coursework still held at the centre should be kept available for inspection until the closing date for enquiries about results. After this time coursework may be returned to the students. Edexcel reserves the right to retain examples of coursework completed by students in a particular examination, for grading and other purposes.

Grade descriptions

The following grade descriptions indicate the level of attainment characteristic of the given grade at GCSE. They give a general indication of the required learning outcomes at each specified grade. The descriptions should be interpreted in relation to the content outlined in the specification; they are not designed to define that content. The grade awarded will depend in practice upon the extent to which the student has met the assessment objectives overall. Shortcomings in some aspects of the examination may be balanced by better performances in others.

Grade F

Candidates recall basic information about places, environments and themes, at more than one scale, as required by the specification, and show an elementary level of knowledge of location and geographical terminology.

Candidates understand some simple geographical ideas from the specification content in a particular context. They understand some simple physical and human processes and recognise that they contribute to the development of geographical patterns and the geographical characteristics of places and environments. They understand some simple interrelationships between people and the environment, and the idea of sustainable development. They show some awareness of the values and attitudes of people involved in geographical issues and in decision-making about the use and management of environments.

Candidates undertake geographical enquiry, collecting and recording geographical evidence from primary and secondary sources, drawing simple maps and diagrams, communicating information and outcomes by brief statements, and recognising some of the limitations of evidence.

Grade C

Candidates recall accurately information about places, environments and themes, at a range of scales, as required by the specification, and show a broad knowledge of location and geographical terminology.

Candidates understand geographical ideas from the specification content in a variety of physical and human contexts. They understand a range of physical and human processes and their contribution to the development of geographical patterns, the geographical characteristics of particular places and environments, and their interdependence. They understand interrelationships between people and the environment and appreciate that considerations of sustainable development affect the planning and management of environments and resources. They understand the effects of values and attitudes of those involved in geographical issues and in decision-making about the use and management of environments.

Candidates undertake geographical enquiry, identifying questions or issues, suggesting appropriate sequences of investigation, collecting appropriate evidence from a variety of primary and secondary sources, using a range of relevant skills and techniques, reaching plausible conclusions, communicating outcomes, and appreciating some of the limitations of evidence and conclusions.

Grade A

Candidates recall accurately detailed information about places, environments and themes, across all scales, as required by the specification, and show detailed knowledge of location and geographical terminology.

Candidates understand thoroughly geographical ideas from the specification content, and apply their understanding to analyses of unfamiliar contexts. They understand thoroughly the way in which a wide range of physical and human processes interact to influence the development of geographical patterns, the geographical characteristics of particular places and environments, and their interdependence. They understand complex interrelationships between people and the environment, and how considerations of sustainable development affect the planning and management of environments and resources. They evaluate the significance and effects of values and attitudes of those involved in geographical issues and in decision making about the use and management of environments.

Candidates undertake geographical enquiry, identifying relevant questions, implementing effective sequences of investigation, collecting a range of appropriate evidence from a variety of primary and secondary sources, using effectively relevant skills and techniques, drawing selectively on geographical ideas to interpret evidence, reaching substantiated conclusions, communicating outcomes clearly and effectively, and critically evaluating the validity and limitations of evidence and conclusions.

The wider curriculum

Key skills

This specification will provide opportunities, as appropriate, to develop the key skills of communication, information technology, application of number, improving own learning and performance, working with others and problem solving.

Examples of such opportunities are signposted throughout the specification. It is important that these opportunities fall naturally into a programme of study, and it may be that not all the examples are appropriate for all programmes. The examples offered may be adapted to suit particular situations, and it will be possible to devise many alternative opportunities and approaches. The development of key skills can enhance teaching and learning strategies and can be a stimulus to new approaches, and increase levels of student involvement.

Key skills opportunities are detailed more fully in *Appendix 1*.

Spiritual, moral, ethical, social and cultural issues

This specification contributes to an understanding of:

- **spiritual issues**, through an appreciation of the uniqueness of places and the people living there
- moral and ethical issues, for example through studying contributions made by voluntary organisations to development processes in Unit A1.3, and through studying a campaign against child labour or unfair trade in Unit A2.4
- **social issues**, for example through studying the implications of population change in Unit A1.3, and through studying housing issues in Unit A2.1 and A2.2
- **cultural issues**, for example through studying why birth rates differ in A1.2, and through studying the reasons for the growth of tourism in Unit C7.1.

Education for Citizenship

This specification makes a significant contribution towards coverage of the Key Stage 4 programme of study for Citizenship.

Its enquiry-based approach encourages students to investigate topical issues using a range of sources, and to discuss personal opinions about issues, and evaluate views that are not their own.

Opportunities to investigate relevant issues include in unit:

- A1, the impact of immigration on a country's population; the responses of government and voluntary organisations to population change; the sustainability of energy resources
- A2, the location of new housing developments; the sustainability of cities; TNCs and global interdependence; employment issues; child labour; fair trade
- A3, the wider impact of coastal defences; the management of flooding

- B4, the sustainable use of water; pollution of water resources
- B5, global warming and interdependence
- C6, EU influences on farming; genetically modified crops; organic farming; sustainable development
- C7, planning issues in national parks; ecotourism as a sustainable development strategy.

Information and communication technology

The GCSE criteria require that students make effective use of ICT in ways appropriate to the subject and ICT should be built into any teaching programme developed from the specification.

Appropriate uses of ICT in Geography would include the use of data loggers to capture primary data; the use of the Internet and CD ROMs to research information; the use of databases and spreadsheets to present and manipulate the information; and the use of wordprocessing, desktop publishing and graphics packages to write up coursework investigations.

Further suggestions can be found in the National Curriculum programme of study for Key Stage 3; and *Appendix 1* outlines some opportunities to develop the key skill of IT. At least one opportunity has been suggested for each of the teaching options.

Environmental education, health and safety education and the European and global dimension

The study of environmental issues is a major theme throughout the specification. In particular, management of the built environment is considered in Unit 2, management of the physical environment is the main focus of unit 3, while all the optional units are grouped under the theme of 'The use and abuse of the environment.'

When undertaking fieldwork, groups of students and individuals should be taught to identify the hazards in their working environment and assess whether or not the risk associated with that hazard can be managed.

The European dimension is addressed through the requirement for particular case studies to be drawn from the UK and the European Union.

Textbooks and other teaching resources

There is a wide range of textbooks currently available for GCSE Geography, and most of them will contain useful material for teaching this specification. Some of the content of the specification, however, is not part of the current mainstream of GCSE Geography, and so a textbook has been produced specifically for Edexcel GCSE Geography B.

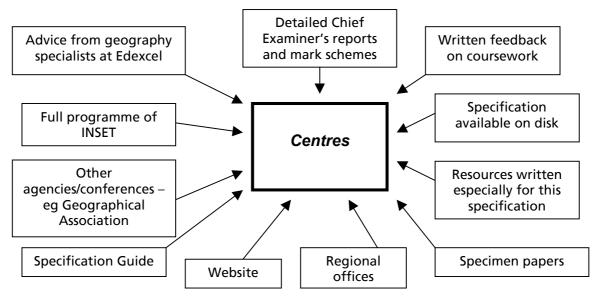
In addition to a textbook, students should obtain information from a wide range of sources, such as an atlas, newspaper articles, periodicals, videos, the Internet, CD ROMs, fieldwork and visiting speakers.

A full list of appropriate resources can be found in the Specification Guide (which accompanies this specification).

Support and training

Support

An extensive support network exists to provide guidance and training for teachers.



Training

A programme of INSET courses covering various aspects of the specifications and assessment will be arranged by Edexcel each year on a regional basis. Full details may be obtained from:

INSET Edexcel Foundation Stewart House 32 Russell Square London WC1B 5DN

Tel: 020 7758 5620 Fax: 020 7758 5950

020 7758 5951 (second fax number) E-mail: inset@edexcel.org.uk

Website

www.edexcel.org.uk

Please visit the Edexcel website, where further information about training and support for all qualifications, including this GCSE, can be found.

The website is regularly updated, and an increasing amount of support material and information will become available through it.

Edexcel publications

Support materials and further copies of this specification can be obtained from:

Edexcel Publications Adamsway Mansfield Notts NG18 4FN

Tel: 01623 467467 Fax: 01623 450481

E-mail: publications@linneydirect.com

The following support materials will be available from spring 2001 onwards:

- specimen papers
- Specification Guide.

Regional offices and Customer Response Centre

Further advice and guidance is available through a national network of regional offices. For general enquiries and for details of your nearest office please call the Edexcel Customer Response Centre on 0870 240 9800.

Appendices

Appendix 1 – Key skills	41
Appendix 2 – Procedures for moderation of internal assessment	57
Appendix 3 – Individual candidate record sheet (ICRS)	63

Appendix 1 – Key skills

The GCSE in Geography B offers a range of opportunities for students to:

- develop their key skills
- generate assessed evidence for their portfolio.

In particular, the following key skills can be developed and assessed through this specification at level 2:

- application of number
- communication
- information technology
- improving own learning and performance
- working with others
- problem solving.

Copies of the key skills specifications can be ordered from Edexcel Publications.

The individual key skills units are divided into three parts:

- **Part A**: What you need to know this identifies the underpinning knowledge and skills required of the student
- Part B: What you must do this identifies the evidence that students must produce for their portfolio
- **Part** C: Guidance this gives examples of possible activities and types of evidence that may be generated.

This GCSE specification signposts development and internal assessment opportunities which are based on Part B of the level 2 key skills units. For those students working at level 1, these level 2 opportunities can also be used to generate evidence at level 1. Reference should be made to the appropriate level 1 statements in the key skills specifications.

The evidence generated through this GCSE will be internally assessed and will contribute to the student's key skills portfolio. In addition, in order to achieve the key skills qualification, students will need to take the additional external tests associated with communication, information technology and application of number. Centres should check the current position on proxy qualifications, as some students may be exempt from part or all of the assessment of a specific key skill.

Each unit within this GCSE will provide opportunities for the development of all six of the key skills. This appendix identifies the key skills evidence requirements and also provides a mapping of those opportunities. Students will need to have opportunities to develop their skills over time before they are ready for assessment. This appendix contains illustrative activities for each key skill that will aid development and facilitate the generation of appropriate portfolio evidence. To assist in the recording of key skills evidence, Edexcel has produced recording documentation which can be ordered from Edexcel Publications.

Mapping of key skills: summary table

Key skills (level 2)	Unit A1	Unit A2	Unit A3	Unit B4	Unit B5	Unit C6	Unit C7	Coursework
Application of number								
N2.1	√	/		\ \	✓			
N2.2	√	/		~	\ 			
N2.3	~	/		/	~			
Communication								
C2.1a	√	/	\ \		✓		✓	
C2.1b		/		~		\ \		/
C2.2		/		\ \		\ 		•
C2.3								•
Information technology								
IT2.1	√	/	<	<	V	~	1	<
IT2.2	V	/	V	V	V	√	1	1
IT2.3	√	/	\ \	\ \	✓	\ 	✓	•
Working with others								
WO2.1		1						<
WO2.2		1						<
WO2.3		1						<

Key Skills (level 2)	Unit A1 Unit A2		Unit A3	Unit B4	Unit B5	Unit C6 Unit C7 Coursework	Unit C7	Coursework
Improving own learning and performance								
LP2.1								\
LP2.2								\ \
LP2.3								/
Problem solving								
PS2.1		•	<				<	•
PS2.2		•	√				<	/
PS2.3			<				<	′

Application of number level 2

straightforward tasks. This will involve students obtaining and interpreting information, using this information when carrying out calculations, and interpreting and presenting the results of the calculations. portfolio. As well as undertaking tasks related to the three areas of evidence required, students are also required to undertake a substantial activity that includes The GCSE in Geography provides opportunities for students to both develop the key skill of application of number and also to generate evidence for their

N2.1 Interpret information from two different sources, including material containing a graph A1.1 Graphs of charget maps to show world population growth and national differences A1.2 Graphs of reational population growth and population pyramids A1.2 Graphs of reational population growth and population pyramids A2.1 Graphs of reational population growth and population pyramids B3.1 Temperature graphs for holiday resorts and tables of data for numbers of visitors by months B3.1 Temperature graphs for holiday resorts and tables of data for numbers of visitors by months B3.1 Temperature graphs for holiday resorts and tables of data for numbers of visitors by months B3.1 Temperature graphs for holiday resorts and tables of data for numbers of visitors by months B3.1 Temperature graphs for holiday resorts and tables of data for numbers of visitors by months B3.1 Temperature graphs for holiday resorts and temperature change over post 150 years Caursevork Data from fieldwork (eg landase data for a farm) and secondary data including graph (eg, how area of farm) and secondary data including graph (eg, how area of etc., and show their methods of working. They must show how they have checked results and corrected their work as necessary Analysis of diagrams and data obtained for N2.1 above. For example: A1.2 How long did the world's population take to double? What is the annual rainfall total shown on the graphs? Find maximum and minimum temperatures and calculate temperature ranges; use formula or angles for pie chart of visitor numbers by months.	Key skil	Key skill portfolio evidence requirement	GCSE unit	Opportunities for development or internal assessment
A1.1 A1.2 A2.1 B4.1 B5.3 Coursework B4.1 B5.3 Coursework Coursework B5.3 Coursework B5.3 Coursework B5.3 Coursework Coursework B5.3 Coursework B5.3 Coursework Coursework B5.3 Coursework Coursework Coursework B5.3 Coursework Coursewo	N2.1	Interpret information from two different sources, including material		Students are required to obtain and use the information required; selecting appropriate methods to get the results required
A1.2 A2.1 B4.1 B5.1 B5.3 Coursework Carry out calculations to do with: a amounts and sizes b scales and proportions c handling statistics d using formulae. A1.1 B4.1 B5.1 B5.1		containing a graph	AI.I	Graphs and choropleth maps to show world population growth and national differences
A2.1 B4.1 B5.1 B5.1 B5.3 Coursework Carry out calculations to do with: a amounts and sizes b scales and proportions c handling statistics d using formulae. A1.1 B4.1 B5.1			A1.2	Graphs of national population growth and population pyramids
B4.1 B5.1 B5.1 B5.3 Coursework Carry out calculations to do with: a amounts and sizes b scales and proportions c handling statistics d using formulae. A1.1 B4.1 B5.1			A2.1	Graphs of housebuilding requirements and map with flow lines showing population movements in the UK
Carry out calculations to do with: a amounts and sizes b scales and proportions c handling statistics d using formulae. B5.1 B5.1 B5.1			B4.1	
Carry out calculations to do with: a amounts and sizes b scales and proportions c handling statistics d using formulae. B5.3 Coursework A1.1 A2.1 B4.1 B5.1			B5.1	Temperature graphs for holiday resorts and tables of data for numbers of visitors by months
Carry out calculations to do with: a amounts and sizes b scales and proportions c handling statistics d using formulae. B4.1 B5.1			B5.3	Graphs to show increase in CO_2 levels and temperature change over past 150 years
Carry out calculations to do with: a amounts and sizes b scales and proportions c handling statistics d using formulae. A1.1 A2.1 B4.1 B5.1			Coursework	Data from fieldwork (eg landuse data for a farm) and secondary data including graph (eg, how area of farm planted with wheat has changed over the years)
amounts and sizes scales and proportions handling statistics using formulae. A1.1 A2.1 B4.1 B5.1	N2.2	Carry out calculations to do with:		Students must carry out their calculations, which could relate to volumes, ratios, averages, formulae,
scales and proportions A1.1 handling statistics using formulae. A2.1 B4.1 B5.1				etc, and show their methods of working. They must show how they have checked results and corrected their work as necessary
handling statistics A1.2 using formulae. A2.1 B4.1 B5.1			AI.I	Analysis of diagrams and data obtained for N2.1 above. For example:
using formulae.			A1.2	How long did the world's population take to double?
			A2.1	What proportion of the country's population is under 15?
			B4.1	Using the flowlines and their scale to work out numbers of people moving between regions
Find maximum and minimum temperatures and calculate temperature ranges; use formula to calculate angles for pie chart of visitor numbers by months.			B5.1	What is the annual rainfall total shown on the graphs?
				Find maximum and minimum temperatures and calculate temperature ranges; use formula to calculate angles for pie chart of visitor numbers by months.

Key ski	Key skill portfolio evidence requirement	GCSE unit	Opportunities for development or internal assessment
		B5.3	By what proportion has CO ₂ increased?
		Coursework	Work out areas of fields from map; calculate total area for each landuse; use formulae to draw proportional squares to represent landuse
N2.3	Interpret results of your calculations		Based on their findings, students must select effective methods of presentation, using as appropriate
	and present your findings. You must		charts, diagrams, and tables. Students should explain how the results of their calculations meet the
	use at least one graph, one chart and		purpose of the activity undertaken.
	one diagram		All the activities suggested for N2.1 and N2.2 lend themselves to interpretation and presentation in a
			variety of ways, including written analysis.

Student evidence for application of number could include:

- description of the substantial activity
- copies of source materials
- records of calculations, showing methods used
- descriptions of findings.

Communication level 2

For the communication key skill, students are required to hold discussions and give presentations, read and summarise information, and write documents. Students will be able to develop all of these skills through an appropriate teaching and learning programme based on this GCSE specification.

Key ski	Key skill portfolio evidence requirement	GCSE unit	Opportunities for development or internal assessment
C2.1a	Contribute to a discussion about a straightforward subject		Many of the topics in this specification are suitable as the basis of a group discussion. The discussion should be about a straightforward subject. This may be a subject often met in their studies, and the vocabulary will be familiar. During the discussion students should make clear and relevant contributions, listen and respond to others, helping to move the discussion forward.
		AI.5	Discuss to what extent Malthus' ideas have proved accurate, and suggest reasons
		A2.1	Should homes be built on greenfield or brownfield sites?
		A3.2	What do people use the coast for? What impact do they have?
		B5.3	Discuss the evidence for global warming. What does it show? Can we be certain?
		C7.1	Use a series of images of scenes from a National Park; discuss the attractions of the different landscapes
C2.1b	Give a short talk about a straightforward subject, using an image		Following a period of research, students could be given the opportunity to give a short talk to the rest of their group.
			During the talk, students should speak clearly in a way that suits the subject and situation. They should keep to the subject. The structure of the talk should help listeners to follow the points which are made. The talk should include an image which illustrates the main points clearly. Images could include charts and diagrams, pictures, maps, items of equipment etc.
		A2.4	A campaign against child labour, illustrated by a poster produced by the campaign
		B4.2	The pros and cons of a method of improving water supply, illustrated with a map
		C6.2	The pros and cons of GM foods, illustrated by newspaper extracts
		Coursework	An explanation of how to use a piece of fieldwork equipment, illustrated by the equipment

Key ski	Key skill portfolio evidence requirement	GCSE unit	Opportunities for development or internal assessment
C2.2	Read and summarise information from two extended documents about a straightforward subject		Students will have a number of opportunities to read and synthesise information from two extended documents. For example, as part of their preparation for the discussion and talk, or as preparation for a piece of written work for their GCSE.
	One of the documents should include at least one image		Extended documents may include textbooks and reports and articles of more than three pages. At least one of these documents should contain an image from which students can draw appropriate and relevant information.
			Students will need to select and read relevant material. From this information they will need to identify accurately the lines of reasoning and main points from the text and images. Students will then need to summarise this information in a form that suits the purpose – eg, for a talk, discussion or an essay.
			All the suggestions for C2.1b above will need research, some of which is likely to come from reading such documents.
			Research into secondary sources to support coursework could also count towards evidence for this part of the key skill.
C2.3	Write two different types of documents about straightforward subjects		Students are required to produce two different types of document. At least one of these should be an extended document, for example a report or an essay of more than three pages.
	One piece of writing should be an extended document and include at least one image		The document should present relevant information in an appropriate form. At least one of the documents should include an appropriate image that contains and effectively conveys relevant information. The information in the document should be clearly structured eg, through the use of headings, paragraphs, etc.
			Students should ensure that the text is legible and that spelling, punctuation and grammar are accurate.
			The completed coursework will provide evidence of an extended document including at least one image.
			The second piece could come from a variety of other exercises carried out on the course, as long as it was different in style from the coursework.

Student evidence for communication could include:

- tutor observation records
- preparatory notes
- audio/video tapes
- notes based on documents read
- essays
- coursework.

Information technology level 2

documents could be e-mailed to tutors for initial comments and feedback. be used to collect information. Documents can be produced using relevant software and images may be incorporated in those documents. Early drafts of When producing work for their GCSE in Geography, students will have numerous opportunities to use information technology. The Internet, CD ROM, etc could

sections identified in Part B of the key skills specification. If students undertaking coursework as part of their GCSE in Geography use information technology, they will have opportunities to generate evidence for all three

images, required for C2.3, could be generated using appropriate software. In addition, students will be able to use information technology to generate evidence for the communication key skill. For example the extended document with

generation and/or other parts of their GCSE course. the use of a spreadsheet application, or some aspects of database use. In this situation, students may use stand alone IT sessions for development and evidence As part of their geography programme, students may not be able to generate sufficient evidence required for this unit. For example working with numbers through

Key skill portfolio evidence requirement	GCSE unit	Opportunities for development or internal assessment
IT2.1 Search for and select information for two different purposes		Students will need to identify suitable sources of information and effectively search for information using multiple criteria. Information selected should be interpreted and students should decide what is relevant for their purpose.
	A1.3	Use websites of NGOs to research information about population change
	A2.4	Use websites of campaigning organisations to research information for presentation on child labour
	A3.4	Use flood simulation software to model possible responses of a river basin to extreme rainfall
	B4.2, B4.3	Use 'London's Thames – the living, working river' CD ROM (Thames Clean Project, 1997) to investigate improvement of water supplies and supply/demand problems in Thames region, and management of pollution in the river
	B5.3	Use 'Atmosphere, climate and environment information programme' CD ROM (Atmosphere Research and Information Centre, Manchester Metropolitan University, 1999) to obtain information on global warming
	C6.2	Use NFU website (www.nfu.org.uk/education) to research information on organic farming
	C7.1	Use Lake District National Park website (www.lake-district.gov.uk) to research information about attractions and management issues
	Coursework	Take photographs of the fieldwork site and work in the field using a digital camera.

Key ski	Key skill portfolio evidence requirement	GCSE unit	Opportunities for development or internal assessment
ІТ2.2	Explore and develop information, and derive new information for two different purposes		Students are required to bring together information in formats, which help development such as tables. The information could be explored by, for example, changing information in a spreadsheet model. Information should also be developed and new information derived as appropriate, for example through the use of headings, tables, charts and graphs.
			New information should be derived from, for example, comparing information from different sources, using formulae to calculate totals or averages.
			For each of the suggestions above, data obtained in the form of figures could be entered on a spreadsheet and then graphed to give trends (eg of river discharge over a year, or numbers of visitors to the National Park by seasons). The data could be ranked or manipulated to give averages.
			Digital photographs can be annotated and manipulated to highlight particular features.
			There are good opportunities to combine activities suggested for application of number, particularly for N2.2.
ІТ2.3	Present combined information for two different purposes. This work must include at least one example of text, one example of		In presenting combined information students will need to select and use appropriate layouts in a consistent way through, for example, the use of margins, headings, borders, font size, etc. Layouts, etc should be refined to suit both the purpose and the needs of the audience (early drafts should be kept as portfolio evidence).
	images and one example of numbers		The final piece of work should be suitable for its purpose and audience eg, GCSE coursework, OHTs/handouts for a presentation, etc. The document should have accurate spelling (use of spell-checker) and have been proof-read.
			One piece of evidence could be the coursework, if it has been word-processed and has images and number manipulation.
			OHTs could be produced for use in the presentation (C2.1b)

Student evidence for information technology could include:

- tutor observation records
- notes of sources used
- print-outs with annotations
- draft documents.

Working with others level 2

example must show that they can work in group situations. Students will plan their work with others and confirm working arrangements; work co-operatively towards achieving identified objectives, and exchange information on progress. To achieve this key skill, students are required to carry out at least two activities. One example must show that they can work in one-to-one situations and one

	WO2.3 Exch and a with		WO2.2 Work towar object respo			WO2.1 Plan other clarif confi	Key skill portf
	Exchange information on progress and agree ways of improving work with others to help achieve objectives		Work co-operatively with others towards achieving identified objectives, organising tasks to meet responsibilities			Plan straightforward work with others, identifying objectives and clarifying responsibilities, and confirm working arrangements	Key skill portfolio evidence requirement
A2.4 Coursework		Coursework	A2.4	Coursework	A2.4		GCSE unit
In both activities, students review the success of their working together. The outcomes can be used to inform the students' actions when they carry out a similar task, and/or inform the actions of students who have yet to attempt the task.	Once completed the full group needs to review outcomes against the agreed objectives. In doing this they should identify what has gone well and what has gone less well. Students should listen and respond to progress reports from others and agree ways of improving work with others to help achieve objectives.	In both activities, students work together to fulfil their aims.	Students will need to organise tasks so that responsibilities can be met. For example, obtaining resources, completing tasks on time, etc. Tasks should be completed accurately and safely. Cooperative ways of working should be supported through, for example, anticipating the needs of others, avoiding actions that offend, etc. Advice from others, including group members, tutor, etc should be sought when needed.	Fieldwork is likely to be an ideal opportunity to generate evidence for this key skill. Students can work in groups to plan their data collection, different people taking responsibility for obtaining the necessary equipment, making a record of the results etc.	Students work in pairs to research information on a campaign against child labour, with the aim of doing a joint presentation on the topic.	Students should identify the objectives of working together and the tasks, resources and timescales required to meet these objectives. Information should be exchanged to clarify responsibilities. For example suggesting ways that help can be given, asking what others can do, checking their own and others' responsibilities. The group needs to confirm responsibilities and working arrangements.	Opportunities for development or internal assessment

Student evidence for working with others could include:

- tutor observation records
- preparatory notes
- records of process and progress made.

Improving own learning and performance level 2

Within GCSE Geography programmes, students will have opportunities to develop and generate evidence that meets part of the evidence requirement of this key

enrichment activities. performance through studying a straightforward subject and through learning through a straightforward practical activity. This GCSE will provide opportunities for students to study a straightforward subject. Evidence for learning through a practical activity may come from other GCSEs in the students' programme or from To achieve this key skill, students will need to provide at least two examples of meeting the standard required. Students are also required to improve their

students should work without close supervision. However, students should seek and receive feedback, from tutors and others, on their target setting and performance. Activities that generate evidence for this skill should take place over a period of a few weeks. Over the period of the activity there will be times when the

Any project work (including coursework) is a suitable learning activity and may be used to generate evidence for this key skill

Key skil	Key skill portfolio evidence requirement	GCSE unit	Opportunities for development or internal assessment
LP2.1	Help set short-term targets with an appropriate person and plan how these will be met		Students plan how they are to meet short-term targets with an appropriate person, eg, agreeing a project with their tutor. This will include setting realistic targets and action points. Review dates with, for example, their tutor should be built into the plan.
		Coursework	At the planning stage of the coursework, students agree an action plan for data collection and the writing of drafts and a final version. Key dates are set by which certain milestones will be achieved.
LP2.2	Take some responsibility for some decisions about your learning, using your plan and support from others to help meet targets.	Coursework	The plan should be implemented with performance reviews and should include working for short periods without close supervision.
	 Improve your performance by: studying a straightforward subject learning through a straightforward practical activity. 		

Key skill	Key skill portfolio evidence requirement	GCSE unit	GCSE unit Opportunities for development or internal assessment
LP2.3	Review progress with an appropriate	Coursework	Coursework Students should review their own progress with the help, for example, of their tutor. They should
	person and provide evidence of your		identify, with evidence, what and how they have learned and provide information on what has gone
	achievements, including how you		well and what has gone less well., and whether targets have been met, providing evidence of
	have used learning from one task or		achievements from relevant sources. They should identify with, for example, their tutor what action to
	activity to meet the demands of a new		take to improve their performance.
	task		

Student evidence for improving own learning and performance could include:

- tutor records
- annotated action plans
- records of discussions
- learning log
- work produced.

Problem solving level 2

coursework for GCSE Geography, as well as meeting one half of the requirements for the problem solving key skill. proposed solutions for some problems, eg river flooding. The opportunity suggested below (relating to Unit A2.3) could be carried out jointly as the piece of difficulties in implementing practical solutions in a school or college context. There is a variety of software available which could simulate the implementation of plan and try out options, check whether the problem has been solved. For this GCSE, students may not be able to try out options and check results as there may be To achieve this key skill, students will need to provide at least two examples of meeting the standard required. They need to show that they can identify problems,

Key sk	Key skill portfolio evidence requirement	GCSE unit	Opportunities for development or internal assessment
PS2.1	Identify a problem and come up with two options for solving it		Students will need to identify the problem and describe its main features and how to show it has been solved. They need to identify different ways of tackling the problem and ways of judging success. They should use the help of others, for example their tutor, as appropriate.
		A2.3	Students consider the problem of dealing with household waste, or the problem of individual attitudes to transport in cities.
		A3.4	Students consider the problem of managing a river flood.
		C7.2	Students consider the problem of managing visitor numbers to a tourist honeypot.
PS2.2	Plan and try out at least one option for solving the problem, obtaining support and making changes to your		Students should confirm with their tutor, for example, their chosen option and how they will implement it. Upon implementation relevant tasks should be organised and changes made as necessary. Support should be obtained when needed.
	plan when needed	A2.3	Plans can be proposed for solving either of these problems, and there is scope for a small-scale implementation of a possible solution, perhaps involving other members of the teaching group.
		A3.4	This could be tried out using computer software.
		C7.2	Plans for solving this problem can be developed, but it is unlikely that this exercise could be carried through to PS2.3

y applying giver esults and explai	by applying given methods, describe results and explain your approach to problem solving	by applying giver results and explai problem solving
,	lving	lving
		A2.3
	Students should identify the strengths and weaknesses of their approach and how they would do things differently if they met a similar problem.	Students should identify the strengths and weaknesses of their approach and how they would do things differently if they met a similar problem. If the proposed solutions were implemented, this part of the problem solving exercise could be completed.

Student evidence for problem solving could include:

- description of the problem
- tutor records and agreement of standards and approaches
- annotated action plans
- records of discussions
- descriptions of options
- records of reviews.

Appendix 2 – Procedures for moderation of internal assessment

All centres will receive Optically-read Teacher Examiner Mark Sheets (OPTEMS) for each coursework component.

Centres will have the option of:

EITHER

recording marks on an Optically-read Teacher Examiner Mark Sheet (OPTEMS), Section 1

OR

recording marks on computer for transfer to Edexcel by means of Electronic Data Interchange (EDI), Section 2.

Sections 3 and 4 apply whichever option is selected and deal with Coursework Record Sheets and the sample of work required for moderation.

1 Centres using OPTEMS

- 1.1 OPTEMS will be pre-printed on three-part stationery with unit and paper number, centre details and candidate names in candidate number order. A number of blank OPTEMS for candidates not listed will also be supplied.
 - The top copy is designed so that the marks can be read directly by an Optical Mark Reader. It is important therefore to complete the OPTEMS carefully in accordance with the instructions below. **Please do not fold or crease the sheets**.
- 1.2 Before completing the OPTEMS please check the subject, paper and centre details, to ensure the correct sheet is being completed.
- 1.3 All candidates entered by the deadline date will be listed on the OPTEMS, except those carrying forward their centre-assessed marks from the previous year. Such candidates will be listed on a separate OPTEMS coded T for Transferred. Any OPTEMS coded T should be checked, signed to confirm the transfer, and the top copy returned to Edexcel. No mark should be entered.
- 1.4 Late entries will need to be added in pencil either in additional spaces on the preprinted OPTEMS or on one of the blank OPTEMS which will be supplied. Please note that full details of the centre, specification/unit, paper, candidates' names and candidate numbers must be added to ALL blank OPTEMS.
- 1.5 The OPTEMS should be completed **using an HB pencil.** Please ensure that you work on a firm flat surface and that figures written in the marks box go through to the second and third copies.
- 1.6 For each candidate, first ensure you have checked the arithmetic on the Coursework Record Sheet, then transfer the **Total Mark** to the box of the OPTEMS labelled 'Marks' for the correct candidate (Please see exemplar).
- 1.7 Encode the component mark on the right-hand side by drawing a line to join the two dots inside the ellipses on the appropriate marks. Clear, dark **HB pencil** lines must be made but they must not extend outside the ellipses on either side of the two dots. Take care to remember the trailing zeros for candidates scoring 10, 20 etc and the leading zero for single figures, as shown.

- 1.8 If you make a mistake rub out the incorrect marks completely. Amend the number in the marks box and in the encoded section, but **please remember to amend separately the second and third copies** to ensure that the correct mark is clear.
- 1.9 Every candidate listed on the OPTEMS must have either a mark or one of the following codes in the marks box.
 - a 0 (zero marks) should be entered only if work submitted has been found to be worthless. It should **not** be used where candidates have failed to submit work
 - b ABS in the marks box and an A in the encoded section for any candidate who has been absent or has failed to submit any work, even if an aegrotat award has been requested.
 - c W should be entered in the marks box and the encoded section where the candidate has been withdrawn.

Exemplar

Encoded section

Candidate name	Number	Marks												
NEW ALAN* SP	3200	0	(=0=)	(•10•) (•1•)	(•20•) (•2•)	(•30•) (•3•)	(•40•) (•4•)	(•50•) (•5•)	(•60•) (•6•)	(•70•) (•7•)	(•80•) (•8•)	(•90•) (•9•)	(•100•) (•A•)	(•200•) (•W•)
OTHER AMY* SP	3201	5	(•0•) (•0•)	(•10•) (•1•)	(•20•) (•2•)	(•30•) (•3•)	(•40•) (•4•)	(•50•) (•5•)	(•60•) (•6•)	(•70•) (•7•)	(•80•) (•8•)	(•90•) (•9•)	(•100•) (•A•)	(•200•) (•W•)
SMITH JOHN AW	3202	47	(•0•) (•0•)	(•10•) (•1•)	(•20•) (•2•)	(•30•) (•3•)	(•40•) (•4•)	(•50•) (•5•)	(•60•) (•6•)	(•70•) (•7•)	(•80•) (•8•)	(•90•) (•9•)	(•100•) (•A•)	(•200•) (•W•)
WATTS MARK* SP	3203	ABS	(•0•) (•0•)	(•10•) (•1•)	(•20•) (•2•)	(•30•) (•3•)	(•40•) (•4•)	(•50•) (•5•)	(•60•) (•6•)	(•70•) (•7•)	(•80•) (•8•)	(•90•) (•9•)	(•100•) (•A•)	(•200•) (•W•)
JONES ANN* AW	3205	40	(•0•) (•0•)	(•10•) (•1•)	(•20•) (•2•)	(•30•) (•3•)	(•40•) (•4•)	(•50•) (•5•)	(•60•) (•6•)	(•70•) (•7•)	(•80•) (•8•)	(•90•) (•9•)	(•100•) (•A•)	(•200•) (•W•)
WEST SARA SP	3207	W	(•0•) (•0•)	(•10•) (•1•)	(•20•) (•2•)	(•30•) (•3•)	(•40•) (•4•)	(•50•) (•5•)	(•60•) (•6•)	(•70•) (•7•)	(•80•) (•8•)	(•90•) (•9•)	(•100•) (•A•)	(•200•) (•₩•)

- 1.10 Where more than one teacher has assessed the work, the teachers' initials should be given to the right of each candidate's name as illustrated.
- 1.11 The authentication and internal standardisation statement on the OPTEMS must be signed. Centres are reminded that it is their responsibility to ensure that internal standardisation of the marking has been carried out.

Once completed and signed the three-part sets should then be divided and despatched, or retained as follows:

- a **top copy** to be returned direct to Edexcel in the envelope provided **to be received by 1 May for the May/June examination series**. Please remember this form **must not be folded or creased**;
- b **second copy** to be sent **with the sampled coursework** as appropriate (see Section 4) to the moderator. The name and address of the moderator will either be printed on the OPTEMS or supplied separately;
- c **third copy** to be retained by the centre.

Section 2: Centres using EDI

- 2.1 Marks must be recorded on computer and transmitted to Edexcel by **1 May for the May/June examination series**. They must be recorded in accordance with the specifications in the booklet 'Formats for the Exchange of Examination Related Data using Microcomputers'. Each mark has a status as well as a value. Status codes are:
 - V valid non-zero mark recorded; candidate not pre-selected as part of the sample for moderation
 - S valid non-zero mark recorded and candidate included in sample for moderation (refer to OPTEMS and Section 4)
 - **Z** zero mark recorded for work submitted
 - N no work submitted but candidate **not** absent
 - **A** absent for component
 - **M** missing mark; no information available about the candidate's previous performance
 - F— mark carried forward from a previous examination series. (If the mark status is 'F', then no mark follows.)

The OPTEMS provided will indicate, with asterisks, the candidates whose work is to be sampled, where this is pre-selected (see Section 4).

2.2 Printout

Centres are required to produce a printout of the centre-assessed marks and annotate it as described below, before forwarding it **together with the sampled coursework** as appropriate (see Section 4) to the moderator, **to be received by 1 May for the May/June examination series**. The name and address of the moderator will either be printed on the OPTEMS or supplied separately.

ABS - absent

W – withdrawn

* – sampled candidate

– additional sampled candidates.

Where more than one teacher has assessed the work the teachers' initials or the set number should be given beside each candidate's name.

Centres are reminded that it is their responsibility to ensure that internal standardisation of the marking is carried out. The following **authentication** and internal standardisation statement should be written at the bottom of the printout and signed by the teacher responsible:

'I declare that the work of each candidate for whom marks are listed is, to the best of my knowledge, the candidate's own and that where several teaching groups are involved the marking has been internally standardised to ensure consistency across groups.'

Signed	Date
Centres are advised to retain a copy of the anno	otated printout.

Section 3: Coursework record sheets

A copy of the Individual Candidate Record Sheet (ICRS) is provided in *Appendix 3* for centres to photocopy. The ICRS, to be completed for each candidate, provides details for the moderator of how each candidate's total mark is reached. It is the teacher's responsibility to ensure that:

- all marks are recorded accurately and that the arithmetic is correct
- the total mark is transferred correctly onto the OPTEMS or via EDI
- the required authentication statement is signed by the teacher.

Where a candidate's work is included in the sample the ICRS should be attached to the work.

Section 4: Sample of work for moderation

Where the pre-printed OPTEMS is asterisked indicating the candidates whose work is to be sampled, this work, together with the second copy of the OPTEMS, should be posted to reach the moderator by 1 May for candidates seeking certification in the summer series. The name and address of the moderator will either be printed on the OPTEMS or supplied separately.

In addition, the centre must send the work of the candidate awarded the **highest** mark and the work of the candidate awarded the **lowest** mark, if these are not already included within the initial samples selected. The centre should indicate the additional samples by means of a tick () in the left-hand column against the names of each of the candidates concerned.

For all sampled work the associated record sheet must be attached to each candidate's work.

If the pre-selected sample does NOT adequately represent ALL parts of the entire mark range for the centre, additional samples in the range(s) not covered should also be sent to the moderator. As above, additional samples should be indicated by means of a tick (\checkmark) .

For centres submitting marks by EDI the candidates in the sample selected on the OPTEMS should be marked with an asterisk (*) or a tick (\checkmark), as appropriate, on the EDI printout. The annotated printout must be sent to the moderator with the sample of work.

4.2 **In all cases** please note that the moderator may request further samples of coursework, as required and the work of all candidates should be readily available in the event of such a request.

4.3 Internal standardisation

Centres are reminded that it is their responsibility to ensure that where more than one teacher has marked the work, internal standardisation has been carried out. This procedure ensures that the work of all candidates at the centre is marked to the same standards. The statement confirming this on the OPTEMS or the EDI printout must be signed.

Appendix 3 – Individual candidate record sheet (ICRS)



GCSE GEOGRAPHY

Specification B (1313)

Individual Candidate Record Sheet Summer 20.....

Centre number:		Centre name:					
Candidate number:		Candidate name:					
Name of teacher:							
Title of coursewo	rk:						
Linkage to specifi	ication: (eg Ke	ey idea 2.3a)					
Mark awarded	1	Moderated mark					
(63)	((For Edexcel use only)					
(Please complete the	breakdown of m	narks by criterion on the second side of this form)					
Teachers may use attention of the N		highlight any issues they wish to bring to the					
Signature of teacher res		nal standardisation:					

Mark Sheet to be used in conjunction with detailed grade descriptors.

Teacher examiners are invited to highlight relevant statements which justify the mark awarded. Please refer to the specification for the full wording of each descriptor. A candidate does not have to meet all aspects of the descriptor to be awarded a mark at a particular level, but should have met all relevant aspects, including any ICT requirements, to achieve the maximum mark at that level.

In all asse been achie	essment criteria, a mark of 0 should be awarded if there is no evidence that any aspect of the Level eved.	el 1 descrip	
Assessme	ent Criterion 1: Introduction and aims (6 marks)	Centre Mark	Moderato Mark
Level 1 1 – 2	Outline of purpose and/or some aims. Sufficient detail to know what the study is about and where it is located.		
Level 2 3 – 4	A clear statement of the broad purpose, aims and location.		
Level 3 5 – 6	Purpose, aims and location given in detail. Some independent input.		
Assessme	ent Criterion 2: Data collection (15 marks)		
Level 1 1 – 5	Description of data required and methods used to collect and record it. Source of secondary data indicated.		
Level 2 6 – 10	Some explanation of the methods used to collect and record data. Why secondary data chosen, or how obtained.		
Level 3 11 – 15	Clear explanation of methods used to collect and record data. Justification of methods. Justification of data chosen. Why secondary data chosen and how obtained. Limitations of data. Problems encountered in data collection		
	ent Criterion 3: Data presentation (15 marks)		
Level 1 1 – 5	A limited range of basic methods.		
Level 2 6 – 10	A variety of appropriate conventional methods.		
Level 3 11 – 15	A wide variety of appropriate methods. Some original methods. Justification of methods chosen.		
Assessme	ent Criterion 4: Analysis and conclusions (15 marks)		
Level 1 1 – 5	Describes the data. Awareness of different attitudes. Some general concluding comments.		
Level 2 6 – 10	Data described in detail. Some genuinely analytical comment. Identification of links/ relationships and/or different values/attitudes. Conclusions derived from data. Some evaluation of the study.		
Level 3 11 – 15	Data analysed in detail. Links made to geographical theory. Shows relevance of links/relationships/values/attitudes. Conclusions supported by evidence. Evaluation of the study.		
Assessme	ent Criterion 5: Planning and organisation (12 marks)		
Level 1 1 – 4	Some material relevant, but not organised into logical sequence. The investigation is incomplete. Page numbers/content page/headings. Spelling, punctuation and grammar used with some accuracy. Some use of ICT.		
Level 2 5 – 8	Content organised in clear and logical way. Page numbers/content page/titles all used appropriately. Spelling, punctuation, grammar used with reasonable accuracy. Some appropriate use of ICT.		
Level 3 9 – 12	Study well organised so it is easy to read. Diagrams integrated with text. Sub-headings and cross-references used appropriately. Spelling and punctuation used with considerable accuracy, with a range of grammatical constructions. ICT integrated and used appropriately to enhance the study.		

TOTAL (63):

Further copies of this publication are available from Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467 Fax 01623 450481 E-mail: publications@linneydirect.com

Order Code UG008972 November 2000

For more information on Edexcel qualifications please contact our Customer Response Centre on 0870 240 9800 or E-mail: enquiries@edexcel.org.uk or visit our website: www.edexcel.org.uk

Edexcel Foundation is a registered charity and a Company Limited By Guarantee Registered in England No. 1686164

