

REVISED GCE AS & A Level  
Scheme of Work  
**Geography**

This is an exemplar scheme of work which supports the teaching and learning of the Geography specification

scheme  
of work

# **GCE Geography**

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## Introduction

CCEA has developed new GCE specifications for first teaching from September 2008. This scheme of work has been designed to support you in introducing the new specification.

The scheme of work provides suggestions for organising and supporting students' learning activities. It is intended to assist you in developing your own scheme of work and should not be considered as being prescriptive or exhaustive.

The time allocations have been based on a notional 120 hours a year of guided learning hours for the AS and A2 courses.

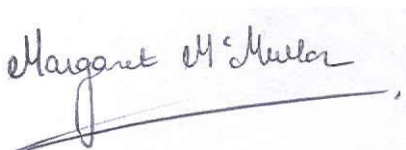
Please remember that this document contains suggestions only. It is the specification on which assessment is based and which details the knowledge, understanding and skills that students need to acquire during the course. The scheme of work should therefore be used in conjunction with the specification.

Published resources and web references included in the scheme of work have been checked and were correct at the time of writing. However they may be updated by the time that the specification is introduced. You should therefore check with publishers and websites for the latest versions. CCEA accepts no responsibility for the content of particular publications or websites referred to.

CCEA will be making Word versions of these schemes of work available on its subject micro-site. This will enable you to use them as a foundation for developing your own schemes of work which are matched to your teaching and learning environment and the needs of your students.

I hope you find this aspect of our support package useful in your teaching.

Best wishes

A handwritten signature in dark ink, reading "Margaret McMullan". The signature is written in a cursive style and is positioned above a horizontal line that extends across the width of the signature.

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# **CCEA Exemplar Scheme of Work: GCE Geography**



# **Unit: AS 1**

## **Physical Geography**

## **Specification: GCE Geography**

**Unit AS 1:** Physical Geography  
**Section A:** Fieldwork Skills

### **Resources**

*Skills, Techniques and Decision Making* – Roulston, S. and Reid, M.  
*Geography for CCEA AS Level* – Thom, M. and Armstrong, E.

### **Topic for Investigation**

An issue, hypothesis or question for investigation related to parts of Units 1 or 2: Physical or Human Geography

### **Skills and techniques:**

#### **(a) Data Collection:**

- Planning for safety in the field;
- Observation and collection of primary data; and
- Analysis and interpretation of public maps at a range of scales, photographs, remotely sensed images and data from secondary sources (quantitative and qualitative). *Geofile* 452 (September 2003)

#### **(b) Data processing:**

- Map distributions – dot, flow, isoline and choropleth;
- Draw annotated sketch maps;
- Construct, analyse and interpret – scatter graphs, line graphs, bar graphs, pie charts, proportional graphs and triangular graphs (with all conventions);
- Sampling methods – random, systematic, stratified (point, line and quadrat) and pragmatic; and
- Statistical analysis – mean, median, mode and range – Spearman's Rank correlation and nearest neighbour analysis.

### **The written report - 100 word summary including:**

- Title;
- Location details (map if appropriate); and
- Aims and hypotheses tested or questions to answer.

## **Specification: GCE Geography**

### **Unit AS 1: Physical Geography**

- Elements 1**
- (a)** Processes and features in fluvial environments
  - (b)** Human interaction with the fluvial environment.

### **Prior Learning**

It would be advantageous if pupils have:

- studied fluvial geography at GCSE level;
- previous experience in interpreting a variety of graphs, maps; and
- used a variety of statistical techniques to present and analyse data.

### **Resources**

It is important to note that a wide variety of texts and assessment activities are included in the schemes so that teachers may select relative to their resources.

### **Time Duration**

4-5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 1 a) Processes and features in fluvial environments</p> <p><b>Learning Outcome:</b> (i) Understand that the drainage basin is an open system involving inputs, outputs, stores and transfers of energy and matter</p> <p><b>Spatial context requirement:</b> General reference to places for illustration purposes only.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>delimit the drainage basin boundaries including the watershed in the context of the water cycle;</li> <li>understand how a drainage basin operates as an open system;</li> <li>understand how rivers transfer energy/matter;</li> <li>explain how inputs, outputs and stores are linked by transfer processes;</li> <li>understand basic concepts associated with the drainage basin hydrology (interception, infiltration, evapotranspiration, transpiration through flow, groundwater flow etc.).</li> </ul>	<p><i>Geography for CCEA AS Level</i> Thom and Armstrong (2008) Chapter 1</p> <p><i>Essential AS Geography</i> p.221-225</p> <p><i>Geography: An Integrated Approach</i> (3<sup>rd</sup> Ed) p.58-59</p> <p><i>Landmarks AS Geography</i> p.40-42, p.44-46</p> <p><i>Advanced Geography</i> (2000) p.61-62</p> <p><i>Landform Systems</i> p.18-19 (1997)</p> <p><i>Natural Systems and Human Responses</i> p. 73-74</p> <p><i>Geography in Focus</i> - Chapter 9</p> <p><i>Advanced Geography</i> (Edexcel) Chapter 2</p> <p><i>Higher Geography</i> p.47-48</p>	<p>Map work – Pupils use a relief map to delimit the watershed and drainage basin of the river</p> <p>Pupils will construct a systems diagram to illustrate the role of inputs, stores, transfers and outputs in an open system</p> <p>The transfers of material through a drainage basin will be discussed and processes and stores named and defined</p> <p>Fieldwork opportunities: Measuring the rate of infiltration at different parts of a slope or before and after rainfall</p> <p>Test – Draw a diagram of water flows within a drainage basin with terminology and definitions</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<b>ASSESSMENT AND REVIEW</b>	Specimen Paper Geography Assessment Unit AS 1 Physical Geography Past examination papers: Assessment Unit AS 1 Themes in Physical Geography. When using past papers please check carefully the requirements of the revised specification. Summer 2007 Q 1(a) (system), Spring 2005 Q 1 (a) (processes and stores), and Summer 2005 Q 1(a) (processes and stores)		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Learning Outcome:</b></p> <p>(ii) Explain how the following factors affect discharge and the storm hydrograph: relief, basin size and shape, soil, geology, land use, drainage density and precipitation</p> <p><b>Spatial context requirement:</b></p> <p>General reference to places for illustration purposes only</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• calculate discharge;</li> <li>• use ICT to calculate and represent statistical data;</li> <li>• draw and interpret the storm hydrograph;</li> <li>• understand the annual variation of discharge – river regime;</li> <li>• use and interpret Spearman’s Rank correlation appropriately;</li> <li>• understand how various factors influence hydrograph;</li> <li>• shape, relief, basin size and shape, drainage density (morphology) soil, geology, (geological), land use (human); and precipitation, (climatic).</li> </ul>	<p><i>Geography for CCEA AS Level</i> Thom and Armstrong (2008) Chapter 1</p> <p><i>Geography: An Integrated Approach</i> (3<sup>rd</sup> Ed) p.61-63</p> <p><i>Landmark Geography</i> p.42-43, p.47-53</p> <p><i>Advanced Geography</i> p.66, p.103</p> <p><i>Environment and People</i> p.44-46</p> <p><i>Water Resources, Process and Management</i> p.25-35</p> <p><i>Core Geography 16-19</i> – p.38-39, p.46-48</p> <p><i>AS Geography – Concepts and Cases</i> p.8-9</p> <p><i>Geography Success at A Level</i> p.62-63</p>	<p>Pupils should be able to calculate discharge using velocity data and cross sectional area data (from drawn cross sections and using spreadsheet package). Primary fieldwork data if available</p> <p>Draw and explain the key elements of the storm hydrograph. Contrast flashy and flat hydrograph forms</p> <p>Examine the influence of short and long-term basin and storm characteristics on the form of storm hydrographs</p> <p>Discuss and explain the impact of urbanisation and afforestation on the features of storm hydrographs</p> <p>Calculate Spearman’s Rank Correlation (<i>Skills, Techniques and Decision Making</i> p.28-34) between lag time and drainage basin area, stream slope, percentage urban, % forest (Activity – <i>Landmark AS</i> p.52)</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
		<p><i>Essential AS Geography</i> p.229-231</p> <p><i>Geography in Focus</i> - Chapter 9</p> <p><i>Higher Geography</i> p.49-51</p>	<p>Extension Activity – Simulation of a hydrograph (<i>Water Resources, Process and Management</i> p.28-29)</p> <p>Extension Activity – Interpreting Hydrographs – <i>Natural Systems and Human Responses</i> p.87-89</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 1 Physical Geography</p> <p>Past examination papers: Assessment Unit AS 1 Themes in Physical Geography. When using past papers please check carefully the requirements of the revised specification.</p> <p>Summer 2007 Q 1(a) (system and size/geology),</p> <p>Spring 2007 Q 1 (b) (deforestation/urbanisation) and (c) (discharge),</p> <p>Spring 2005 Q 1(b) and (c) (hydrograph),</p> <p>Spring 2004 Q 1 (a) (discharge factors)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Learning Outcome:</b></p> <p>(iii) Understand river processes including:</p> <p>Erosion – abrasion/corrasion, attrition, hydraulic action, solution/corrosion.</p> <p>Transportation – suspension, solution, saltation and traction.</p> <p>Deposition – Hjulstrom curves.</p> <p><b>Spatial Context requirement</b> General reference to places for illustration purposes only.</p> <p><b>Learning Outcome:</b></p> <p>(iv) Explain the formation of river landforms: waterfalls, meanders, pools and riffles, oxbow lakes, floodplains, levees, deltas (arcuate and bird’s foot)</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• understand the processes of:</li> <li>• erosion;</li> <li>• transportation and Deposition;</li> <li>• relate the concept of river energy and work to the processes of erosion, transportation and deposition with the use of the Hjulstrom curve;</li> </ul> <ul style="list-style-type: none"> <li>• recognise and explain the processes and conditions which cause the formation of the fluvial landforms listed;</li> </ul>	<p><i>Geography for CCEA AS Level</i> Thom and Armstrong (2008) Chapter 1</p> <p><i>Geography: An Integrated Approach</i> (3<sup>rd</sup> Ed) p. 62-74</p> <p><i>Essential AS Geography</i> p.240-244</p> <p><i>Changing Environments</i> (2000) p.14-27</p> <p><i>Landmark AS</i> p. 53-54, p.62-64</p> <p><i>AS Concepts and Cases</i> (1999) p.12-16</p> <p><i>Advanced Geography</i> – p.87-91, p.93-94</p> <p><i>Geo Factsheet 98</i> (Sept 2000) River channel variables</p> <p><i>Environment and People</i> – p. 37-40</p>	<p>Note making - summarise the processes of erosion, transportation and deposition</p> <p>Design a graph to show the relationship between river energy (velocity) and impact on sediment of varying size. Compare and contrast to Hjulstrom curve</p> <p>Construction of annotated diagrams of fluvial landforms</p> <p>View video footage or on-line animations of fluvial landforms and processes (e.g. <a href="http://www.school-portal.co.uk/">www.school-portal.co.uk/</a>)</p> <p>Analysis of fluvial landforms on maps and photographs</p> <p>Fieldwork Opportunity – Primary data</p> <p>A) Processes – downstream changes in discharge, channel form and/or bed load characteristics B) Features – analysis of meanders, pools and riffles etc</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Spatial context requirement:</b></p> <p>General reference to places for illustration purposes only</p>	<ul style="list-style-type: none"> <li>• identify fluvial landforms from maps, photographs and satellite images;</li> <li>• draw and annotate diagrams to illustrate the structure and formation of fluvial landforms.</li> </ul>	<p><i>Landform Systems</i> p.27-30, 32-38 and 46-50</p> <p><i>Geofile 251</i> (January 1995)</p> <p><i>Geofile 529</i> (Sept. 2006) Rivers fieldwork</p> <p><i>Essential AS Geography</i> p.245-252</p> <p><i>Geography in Focus</i> - Chapter 9</p> <p><i>Higher Geography</i> (2<sup>nd</sup> Ed.) p.53-61</p>	<p>Opportunities to use secondary sources maps, photographs to select, sample and analyse. Sketch mapping, graphic and statistical analysis</p> <p>Groups may collect data for this element</p> <p><i>(Skills, Techniques and Decision Making</i> p.7-13 and 28-34)</p> <p>Extension activity: Pupils use digital images to prepare a PowerPoint presentation illustrating the formation of a range of fluvial landforms</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 1 Physical Geography</p> <p>Past examination papers: Assessment Unit AS 1 Themes in Physical Geography. When using past papers please check carefully the requirements of the revised specification.</p> <p>Spring 2007 Q4, Summer 2004 Q4 (river features), Spring 2004 1 (b) (transport)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b></p> <p>1 b) Human interaction with the fluvial environment</p> <p><b>Learning Outcome:</b></p> <p>Analyse the causes of floods and their effects on people, property and land</p> <p><b>Spatial context requirement:</b></p> <p>The beneficial and detrimental effects of flooding in a large-scale drainage basin or its delta, eg Ganges valley or its delta (national/regional scale).</p>	<p>Students should be able to :</p> <ul style="list-style-type: none"> <li>• understand the physical and human factors which cause river flooding;</li> <li>• discuss how flooding can have beneficial and detrimental effects on society, the economy and the environment in their case study area;</li> <li>• access relevant information from a library using a range of resources including ICT, textbooks;</li> <li>• understand how humans have adapted to predictable floods.</li> </ul>	<p><i>Geography for CCEA AS Level</i> Thom and Armstrong (2008) Chapter 1</p> <p><i>Advanced Geography Concepts and Cases</i> p.243-246</p> <p><i>Environment and People</i> - p.46-49 (Bangladesh)</p> <p><i>Changing Environments</i>, p.30-36</p> <p>Magazine articles:  <i>Geography Review</i> November.(1993)  <i>Geography Review</i> March (1996) (Bangladesh) p.21  <i>Geography Review</i> November (1996) (Bangladesh) p.2  <i>Geo Factsheet 45</i> April (1998)  <i>Geographical Magazine</i> July (1994) (Bangladesh Floods)</p> <p><i>Water Resources: Process and Management</i> p.176-180 (1988 Bangladesh flood)</p> <p><i>Thinking Through Geography</i> – Leat, D, p.10-12</p> <p><i>Geofile</i> 366 (Jan 2000), 345 (Jan 99), 268 Sept 95)</p> <p>CD Rom – <i>Physical Geography</i> Environment</p>	<p>Pupils discuss and summarise the factors which cause flooding</p> <p>Research on a selected example of flooding</p> <p>Group work presentations on;</p> <ol style="list-style-type: none"> <li>a) the causes;</li> <li>b) the detrimental effects; and</li> <li>c) the beneficial effects, of flooding in the selected study.</li> </ol> <p>ICT – Research the impact of recent flood events in Bangladesh</p> <p>Review Thinking Activity (River Basins and Flooding – (Odd one Out) – D. Leat.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
		<p><a href="http://www.dartmouth.edu/~floods/archives/">www.dartmouth.edu/~floods/archives/</a> (Global Archive of Large Floods)</p> <p><a href="http://www.floodplain.org">www.floodplain.org</a> information on flooding/flood management)</p>	<p>Extension Activity- Debate, “This House believes that flooding is the lifeblood of Bangladesh”</p> <p>Extended writing on causes and effects of flooding in a specific location</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 1 Physical Geography Past examination papers: Assessment Unit AS 1 Themes in Physical Geography. When using past papers please check carefully the requirements of the revised specification. Summer 2007 Q4, Spring 2005 Q4, (outcomes), Summer 2006 Q4, Spring 2004 Q4 (flood causes)</p>		

**Specification:**           **GCE Geography**

**Unit AS 1:**               **Physical Geography**

**Elements 2**           **(a)**    The ecosystem as an open system  
                             **(b)**    Plant succession  
                             **(c)**    Human Interaction with ecosystems.

### **Prior Learning**

It would be advantageous if pupils have:

- studies ecosystems at GCSE Level;
- experience of group work and oral presentations; and
- experience of drawing and interpreting a wide variety of graphical representation methods.

### **Resources**

It is important to note that a wide variety of texts and assessment activities are included in the schemes so that teachers may select relative to their resources.

### **Time Duration**

4-5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 a) The ecosystem as an open system</p> <p><b>Learning Outcome:</b> Demonstrate knowledge and understanding of the ecosystem as an open system to include</p> <p>i. biotic and abiotic components</p> <p>ii. inputs, outputs, transfers and stores of energy and matter</p> <p>iii. trophic structure: autotrophs, heterotrophs, decomposers; trophic levels, trophic pyramid;</p> <p>iv. general cycling of nutrients between soil, litter and biomass; nutrient cycling model</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• demonstrate a knowledge and understanding of the ‘ecosystem’ concept as an open system;</li> <li>• classify the components (biotic and abiotic) of an ecosystem;</li> <li>• understand how ecosystems function through the two basic processes of;                             <ol style="list-style-type: none"> <li>1. energy input and flow</li> <li>2. nutrient cycling and illustrate using diagrams</li> </ol> </li> <li>• interpret the trophic pyramid and the model of nutrient stores and transfers;</li> <li>• illustrate the components, energy flows and nutrient cycling in a local ecosystem.</li> </ul>	<p><i>Geography for CCEA AS Level</i> Thom and Armstrong (2008) Chapter 2 –Including case studies – Breen wood</p> <p><a href="http://www.geographyinaction.co.uk">www.geographyinaction.co.uk</a></p> <p><i>Geography: An Integrated Approach</i> p.295-301</p> <p><i>Soils, vegetation and Ecosystems</i> p.97-106</p> <p><i>AS Geography Concepts and Cases</i> p. 35-40</p> <p><i>The Nature and Vulnerability of Tropical Ecosystems</i> p.8-10</p> <p><i>Ecosystems and Human Activity</i> - p.6-9.</p> <p>Woodlands – Deciduous p.42-46 and Borealp.62-66</p> <p><i>Environment and People</i> (1995) p.166-170</p> <p><i>Higher Geography</i> (2<sup>nd</sup> Ed.) p.151-155 Oak woodland</p>	<p>Pupils research and define key terminology associated with ecosystem dynamics</p> <p>Diagram construction and classification of inputs, stores, transfers and outputs of energy and matter in the ecosystem</p> <p>Interpretation of the model of nutrient cycling, eg Gersmehl cycle</p> <p>Drawing and the interpretation of food chains, food webs and the trophic pyramid</p> <p>Classification and sequencing of autotroph and heterotroph populations in food webs</p> <p>Fieldwork Opportunity: Pupils research a local ecosystem such as a woodland or lake, drawing up trophic pyramids and food chains. Sketch maps</p> <p>CD Rom: Physical World</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Spatial context requirement:</b></p> <p>For (i) – (iv) – study of a small scale ecosystem, including its physical characteristics and examples of food chains; eg woodland or lake.</p>		<p><i>AS/A Level Geography Revision</i> p.103-106</p> <p><i>Essential AS Geography</i> p.76-80</p> <p><i>The Physical Environment</i> p. 150-155</p> <p><i>Geofile</i> 431 (Sept 2002) British deciduous woodlands</p>	
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 1 Physical Geography</p> <p>Past examination papers: Assessment Unit AS 1 Themes in Physical Geography. When using past papers please check carefully the requirements of the revised specification.</p> <p>Summer 2007 Q 2 (a) (iii) case study trophic pyramid</p> <p>Spring 2007 Q5 Open system at local case study scale</p> <p>Summer 2005 2(b) nutrient cycling,</p> <p>Spring 2005 Q5 energy and nutrients flows in a small scale ecosystem</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 b) Plant succession</p> <p><b>Learning Outcome:</b></p> <p>Demonstrate knowledge and understanding of plant succession to include seral stages, climatic climax, and plagioclimax vegetation</p> <p><b>Spatial context requirement:</b></p> <p>Study of one vegetation succession at a small/regional scale; eg Krakatoa.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>understand the concept of succession and identify factors (internal and external) which cause change in vegetation communities over time;</li> <li>identify seral stages in primary succession and demonstrate a knowledge of changes in productivity, biomass, biodiversity, vegetation structure etc;</li> <li>understand the role of people in the formation of a plagioclimax;</li> <li>illustrate the concept of succession in a small or regional scale environment eg psammosere, hydrosere etc;</li> <li>demonstrate understanding of the sequence and processes in one small or regional scale succession study;</li> </ul>	<p><i>Geography for CCEA AS Level</i> Thom and Armstrong (2008) Chapter 2 –Hydrosere case study</p> <p>Environment and people p.228 Hydrosere</p> <p><i>Soils, Vegetation and Ecosystems</i> p.65-71 and 79 Including hydrosere –Sweetmere, Shropshire <i>Biogeography</i> p.104-115</p> <p><i>Essential AS Geography</i> (2000) p. 82-85</p> <p>Advanced Geography (Edexcel) p.376-381 (including plagioclimax) Hydrosere - Sweetmere, Shropshire</p> <p><i>Ecosystems and Human Activity</i> p.79-85 psammosere study</p> <p><i>Geography: An Integrated Approach</i> p.286-294</p> <p><i>Higher Geography</i> (2<sup>nd</sup> Ed.) p.165-168 psammosere in Fife</p>	<p>Draw an annotated diagram to illustrate vegetation successional changes. – primary, secondary and plagioclimax</p> <p>Research using a range of resources including ICT/CD-ROMs and Internet the terminology associated with succession</p> <p>Discuss and summarise the internal and external factors responsible for successional changes in plant communities</p> <p>Research and study a local scale/regional scale example of vegetation succession</p> <p>Fieldwork Opportunity – Psammosere - sand dune succession case study such as Murlough Nature Reserve (Dundrum), Tyrella, Whitepark Bay, Murlough Bay (Co. Antrim) Magilligan etc Or Hydrosere – Freshwater succession such as Hollymount, Co. Down.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
		<p><i>Advanced Geography: Concepts and Cases p.207</i></p> <p><a href="http://www.geographyinaction.co.uk">www.geographyinaction.co.uk</a> Virtual field trip of sand dunes in Magilligan</p> <p><i>Geofile 129 (April 198) -Succession</i></p>	<p>Using vegetation analysis (systematic area – quadrat - sampling). Graphically illustrate changes in vegetation across a succession: pH, cover, height etc. Illustrate using scatter graphs, line graphs, pie and bar charts</p> <p>Analyse using Spearman’s rank correlation, means and range.</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 1 Physical Geography Past examination papers: Assessment Unit AS 1 Themes in Physical Geography. When using past papers please check carefully the requirements of the revised specification. Spring 2007 Q2(b) plagioclimax, Summer 2006 Q5 vegetation succession study, Summer 2004 Q2(b) disrupted climatic climax, Spring 2004 Q5 Case study succession</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 c) Human interaction with ecosystems</p> <p><b>Learning Outcome:</b></p> <p>(i) knowledge and understanding of:</p> <ul style="list-style-type: none"> <li>• characteristics of mollisols/chernozems;</li> <li>• the characteristics of mid-latitude grasslands; and</li> </ul> <p>(ii) evaluate the impact of human activity on and attempts to manage an area of mid-latitude grassland (monoculture, soil erosion and soil conservation)</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• locate the areas of mid-latitude grassland on a global scale;</li> <li>• describe the climate and vegetation of this ecosystem;</li> <li>• draw and annotate a soil profile diagram of a Mollisol and be able to understand the important roles of leaching and capillary rise;</li> <li>• understand how these soils have been used for commercial cereal production (monoculture) in the past;</li> <li>• understand how modern farming methods can lead to soil erosion;</li> <li>• describe and explain the soil conservation methods used in a specific national or regional setting.</li> </ul>	<p><i>Geography for CCEA AS Level</i> Thom and Armstrong (2008) Chap 2 – Prairies case study</p> <p>Atlases– CD Rom atlas.</p> <p><a href="http://www.thewildclassroom.com/biomes/index.html">www.thewildclassroom.com/biomes/index.html</a></p> <p><i>Soils, Vegetation and Ecosystems</i> p.123-125.</p> <p><i>Managing Ecosystems</i> (case study Prairies USA) .p59-63.</p> <p><i>Geo Factsheet</i> 125 (Jan, 2002) Grassland Biomes – North America case study</p> <p><i>North America an Advanced Geography</i> p.133-146– (case study – Canadian Prairies)</p> <p><a href="http://www.agr.gc.ca/pfra/main_e.htm">www.agr.gc.ca/pfra/main_e.htm</a></p> <p>Canadian grassland Management site</p> <p><i>Higher Geography</i> (2<sup>nd</sup> Ed.) p.243-251 (Prairie agriculture).</p>	<p>Mapping the location of mid-latitude grassland areas</p> <p>Draw and interpret a climate graph for a specific mid-latitude grassland area</p> <p>Draw and annotate a chernozem soil profile diagram</p> <p>Relate the specific soil formation factors to the chernozem soil profile</p> <p>Study a triangular (ternary) diagram of soil texture. Locate and identify soil types (<i>AS Geography for CCEA Chap.2</i>)</p> <p>From a range of textual and online resources research a selected mid-latitude grassland area and examine past and current commercial farming practices and their impact on the soil</p> <p>Pupils need to study human management activities to conserve soil in this region.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Spatial context requirement:</b></p> <p>For (i) and (ii) a study of the impact of human activity and attempts to manage an area of mid-latitude grassland e.g. Prairies of USA (national/regional scale)</p>		<p><i>Geography: An Integrated Approach</i> p.339-42</p> <p><i>Environment and People</i> 1995 p.201-203 (case studies: Hungary puszta and Agriculture in mid west USA).</p> <p><i>Ecosystems and Human Activity</i> p.99-101 (Prairies)</p> <p>Video: The Great Plains: Return to Wildlife</p> <p><i>Geofile</i> 456 (Sept, 2003) USA Agriculture</p>	<p>This could be carried out as group work and presented as a PowerPoint with accompanying word processed notes.</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 1 Physical Geography                      Past examination papers: Assessment Unit AS 1 Themes in Physical Geography. When using past papers please check carefully the requirements of the revised specification.                      Summer 2007, Q5 human activity and grassland,                      Spring 2006 Q5 Mollisol characteristics and management                      Summer 2005 Q5 management of mid-latitude grassland,                      Spring 2005 Q1(c) mollisol characteristics                      Spring 2004 2(a) and (b) mid latitude nutrient cycle and soil erosion</p>		

**Specification:**           **GCE Geography**

**Unit AS 1:**               **Physical Geography**

**Elements 3**

**(a)** Atmospheric processes

**(b)** Weather systems in mid-latitudes and their interaction with the human environment

**(c)** Extreme weather events.

### **Prior Learning**

It would be advantageous if pupils have studied:

- atmosphere at GCSE;
- previous experience of interpreting synoptic charts and satellite photographs to describe weather patterns; and
- experience of group work and oral presentations.

### **Resources**

It is important to note that a wide variety of texts and assessment activities are included in the schemes so that teachers may select relative to their resources.

### **Time Duration**

4-5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 a) Atmospheric processes</p> <p><b>Learning Outcome:</b> Demonstrate knowledge and understanding of:</p> <p>(i) the global energy balance: vertical and horizontal heat transfer, including the role of ocean currents;</p> <p>(ii) the factors which control wind speed and direction; and</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• describe the structure of the atmosphere;</li> <li>• understand and illustrate the earth/atmosphere energy budget;</li> <li>• describe and explain how energy is transferred: vertically by air movement and horizontally in wind and ocean currents;</li> <li>• recognise the reasons for global temperature patterns;</li> <li>• recognise and explain the forces that govern winds;</li> </ul>	<p><i>Geography for CCEA AS Level</i>, Thom and Armstrong (2008) Chapter 3 - All aspects</p> <p><i>Essential AS Geography</i> p.179-184</p> <p>Atlas world map -Temperature patterns</p> <p><i>Geography: An Integrated Approach</i> p.206-212 Atmosphere structure and heat budget</p> <p><i>Process and Pattern in Physical Geography</i> p.38-40 Circulation of the atmosphere</p> <p><i>Atmospheric Processes and Human Influences</i> p.30-35 Solar budget and ocean currents and p.77-83 wind motion and global models.</p>	<p>Illustrate the vertical structure of the atmosphere</p> <p>Use slate globe and OHP (sun) to show the role of latitude on heat variation and diagrams to illustrate annual energy surplus (tropics), deficit (polar) and exchange region (mid-latitudes)</p> <p>Create a map of world built up assuming homogeneous globe, at an equinox temperature patterns. Compare to actual temperature variation and identify other factors in temperature patterns (continentality, ocean currents, prevailing wind, altitude)</p> <p>Use a balancing forces approach to the factors affecting direction and speed of air movement – pressure gradient, Coriolis effect and friction.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) the general circulation of atmosphere including spatial variations in pressure, resulting surface winds and the tri-cellular model.</p>	<ul style="list-style-type: none"> <li>describe and illustrate the pressure and air flows of the tri-cellular general circulation model (Polar, Ferrel and Hadley cells).</li> </ul>	<p><i>Advanced Geography (Edexcel)</i> p.286-288 energy budget, p.291-292 global pressure and winds and p.289-291 global circulation pattern</p> <p><i>Geography: An Integrated Approach</i> p.224-225 air motion and p.226-227 Tri-cellular model of atmospheric circulation</p> <p>Atlas world map - Pressure and Wind patterns.</p>	<p>Use maps to show surface circulation of atmosphere and pressure belts noting complexity of pattern due to land/sea differences</p> <p>Name pressure belts and wind areas</p> <p>Draw simple convection diagram and develop into vertical cells on global scale start with Hadley cell.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 (a) (Continued)</p> <p><b>Learning Outcome:</b></p> <p>(iv) the distinction between absolute and relative humidity; and</p> <p>(v) dew point temperature and the various causes of precipitation</p> <p><b>Spatial context requirement:</b></p> <p>study of global patterns of precipitation, surface temperature, pressure, winds (global scale study)</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>describe the difference between absolute and relative measures of air moisture;</li> <li>demonstrate knowledge of the various ways air reaches dew point and forms precipitation – convection, orographic (relief) and frontal;</li> <li>describe and explain the global distribution of rainfall.</li> </ul>	<p><i>Geography for CCEA AS Level</i>, Thom and Armstrong (2008) Chapter 3</p> <p><i>Geography: An Integrated Approach</i> p.207</p> <p><i>Essential AS Geography</i> p.197-201</p> <p>Wet and dry bulb thermometer Humidity tables</p> <p><i>Geography: An Integrated Approach</i> p.200</p> <p>Atlas: maps of British Isles and relief maps of British Isles</p> <p>Atlas: world maps: Pressure and Winds,</p>	<p>Use wet and dry bulb thermometer to calculate relative humidity using Humidity tables</p> <p>Identify the nature of phase change at dew point temperature</p> <p>Discuss the role of temperate change on air humidity measures</p> <p>Illustrate the three formation processes of precipitation</p> <p>Describe pattern of rainfall in the British Isles and attempt to explain (p.202-203 <i>Essential AS Geography</i>)</p> <p>Identify and account for relationships between patterns of precipitation on regional and world maps.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>ASSESSMENT AND REVIEW</b></p>			<p>Specimen Paper Geography Assessment Unit AS 1 Physical Geography                      Past examination papers: Assessment Unit AS 1 Themes in Physical Geography. When using past papers please check carefully the requirements of the revised specification.                      Summer 2007 Q 3(a) atmospheric circulation,                      Spring 2007 Q 3 (a) solar radiation balance,                      Summer 2006 Q 3(a) Wind forces and precipitation,                      Spring 2006 Q 3 (a) Dew point, Q 3 (b) global energy balance,                      Summer 2005 Q 3 (a) surface temperature patterns,                      Spring 2005 Q 3 (a) processes maintaining energy budget, Q 3 (c) Precipitation,                      Summer 2004 Q 3 (b) Energy (latitude).                      Summer 2003 Q 3 (a) Dew point, Q 3 (b) Ocean currents,                      Spring 2003 Q 3(a) air masses and (b) wind speed and direction.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 b) Weather systems in mid-latitudes and their interaction with the human environment</p> <p><b>Learning Outcome:</b></p> <p>(i) demonstrate knowledge and understanding of Mid-latitude frontal depressions their structure, formation and associated air masses;</p> <p>(ii) analyse the impact of frontal depressions on people;</p> <p>(iii) understand the formation of anticyclones and their associated weather; and</p> <p>(iv) contrast the impacts of winter and summer anticyclones on people.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• identify the nature of air masses;</li> <li>• be able to interpret a synoptic chart of mid-latitude weather systems (Low and High);</li> <li>• annotate 3-d diagrams of depression structure and formation sequence;</li> <li>• show and understand the conditions associated with a depression and the weather sequence associated with it;</li> <li>• understand high pressure conditions and explain the processes that lead to different kinds of weather under summer and winter anticyclones;</li> </ul>	<p><i>Geography for CCEA AS Level</i>, Thom and Armstrong (2008) Chapter 3</p> <p><i>Essential AS Geography</i> p. 204-209</p> <p><i>Geography: An Integrated Approach</i>, p.229-230 Air masses, p.244-245</p> <p>TV weather forecast video or website Met office</p> <p>Satellite images from internet weather sites e.g.: <a href="http://www.metoffice.gov.uk/weather/uk/index.html">www.metoffice.gov.uk/weather/uk/index.html</a> <a href="http://www.ireland.com/weather">www.ireland.com/weather</a> <a href="http://www.accuweather.com/ukie/index.asp?">www.accuweather.com/ukie/index.asp?</a></p> <p><i>Geography: An Integrated Approach</i> p.230-232 Depression life cycle p.232-233 'Great Storm' 1987</p>	<p>Use maps to explain the origin and characteristics of air masses</p> <p>Tie the spiralling weather systems of the mid latitudes to the region of energy exchange of the Ferrell cell</p> <p>Use satellite images and synoptic charts to identify low and high pressure systems and their related weather</p> <p>The construction and labelling of a cross-section through a depression</p> <p>Sequencing of the weather associated with the passage of mid-latitude depressions</p> <p>Discuss the sequence of events starting with air subsidence to the nature on an anticyclone.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Spatial context requirement:</b></p> <p>For (ii) and (iv) study of the effects of low and high pressure systems on the weather at the small or regional scale eg Northern Ireland.</p>	<ul style="list-style-type: none"> <li>understand the causes of heatwave, drought, fog and frost and their impact on the human environment</li> <li>relate actual weather events at the small/regional scale to both low and high pressure mid-latitude systems.</li> </ul>	<p><i>Advanced Geography Edexcel</i> p.296-302</p> <p>1994 Anticyclone and 1987 Great Storm</p> <p>Synoptic charts on the internet e.g.  <a href="http://www.metoffice.gov.uk/weather/uk/index.html">www.metoffice.gov.uk/weather/uk/index.html</a></p> <p>Use of anticyclone secondary data: school or internet</p> <p><i>Geo Factsheet</i> 106 (Jan 2001) Anti-cyclone hazard?</p> <p><i>Geo Factsheet</i> 146 (April 2003) Depressions</p> <p><i>Essential AS Geography</i> p.214-215 1987 'Great Storm' and p.218-219 1976 UK drought</p>	<p>Using examples show how anticyclones produce different weather in summer and winter. (Internet resources or school weather station)</p> <p>Discuss the implications for human activity – summer drought, winter fog and frost</p> <p>Group work</p> <p>From written resources and online research describe and explain the impact of a weather system event (Low or High) on people at the regional scale, eg 1987, 1994 storms of 1976, 1994 or 1996 drought/anticyclone.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
		<p><i>Geofile</i> 355 UK anticyclones</p> <p><i>Geofile</i> 376 Satellite image</p> <p><i>Geofile</i> 493 Frontal rainfall effects British Isles</p> <p><i>Geo.Active</i> 342 (2006) Depression weather</p> <p>CD Rom: Physical Geography and Weather</p>	
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 1 Physical Geography</p> <p>Past examination papers: Assessment Unit AS 1 Themes in Physical Geography. When using past papers please check carefully the requirements of the revised specification.</p> <p>Summer 2007 Q3 (b) air masses low pressure weather and Q6 Summer and Winter anticyclones</p> <p>Spring 2007 Q6 Frontal depressions</p> <p>Summer 2006 Q3 (b) anticyclonic weather conditions</p> <p>Spring 2006 Q6 Case study depression and human environment</p> <p>Summer 2005 Winter and summer anticyclone weather and human environment</p> <p>Spring 2005 Q3 (b) depression air masses</p> <p>Summer 2004 Q3 (a) depression including cross section</p> <p>Spring 2004 Q3 (a) Synoptic chart low and high systems and Q6 low pressure and human environment,</p> <p>Summer 2003 Q6 Weather and passage of depression</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 c) Extreme weather events</p> <p><b>Learning Outcome:</b></p> <p>(i) understand the formation and structure of hurricanes;</p> <p>(ii) analyse the effects of hurricanes on people and property; and</p> <p>(iii) evaluate the protective measures used to reduce loss of life and damage to property.</p> <p><b>Spatial context requirement:</b></p> <p>For (ii) and (iii) a study of the effects of one tropical cyclone/hurricane eg Hurricane Katrina (2005) (national/regional scale)</p>	<p>Students should be able to</p> <ul style="list-style-type: none"> <li>• understand the factors controlling where and how hurricanes develop across the world;</li> <li>• track hurricanes using ICT;</li> <li>• use internet sources which provide the latest weather information from around the world;</li> <li>• know the range of impacts hurricanes have on people and property (high winds, storm surge, rainfall);</li> <li>• discuss and assess the effectiveness of various protective measures used to reduce loss of life and damage to property caused by hurricanes.</li> </ul>	<p><i>Geography for CCEA AS Level</i> Thom and Armstrong (2008) Chapter 3</p> <p>Suitable video footage of hurricane formation, impact and/or management</p> <p><i>Essential AS Geography</i> p.216-217 Hurricane Mitch</p> <p><i>Process and Pattern in Physical Geography</i> p.45-46</p> <p><i>Advanced Geography Edexcel</i> p.302-304 Tropical storms</p> <p><i>Geography: An Integrated Approach</i> p.235-238 Tropical cyclones with examples</p> <p><i>Geo Factsheet</i> 162 Hurricane hazard</p>	<p>Map world distribution of tropical cyclones</p> <p>Explain formation and structure using the OHP or data projector (power point) presentation including vertical and cross section diagrams</p> <p>Watch video footage and identify hurricane impacts on people and property including wind, rainfall and storm surges</p> <p>Preventative measures, before during and after – discussion arising from the video</p> <p>Study hurricane tracks – discuss the role of prediction as a prevention measure and its difficulty.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
	<p>Describe in detail the impact of one hurricane or tropical cyclone event and evaluate the attempts to reduce these impacts.</p>	<p><i>Geofile</i> 500 Sept '05) (2004) Hurricane season, 530 (Sept '06) After-effects of Katrina and Rita</p> <p><i>Geo.Active</i> 359 Hurricane Katrina management disaster?</p> <p>Internet – archive hurricane data sites <a href="http://www.hurricane.terrapin.com/">www.hurricane.terrapin.com/</a> <a href="http://www.nhc.noaa.gov/pastall.shtml">www.nhc.noaa.gov/pastall.shtml</a> <a href="http://www.vortex.plymouth.edu">www.vortex.plymouth.edu</a></p>	<p>Use online sources to debate the effectiveness of measures to prevent loss of life and damage in the case study example (Katrina).</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 1 Physical Geography Past examination papers: Assessment Unit AS 1 Themes in Physical Geography. When using past papers please check carefully the requirements of the revised specification. Spring 2007 Q3(b) Hurricanes Summer 2006 Q6 Hurricane study impacts Spring 2006 Q3 (c) Hurricane formation Summer 2005 Q3 (b) Hurricane structure Spring 2005 Q6 Formation and case study effects Summer 2004 Q6 Hurricane case study effects, Spring 2004 Q3 (b) Nature and location of hurricanes, Summer 2003 Q3 (c) Hurricane deaths and damage graph, Spring 2003 Q3 (c) Hurricanes formation and impacts</p>		

**Bibliography**  
**AS Module 1: Physical Geography**

<b>Titles</b>	<b>Author</b>	<b>Publisher</b>
Geography for CCEA AS Level	Thom, M and Armstrong, E.	Colourpoint
Skills, Techniques and Decision Making	Roulston, S and Reid, M	Colourpoint
Geography: An Integrated Approach (3 <sup>rd</sup> Ed)	Waugh, D	Nelson
Geography in Focus	Cook, Hordern, McGahan and Ritson	Causeway Press
Essential AS Geography	Ross, S, Morgan, J and Heelas, R	Stanley Thornes
Environment and People	Witherick, M	Stanley Thornes
Higher Geography (2 <sup>nd</sup> Ed)	Maclean, K and Thomson, N	Hodder Gibson
Advanced Geography (Edexcel)	Palmer, A and Yates, N	Philip Allen
Geography AS Level	Hart, C	Cambridge Press
AS Geography – Concepts and Cases	Guinness, P and Nagle, G	Hodder/Stoughton
Thinking Through Geography	Leat, D	Chris Kington
Advanced Geography: Concepts and Cases	Guinness, P and Nagle, G	Hodder/Stoughton
Advanced Geography	Nagle, G	Oxford
AS Level Geography	Bowen, A and Pallister, J	Heinemann
Landmark AS Geography	Prosser, R, Raw, M and Bishop, V	Collins Education
Natural Systems and Human Responses	Prosser, R	Nelson
16-19 Core Geography	Naish, M and Warn, S	Longman
Landform Systems	Bishop, V and Prosser, R	Collins Education
Rivers	Raw, M	Philip Allen

<b>Titles</b>	<b>Author</b>	<b>Publisher</b>
Rivers and Coasts	Hordern, B	Philip Allen
The Nature and Vulnerability of Tropical Ecosystems	Thom, M	Colourpoint
Ecosystems and Human Activity	RSPB	Collins Education
North America an Advanced Geography	Price, B and Guinness, P	Hodder Stoughton
Process and Pattern in Physical Geography	Hilton, K	Unwin Hyman
Changing Environments	Digby, B	Heinemann
Atmospheric Processes and Human Influences	Warburton, P	Collins Education
Geofile	Various	Stanley Thornes
GeoActive	Various	Stanley Thornes
Geo Factsheet	Various	Curriculum Press

# **Unit: AS 2**

# **Human Geography**

<b>Specification:</b>	<b>GCE Geography</b>
<b>Unit AS 2:</b>	<b>Human Geography</b>
<b>Element 1</b>	(a) Population Data (b) Population Structure (c) Population and Resources

### **Prior Knowledge – Population**

It is helpful if students have:

- considered the factors influencing population change;
- an understanding of the concept of dynamic populations; and
- constructed population pyramids.

### **Opportunities for Key Skills**

Throughout the teaching of this unit of human geography opportunities are available for assessment of the following Key Skills:

- Communication;
- Work with Others; and
- ICT.

### **Resources**

It is important to note that a wide variety of texts and assessment activities are included in the schemes so that teachers may select relative to their resources.

### **Time Duration**

4-5 week

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 1 (a) Population data</p> <p><b>Learning Outcomes:</b></p> <p>Students should be able to distinguish between:</p> <p>(i) national census taking; and</p> <p>(ii) vital registration.</p> <p><b>Spatial context requirement:</b></p> <p>For (i) and (ii) contrasts between MEDCs and LEDCs in terms of the reliability of data and how it is collected.</p>	<ul style="list-style-type: none"> <li>students will know how and understand why demographic data is collected;</li> <li>students will distinguish between census taking and vital registration;</li> <li>students will be aware of the spatial differences in quality and quantity of demographic data;</li> <li>students will understand the problems of obtaining accurate data, particularly for LEDCs.</li> </ul>	<p>Thom, M. &amp; Armstrong, E. <i>Geography for CCEA AS Level</i></p> <p>Chrispin, J &amp; Jegede, F. <i>Population, Resources and Development</i> (p.37-40)</p> <p>Witherick, M. (ed) <i>Environment and People</i> (p.254-257)</p> <p>Prosser, R. et al Landmark AS Geography, p 154-158</p> <p>Rubenstein, James, M. <i>An Introduction to Human Geography</i> p.72-73</p> <p>Jones, H. Population Registers <i>Population Geography</i> p.182-188</p> <p>Geoactive 61 The 1991 Population Census</p> <p>Geoactive 83 The 1991 Nigerian Census</p> <p>Geoactive 89 Nigeria’s Population – Recent Trends</p> <p>Geofile 483 The 2001 Census</p> <p>Geofile 249 The Census – Using Statistics</p>	<p>Students read and discuss the format of a census form from a country e.g. UK see website below</p> <p>Students read and discuss the purpose, content and distribution of the census</p> <p>Class discussion on the problems of obtaining accurate data collection.</p> <p>Extensions materials</p> <p>Read and discuss articles on “Missing Kids” and “Census Data to the Rescue”</p> <p>Students read, discuss and take notes on articles concerning vital registration.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
		<p>UK Census:  <a href="http://www.nisranew.nisra.gov.uk/census/start.html">www.nisranew.nisra.gov.uk/census/start.html</a>  <a href="http://www.statistics.gov.uk">www.statistics.gov.uk</a>  <a href="http://www.nisranew.nisra.gov.uk/census/start.html">www.nisranew.nisra.gov.uk/census/start.html</a>  <a href="http://www.pop.org/">www.pop.org/</a>  <a href="http://www.prb.org/Articles/2007/ObjectionsOverNigerianCensus.aspx">www.prb.org/Articles/2007/ObjectionsOverNigerianCensus.aspx</a>  <a href="http://www.prb.org">www.prb.org</a>, a number of very useful short articles on the 2006 census in Nigeria.  <a href="http://www.newsvote.bbc.co.uk">www.newsvote.bbc.co.uk</a></p> <p><a href="http://www.iussp.org/Brazil2001/s30/S35_P02_Ramachandran.pdf">www.iussp.org/Brazil2001/s30/S35_P02_Ramachandran.pdf</a></p>	
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 2 Human Geography                      Past examination papers: Assessment Unit AS 2 Themes in Human Geography. When using past papers please check carefully the requirements of the revised specification                      Summer 2006 Q. 1 (b)                      Summer 2005 Q. 1 (a)                      Spring 2005 Q. 1 (a)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 1.(b) Population structure</p> <p><b>Learning Outcomes:</b></p> <p>Students should be able to:</p> <p>(i) understand components of population change – and define crude birth rate, crude death rate, natural increase / decrease and migration balance</p> <p>(ii) analyse population pyramids including comparisons to be made over time and space; and</p>	<ul style="list-style-type: none"> <li>● students will understand that the demographic characteristics of any area are the result of the relationship between births, deaths and migration;</li> <li>● students define: <ul style="list-style-type: none"> <li>○ Crude Birth Rate</li> <li>○ Crude Death Rate</li> <li>○ Natural Increase</li> <li>○ Natural Decrease</li> <li>○ Migration balance: gross and net migration</li> </ul> </li> <li>● students will examine different methods of presentation of age/sex pyramids;</li> <li>● students will be able to account for differences in population structure; <ul style="list-style-type: none"> <li>○ over time; and</li> <li>○ space</li> </ul> </li> </ul>	<p>Thom, M. &amp; Armstrong, E. Geography for CCEA AS Level</p> <p>Waugh, D. Geography: An Integrated Approach p 353-4</p> <p>Witherick, M. <i>Environment and People</i> p.297-306</p> <p>Guinness, P. and Nagle, G. <i>AS Geography</i> Chapter 7 p.163-188</p> <p>Nagle, G. <i>Advanced Geography</i> (pp228-229) also (p.242-245)</p> <p>Prosser, R. et al Landmark AS Geography p 169-171</p> <p>Electronic Atlas (Anglia Multimedia) for latest world population data</p> <p>Ross, S et al Essential AS Geography p.111-113</p>	<p>Students prepare presentation on “Changing Population” using resource material. (Interaction of Births, Deaths and Migration)</p> <p>Students describe and explain how the structure has changed between 1841 and 1991</p> <p>Thinking Skills - (p299 Witherick) Generalising population pyramids</p> <p>Case Study – e.g. United Kingdom</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) understand the economic, social and political implications of dependency ratios in MEDCs and LEDCs</p> <p><b>Spatial context requirement:</b> For (ii) one national case study.</p>	<ul style="list-style-type: none"> <li>• students will be able to define the terms;                             <ul style="list-style-type: none"> <li>○ dependency ratio,</li> <li>○ youth dependency; and</li> <li>○ aged dependency.</li> </ul> </li> <li>• students will be able to explain the social, economic and political implications of dependency ratios in;                             <ul style="list-style-type: none"> <li>○ Aged Dependency in MEDCs</li> <li>○ Youth Dependency in LEDCs</li> </ul> </li> </ul>	<p>Hornby and Jones <i>Introduction to Population Geography</i> p.28-30</p> <p>Population Concern CD Rom</p> <p><a href="http://www.uscensusbureau.us">www.uscensusbureau.us</a></p> <p>Geo Factsheet No 196 The Globalisation of Ageing</p> <p>Geoactive 48 Kenyan Population Characteristics</p> <p>Geofile 341 Japan's Changing Population</p> <p>Geofile 343 Britain's Changing Population</p> <p>Geography Review, November 2001 Ageing Society in Japan</p>	
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 2 Human Geography</p> <p>Past examination papers: Assessment Unit AS 2 Themes in Human Geography. When using past papers please check carefully the requirements of the revised specification</p> <p>Spring 2007 Q. 1 (c) (d)</p> <p>Summer 2006 Q. 1 (a); Q. 4</p> <p>Summer 2005 Q. 1 (b) (i) and (ii); Q. 4</p> <p>Spring 2005 Q. 1 (b) (i) and (ii)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 1.(c) Population and resources</p> <p><b>Learning Outcomes:</b></p> <p>Students should be able to explain the relationship between population distribution and resources</p> <p><b>Spatial context requirement:</b></p> <p>One national case study</p>	<ul style="list-style-type: none"> <li>students will be able to describe and interpret population distribution as it applies to one chosen national study in relation to resource base (physical and human).</li> </ul>	<p>Thom, M. &amp; Armstrong, E. Geography for CCEA AS Level</p> <p>Waugh, D. <i>Geography: An Integrated Approach</i> p.376-7</p> <p>Ross, S. et al Essential AS Geography p. 114 – 119</p> <p>Guinness, P. &amp; Nagle, G Advanced Geography Concepts and Cases Chapter 2</p> <p>Witherick, M. Environment &amp; People p 309</p> <p>Useful websites:  <a href="http://www.census.gov">www.census.gov</a>  <a href="http://www.odci.gov/cia/publications/factbook">www.odci.gov/cia/publications/factbook</a></p>	<p>Note making and defining key terms. Learning key terms and reading background information on countries which exemplify the scenarios</p> <p>Case Study: Italy/France/UK</p> <p>Study atlas maps showing the physical regions of the chosen case study</p> <p>Draw a map to display these features</p> <p>Students, working in groups of three or four, research a variety of information sources on the chosen case study, in order to make a presentation to the rest of the class about the topic:</p> <ul style="list-style-type: none"> <li>Physical factors;</li> <li>Human factors; and</li> <li>Governmental/Political influences</li> </ul>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
			<p>Need to distinguish between physical and human resources</p> <p>Students take notes on key ideas and concepts as linear notes or as a 'mind map'.</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 2 Human Geography</p> <p>Past examination papers: Assessment Unit AS 2 Themes in Human Geography. When using past papers please check carefully the requirements of the revised specification.</p> <p>Summer 2007 Q.1 (a) (i) (ii) (b)</p> <p>Summer 2006 Q. 1 (c)</p> <p>Summer 2005 Q. 1 (c)</p> <p>Spring 2005 Q. 1 (c); Q. 4</p>		

**Specification:**           **GCE Geography**

**Unit:** AS 2               **Human Geography**

**Element 2**               **(a)** Challenges for rural environments  
                                  **(b)** Planning issues in rural environments  
                                  **(c)** Challenges for urban environments

### **Prior Knowledge – Settlement**

It is helpful if students have:

- knowledge on the differences between rural and urban areas;
- an awareness of the issues facing rural areas; and
- an awareness of problems associated with urban areas.

### **Opportunities for Key Skills**

Throughout the teaching of this unit of human geography opportunities are available for assessment of the following Key Skills:

- Communication;
- Work with Others; and
- ICT.

### **Resources**

It is important to note that a wide variety of texts and assessment activities are included in the schemes so that teachers may select relative to their resources.

### **Time Duration**

4-5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 (a) Challenges for rural environments</p> <p><b>Learning Outcomes:</b></p> <p>Students should be able to demonstrate knowledge and understanding of:</p> <p>(i) issues in the rural urban fringe including green field developments, suburbanisation, counterurbanisation and transport infrastructure; and</p> <p>(ii) issues in remote rural environments including population change, service provision including transport.</p> <p><b>Spatial context requirement:</b></p> <p>For (i) and (ii) general reference to places for illustration purposes only</p>	<p>Students will be able be:</p> <ul style="list-style-type: none"> <li>• aware of the issues involved when attempting to distinguish between rural and urban settlement;</li> <li>• Students will understand the issues affecting the rural urban-fringe; <ul style="list-style-type: none"> <li>○ Green field developments</li> <li>○ Green belt policies</li> <li>○ Suburbanisation</li> <li>○ Counterurbanisation</li> <li>○ Transport infrastructure</li> </ul> </li> <li>• Main characteristics of remote rural areas: <ul style="list-style-type: none"> <li>○ Out migration</li> <li>○ Ageing population</li> <li>○ Physical remoteness and inaccessibility</li> <li>○ Limited economic activities</li> <li>○ Poor service provision including transport</li> </ul> </li> </ul>	<p>Thom, M. &amp; Armstrong, E. Geography for CCEA AS Level</p> <p>Waugh, D. <i>Geography - An Integrated Approach</i> –p.335-345</p> <p>Witherick, M. <i>Environment and People</i> Pages 442-452</p> <p>Ross, S. et al <i>Essential AS Geography</i> pp 158-165</p> <p>Nagle, G. <i>Advanced Geography</i> pages 258-261; pp 168-170</p> <p>Hornby and Jones, <i>Settlement Geography</i></p> <p>Geo Fact Sheet 165 Change and Conflict in the Rural Urban Fringe</p> <p>Geo Fact Sheet 187 Rural Deprivation in Cornwall</p> <p>Belfast Area Metropolitan Plan <a href="http://www.planningni.gov.uk/AreaPlans_Policy/APP.htm">www.planningni.gov.uk/AreaPlans_Policy/APP.htm</a></p>	<p>Students use Census data to establish % rural and urban e.g. for Northern Ireland</p> <p>Students use Cloke’s Index of Rurality to compare areas</p> <p>Students investigate the growth of Belfast</p> <p>Skills link: Nearest Neighbour Analysis</p> <p>An investigation of the Highlands and Islands of Scotland will provide an appropriate context</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
		<p>Geoactive 86 Settlement: A Changing Village</p> <p>Geoactive 146 Rural Change in the UK</p> <p>Geofile 289 Changes in Rural Britain</p> <p>Geofile 325 Changes in UK Villages</p> <p>Geofile 328 Scotland's Changing Regional and Economic Geography</p> <p>Geofile 353 Suburbanisation – London Case Study</p>	<p>Extension Activities: Rural Environment (Resources &amp; Employment)</p> <ul style="list-style-type: none"> <li>• Students working in groups, with appropriate resources, are assigned a fictional character in a rural setting in which change is taking place. Students will be expected to debate these changes in their role; and</li> <li>• The main aspects to be studied might include: <ul style="list-style-type: none"> <li>- changes in agriculture</li> <li>- counter-urbanisation</li> <li>- the development of leisure and tourism</li> <li>- transport</li> <li>- economic changes</li> <li>- second home</li> </ul> </li> </ul>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 2 Human Geography</p> <p>Past examination papers: Assessment Unit AS 2 Themes in Human Geography. When using past papers please check carefully the requirements of the revised specification.</p> <p>Summer 2007 Q. 2 (a) (i) (ii)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 (b) Planning issues in rural environments</p> <p><b>Learning Outcomes:</b></p> <p>Students should be able to explain how:</p> <p>(i) the countryside is managed for conservation, recreation and tourism eg AONB, National Parks, SSIs; and</p> <p>(ii) economic re-generation is delivered to remote rural areas by regional development agencies.</p> <p>A case study for either: (i) those aspects of management that affect one area that is being protected at the local/regional scale e.g. The Peak District National Park</p>	<p>Students will understand the main strategies used to manage the countryside for conservation, recreation and tourism:</p> <ul style="list-style-type: none"> <li>• Sites of Special Scientific Interest (Areas of Special Scientific Interest in Northern Ireland);</li> <li>• National Parks;</li> <li>• Areas of Outstanding Natural Beauty;</li> </ul> <p>National Park Case Study –e.g. Peak District:</p> <ul style="list-style-type: none"> <li>• Location</li> <li>• Tourism</li> <li>• Conflict</li> <li>• Sustainable tourism strategy                             <ul style="list-style-type: none"> <li>○ Honeypots</li> <li>○ Traffic</li> <li>○ Environmental issues</li> <li>○ Conservation issues</li> </ul> </li> </ul>	<p>Thom, M. &amp; Armstrong, E. Geography for CCEA As Level</p> <p>Prosser, R. Landmark AS Geography pp253-9</p> <p>Ross, S. et al Essential AS Geography pp171-8</p> <p>Prosser, R. Leisure, Recreation and Tourism pp 78-91 Case Study The Lake District National Park</p> <p>Geoactive 75 National Parks in England &amp; Wales Geoactive 120 National Park Update – the New Forest</p> <p>Environment and Heritage Service (Northern Ireland) <a href="http://www.ehsni.gov.uk">www.ehsni.gov.uk</a></p> <p>Scotland <a href="http://www.snh.org.uk">www.snh.org.uk</a></p> <p>Wales <a href="http://www.ccw.gov.uk">www.ccw.gov.uk</a></p>	<p>Mapping exercise: use base maps to locate SSSIs (ASSIs), AONBs and National Parks</p> <p>Debate: Should the Mourne become the first National Park in Northern Ireland?</p> <p>Extension activities Students research one other rural development agency/ programme and evaluate the strategies employed.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>or</b></p> <p>(ii) one case study of a regional development agency at the local / regional scale, e.g. Norfolk Development Agency</p>	<p>Regional Development Agency e.g. The Highlands and Islands Enterprise</p> <ul style="list-style-type: none"> <li>• Existing problems, e.g. out migration</li> <li>• How the development agency has attempted to solve these problems:</li> <li>• Restructuring of the local economy</li> <li>• Role of modern technologies</li> </ul>	<p>England <a href="http://www.naturallengland.org.uk">www.naturallengland.org.uk</a></p> <p>Areas of Outstanding Natural Beauty <a href="http://www.aonb.org.uk">www.aonb.org.uk</a></p> <p>National Parks <a href="http://www.nationalparks.gov.uk">www.nationalparks.gov.uk</a></p> <p>Peak District <a href="http://www.peakdistrict.org">www.peakdistrict.org</a></p> <p>The Highlands and Islands Enterprise Network <a href="http://www.hie.co.uk">www.hie.co.uk</a></p> <p>Rural Development Agencies (England) <a href="http://www.englishrdas.com/home.aspx">www.englishrdas.com/home.aspx</a></p> <p>Rural Development in Northern Ireland <a href="http://www.dardni.gov.uk">www.dardni.gov.uk</a></p>	
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 2 Human Geography</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 (c) Challenges for the urban environment</p> <p><b>Learning Outcomes:</b></p> <p>Students should be able to demonstrate knowledge and understanding of:</p> <p>(i) issues of the inner city in MEDCs including social and economic deprivation in inner cities, re-urbanisation and gentrification; and</p> <p>(ii) issues of rapid urbanisation in LEDCs including informal settlements, service provision and economic activity</p>	<p>Students will understand the issues of inner city areas in MEDCs:</p> <ul style="list-style-type: none"> <li>• outline the history of inner city areas to explain the social and economic deprivation and environmental degradation;</li> <li>• the role of Urban Development Corporations;</li> <li>• the impact of re-development: Reurbanisation and Gentrification;</li> <li>• Case Study e.g. Belfast.</li> </ul>	<p>Thom, M. &amp; Armstrong, E. Geography for CCEA AS Level</p> <p>Nagle, G. <i>Advanced Geography</i> pp 268-271</p> <p>Nagle, G. <i>Changing Settlements</i> pp 32-40</p> <p>Guinness. &amp; Nagle, G. <i>AS Geography Chapter 3</i></p> <p>Bowen, A. &amp; Pallister, J. <i>AS Level Geography</i> pp.184-206, pp.212-219</p> <p>Flint, C &amp; Flint, D. <i>Urbanisation: Changing Environments</i> pp141-153</p> <p>Prosser, R. <i>Landmark Geography</i> pp215-8</p>	<p>Brainstorm problems in urban areas. Divide problems into MEDC/LEDC issues</p> <p>Groups research and produce presentation on urban problems e.g.:</p> <ul style="list-style-type: none"> <li>- overcrowding</li> <li>- LEDC/MEDC</li> <li>- congestion</li> <li>- gentrification</li> <li>- air pollution/industrial pollution</li> <li>- brownfield site development</li> <li>- urban sprawl etc</li> </ul> <p>Students use census data to compare the social and economic characteristics of an inner city wards with that of the city as a whole</p> <p>Students will research and present material on a case study of one city eg Belfast using ICT.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Spatial context requirement:</b></p> <p>Two urban case studies to illustrate these issues: one from a MEDC, e.g. Belfast, and one from a LEDC, e.g. Rio de Janeiro</p>	<p>Students will understand the issues of rapid urbanisation in LEDCs:</p> <ul style="list-style-type: none"> <li>• Nature and cause of urban growth in LEDCs;</li> <li>• Impact of rapid urbanisation; <ul style="list-style-type: none"> <li>○ Informal settlements</li> <li>○ Service provision</li> <li>○ Economic activity</li> </ul> </li> <li>• Case Study e.g. Rio de Janeiro.</li> </ul>	<p>Geoactive 320 Urban Regeneration in Paris</p> <p>Geoactive 324 Inner City Redevelopment in Birmingham</p> <p>Geoactive 373 London Dockland: Post LDDC Developments</p> <p><a href="http://www.geographyinaction.co.uk/Urban_structure/Belf_Sus.html">www.geographyinaction.co.uk/Urban_structure/Belf_Sus.html</a></p> <p>Information on inner city wards in Belfast <a href="http://www.ninis.nisra.gov.uk">www.ninis.nisra.gov.uk</a>.</p> <p>State of the countryside 2007 <a href="http://www.ruralcommunities.gov.uk">www.ruralcommunities.gov.uk</a></p> <p>Laganside Corporation <a href="http://www.laganside.com">www.laganside.com</a></p>	

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
		Geofile 310 Issues of an LEDC City: Beijing  Geofile Jan 2001 Rural Urban Migration in the Developing World  Geofile Jan 2006 Housing Solutions in LEDC Cities	
<b>ASSESSMENT AND REVIEW</b>	Specimen Paper Geography Assessment Unit AS 2 Human Geography Past examination papers: Assessment Unit AS 2 Themes in Human Geography. When using past papers please check carefully the requirements of the revised specification Spring 2007 Q. 2 (b) (i) (ii)		

**Specification:** GCE Geography  
**Unit AS 2:** Human Geography

**Element 3** (a) The Nature and Measurement of Development  
(b) Issues of Development

### **Prior Knowledge – Development**

It is helpful if students have:

- a knowledge of social and economic indicators of development;
- a knowledge of general differences in development between LEDC and MEDC; and
- an understanding of trade and aid.

### **Opportunities for Key Skills**

Throughout the teaching of this unit of human geography opportunities are available for assessment of the following Key Skills:

- Communication;
- Work with Others; and
- ICT.

### **Resources**

It is important to note that a wide variety of texts and assessment activities are included in the schemes so that teachers may select relative to their resources.

### **Time Duration**

4-5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 (a) The nature and measurement of development</p> <p><b>Learning Outcomes:</b></p> <p>Students should be able to:</p> <p>(i) explain the problems of defining development;</p> <p>(ii) explain and evaluate two economic, two social and two composite measures of development; and</p>	<p>Students should in the context of both global and regional scales:</p> <ul style="list-style-type: none"> <li>• understand the difficulties in defining development;</li> <li>• be able to write a definition of development;</li> <li>• know how to measure development;</li> <li>• know and understand two social, two economic and two composite measures of development. For each measure:                             <ul style="list-style-type: none"> <li>(i) be able to define it clearly</li> <li>(ii) be able to evaluate its usefulness</li> <li>(iii) be aware of the limitations of the use of indicators</li> </ul> </li> </ul>	<p>Thom, M. &amp; Armstrong, E. Geography for CCEA AS Level</p> <p>Nagle, G. Development and Underdevelopment pages 4-7</p> <p>Nagle, G. Advanced Geography pp 432 -435</p> <p>Chrispin, J &amp; Jegede, F. Population, Resources and Development p.8-13</p> <p>Waugh, D. Geography – <i>An Integrated Approach</i> Chapter 22</p> <p>Geoactive 80 Regional Disparities in Italy Geoactive 94 Measuring Development Geoactive 126 Regional Disparities in the European Union Geofile523 A comparison of Northern and Southern Italy Geofile 294 Regional Disparities in the UK</p>	<p>Class discussion of what is meant by development, and why do perceptions of development differ?</p> <p>Produce 2 choropleth maps to show world variations in development using a social and an economic indicator</p> <p>Compare world maps of different indicators eg GNI, PPP PQLI, HDI Discuss the Millennium Development Goals Techniques:</p> <p>(i) use of mean, median and mode. From a table of LEDCs and MEDCs showing indicators, Students will calculate mean, median and modal values for a variety of indicators and analyse results.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) identify and explain regional contrasts in development.</p> <p><b>Spatial context requirement:</b></p> <p>For (i) and (ii) general reference to places to illustrate global contrasts.</p> <p>For (iii) one case study at the national scale which demonstrates distinct regional variations in development.</p>	<ul style="list-style-type: none"> <li>compare and contrast development throughout the world using indicators.</li> </ul> <p>Students should be able to identify and explain regional contrasts in development</p> <p>Case Study: national scale to demonstrate distinct regional variations in development Students should in relation to their case studies:</p> <ul style="list-style-type: none"> <li>identify contrasts in development between 2 regions eg. northern and southern Italy;</li> <li>identify the social and economic measures for the two regions;</li> </ul>	<p>Geofile 311 Role-Play Exercise – Regional Disparities in the UK 2007 world database <a href="http://devdata.worldbank.org">devdata.worldbank.org</a></p> <p>millennium development goals <a href="http://www.undp.org">www.undp.org</a></p> <p>Chrispin, J &amp; Jegede, F. Population, Resources and Development chapter 9 p.145-155</p> <p>Guinness, P &amp; Nagle, G. Advanced Geography Concepts &amp; Cases, Chapter 5</p> <p>Nagle, G. Advanced Geography Chapter 19</p>	<p>(ii) Scattergraphs</p> <p>(iii) Students use Spearman’s rank correlation technique to explore relationship between various pairs of indicators and analyse results</p> <p>Case Study: Small group presentation to investigate contrasts between 2 regions within chosen national scale case study, e.g. northern and southern Italy</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
	<ul style="list-style-type: none"> <li>• explain the reasons for contrasts in development within the chosen case study:                             <ul style="list-style-type: none"> <li>○ historical</li> <li>○ physical</li> <li>○ social</li> <li>○ economic</li> </ul> </li> </ul>		
<b>ASSESSMENT AND REVIEW</b>	Specimen Paper Geography Assessment Unit AS 2 Human Geography Past examination papers: Assessment Unit AS 2 Themes in Human Geography. When using past papers please check carefully the requirements of the revised specification Spring 2007 Q. 3 (b) (i) (ii) Q.6 Summer 2006 Q. 3 (a) (iii) Summer 2005 Q. 3 (a) (i) (ii) Q.6 Spring 2005 Q. 3 (a)		



Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
	<p>Globalisation:</p> <ul style="list-style-type: none"> <li>• Understand the term globalisation and be aware of the development of globalisation over time;</li> <li>• know the effects of globalisation.</li> </ul> <p>Aid:</p> <ul style="list-style-type: none"> <li>• know what is meant by aid;</li> <li>• understand the different types of aid;</li> <li>• understand how aid can help and hinder the development process.</li> </ul> <p>Trade:</p> <ul style="list-style-type: none"> <li>• know what is meant by trade;</li> <li>• understand the historical relationships of trade between the LEDCs and MEDCs;</li> <li>• the different trade patterns associated with LEDCs and MEDCs;</li> </ul>	<p>Guinness, P. &amp; Nagle, G. <i>Advanced Geography</i> p 123-5</p> <p>Chrispin, J. &amp; Jegede, F. <i>Population, Resources and Development</i> p.32-33</p> <p>Nagle, G. <i>Development and Underdevelopment</i> p.15-18</p> <p>Chrispin, J. &amp; Jegede, F. <i>Population, Resources and Development</i> Chapter 8, pp 135-144</p> <p>Nagle, G. <i>Development and Underdevelopment</i> p.20-21</p> <p><a href="http://www.cia.gov/cia/publications/factbook/index.html">www.cia.gov/cia/publications/factbook/index.html</a> Contains up to date information on all countries</p>	<p>Discuss how the terms of trade have worsened from the standpoints of the LEDCs and the implications of this for economic development in the LEDCs</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
	<ul style="list-style-type: none"> <li>know how the present pattern of trade helps and hinders both LEDCs and MEDCs eg dependency on a single product; trading blocs etc.</li> </ul>		
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit AS 2 Human Geography                      Past examination papers: Assessment Unit AS 2 Themes in Human Geography. When using past papers please check carefully the requirements of the revised specification                      Summer 2007 Q. 3 (a) (i) (ii) Q. 6                      Spring 2007 Q. 3 (d)                      Summer 2006 Q. 3 (b), Q. 6                      Summer 2005 Q. b (a)                      Spring 2005 Q. 3 (b), Q 6</p>		

## **Bibliography**

### **AS Module 2: Human Geography**

Geography for CCEA AS Level	Thom, M. & Armstrong, E.	Colourpoint
Advanced Geography	Nagle, G.	Oxford
Advanced Geography – Concepts and Cases	Guinness, P. & Nagle, G.	Hodder & Stoughton
AS Level Geography	Bowen, A. & Pallister, J.	Heinemann
Changing Settlements	Nagle, G.	Heinemann
Development and Underdevelopment	Nagle, G.	Nelson
Environment and People	Witherick, M. (ed)	Stanley Thornes
Essential AS Geography	Ross, S. Morgan, J. & Heelas, R.	Nelson Thornes
Geography in Focus	Cook, I. Hordern, B. McGahan, H & Ritson, R	Causeway Press
Geography – An Integrated Approach	Waugh, D.	Nelson
Landmark AS Geography	Prosser, R. Raw, M. Bishop, V. & Miller, G.	Collins
Leisure, Recreation and Tourism	Prosser, R.	Collins

# **A2 1: Human Geography and Global Issues**

<b>Specification:</b>	<b>GCE Geography</b>
<b>Unit: A2 1:</b>	<b>Human Geography and Global Issues</b>
<b>Option A:</b>	<b>Impact of Population Change</b>
<b>Element</b>	<b>1. Natural Population Change</b> <b>2. Migration; causes, streams and impacts</b> <b>3. Population Policies</b>

### **Prior Learning**

Pupils will have studied AS Level Geography (Module 2).

### **Opportunities for Key Skills**

Throughout the teaching of this unit opportunities are created for the assessment of the following Key Skills.

- ICT;
- Application of Number; and
- Communication.

### **Resources**

It is important to note that a wide variety of texts and resources are included in the schemes so that teachers may select what is relevant to their own needs.

### **Time Duration**

5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b>  <b>1</b> Natural population change</p> <p><b>Learning Outcomes:</b></p> <p>(i) Explain fertility and mortality measures, their geographical patterns and trends over time</p> <p>(ii) Explain factors influencing fertility and mortality: economic; social; political; cultural; environmental; HIV/AIDS</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• define and explain the following measures of fertility and mortality: <ul style="list-style-type: none"> <li>- crude birth rate;</li> <li>- age-specific fertility rate;</li> <li>- crude death rate;</li> <li>- age-specific mortality rate;</li> <li>- infant mortality rate.</li> </ul> </li> <li>• understand replacement level fertility;</li> <li>• identify global variations over time;</li> <li>• extract information from choropleth maps and population data in graphical form.</li> <li>• explain the various factors that affect fertility and mortality in any society.</li> </ul>	<p>Royle, S. <i>The Impact of Population Change</i>, pp 4 – 9</p> <p>Waugh, D. <i>Geography: An Integrated Approach</i> pp.325–336; 356-357 (2<sup>nd</sup> ed )</p> <p>Carr, M. <i>New Patterns: Process and Change in Human Geography</i>, pp 4-5</p> <p>Chrispin, J. &amp; Jegede, F. <i>Population Resources and Development</i> (2<sup>nd</sup> ed) pp 45-62; p.78-81</p> <p><a href="http://www.un.org/pubs/cyberschoolbus">www.un.org/pubs/cyberschoolbus</a> to download data on demographic and other indicators</p> <p>Jackson, S. (1998) <i>Britain's Population</i>, pp. 25-51, methods of demographic analysis; pp. 51-77, Britain's population history; pp. 78-97, recent trends in fertility and mortality</p>	<p>Use choropleth maps to investigate and explain global contrasts in fertility and mortality</p> <p>Use internet to download data on fertility and mortality for selected countries to draw comparisons and explain differences</p> <p>Draw and interpret the demographic transition model and place countries in appropriate stage</p> <p>Use Living Graphs (David Leat activities)</p> <p>Label and interpret Malthus' graph showing relationship between population growth and food supply</p> <p>Summarise and compare the ideas of Malthus and Boserup. Use group or paired work to evaluate findings and have a class discussion.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) Evaluate the theories and issues of population sustainability put forward by Malthus and Boserup.</p> <p>(iv) demonstrate knowledge and understanding of the demographic transition model including the impact of the epidemiological transition.</p> <p><b>Spatial context requirement:</b></p> <p>For (i)-(iv) - global contrasts</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• understand the views of Malthus and Boserup and be able to evaluate the significance and relevance of their findings;</li> <li>• understand the concept of sustainability.</li> <li>• identify, and give reasons for each stage in the demographic transitional model;</li> <li>• understand the impact of the epidemiological transition.</li> </ul>	<p>Video: The Geography Collection Baby Boom – available from SELB (028) 37525353 (TE1881)</p>	<p>Pupils make notes on key ideas and concepts</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit A2 1 Human Geography and Global Issues.                      Past examination papers: Assessment Unit A2 2 Processes and Issues in Human Geography. When using past papers please check carefully the requirements of the revised specification.                      Summer 2004 Module 5: Q.1 (a) (b) (c)                      Spring 2005 Module 5: Q.1 (a) (b) (c) (d)                      Spring 2006 Module 5: Q.2 (a)                      Summer 2006 Module 5: Q2 (a) (b) (d)                      Spring 2007 Module 5: Q1 (a) (c)                      Summer 2007 Module 5: Q1 (a)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 Migration: causes, streams and impacts</p> <p><b>Learning Outcomes:</b></p> <p>(i) Explain – push/pull processes in migration (economic, social, political, cultural and environmental factors); and barriers to migration</p> <p>(ii) Demonstrate knowledge and understanding of migration streams: internal and international; economic migrants: illegal migrants, asylum seekers and refugees</p> <p>(iii) Demonstrate knowledge and understanding of migrant characteristics: age; gender; ethnicity; socio-economic status</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>● explain the push/pull processes which influence the process of migration;</li> <li>● identify and explain barriers to migration.</li> <li>● identify and explain patterns of migration flow at internal and international scale;</li> <li>● identify different types of migrant and explain why the migration occurred.</li> <li>● explain how migration is a selective process and is influenced by variables such as age, sex, ethnic and socio-economic status.</li> </ul>	<p>Royle, S. <i>The Impact of Population Change</i>, pp 10 – 14. and 16-22</p> <p>Waugh, D. <i>Geography (1995); An Integrated Approach</i> p.337-340, 346,409 (2<sup>nd</sup> ed)</p> <p>Carr, M. (1997) <i>New Patterns: Process and Change in Human Geography</i> p.46-59.</p> <p>Chrispin, J. &amp; Jegede, F. (2000) <i>Population Resources and Development</i> (2<sup>nd</sup> ed) p.58-71.</p> <p>Guinness, P. &amp; Nagle, G. (1999) <i>Advanced Geography Concepts and Cases</i>, p.28-29, 114-119</p> <p>Guinness, P. Brazil (1998) <i>Advanced Case Studies</i> p.69-72.</p> <p>Rees, P. (1996) <i>Population Migration in the EU – case studies</i></p> <p>Jackson, S. (1998) <i>Britain's Population</i> p.88-122</p>	<p>Use existing knowledge to complete a thinking skills activity (classification of a range of population movements) draw a table to group migration into the various categories</p> <p>Pupils make notes on key ideas and concepts</p> <p>Pupils will describe and suggest reasons for population movement in terms of push/pull factors</p> <p>Using examples of migration flows pupils make a list of different reasons for migration and sort into economic, social, cultural, political, physical factors and suggest possible barriers to migration</p> <p>Pupils examine map showing major international migration flows to investigate streams and reasons for movement</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iv) demonstrate knowledge and understanding of the implications of migration for service provision, economic activity and social stability</p> <p><b>Spatial context requirement:</b></p> <p>For (iv) - those implications that are relevant to one small-scale case study of out-migration e.g. Achill Island and one small-scale case study of in-migration e.g. Dublin or Delhi.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• understand that migration has implications for both sending and receiving areas in terms of providing services;</li> <li>• employment and the stability of society;</li> <li>• understand the implication of migration on two small-scale case studies.</li> </ul> <p>In all areas students should be able to:</p> <ul style="list-style-type: none"> <li>• interpret flow line maps;</li> <li>• construct /interpret a range of maps showing population movement;</li> <li>• develop a range of research skills (including ICT – CD Roms).</li> </ul>	<p>Newspapers e.g. Daily Mail, The Times, Daily Telegraph (this topic is covered extensively in current media)</p> <p>Geography Magazine November 1993 <i>The Emigration Isle</i> p.22-26</p> <p><a href="http://www.achill-island.com">www.achill-island.com</a></p> <p>King, R. <i>Migration and Development in the Mediterranean Region</i>, Geography 81.1, p.3-14</p> <p>Royle, S. (1999) <i>Leaving the 'Dreadful Rocks'. Irish Island Emigration and its Legacy</i>, History Ireland 7.2 p.34-37</p>	<p>Using a data set on internal migration flows pupils can represent information using techniques such as choropleth mapping, flow lines or proportional circles</p> <p>Brainstorm ideas with class on possible impact of migration on losing and receiving areas and group ideas into demographic, service provision, economic activity and social stability</p> <p>Develop discussions</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>ASSESSMENT AND REVIEW</b></p>			<p>Specimen Paper Geography Assessment Unit A2 1 Human Geography and Global Issues.                      Past examination papers: Assessment Unit A2 2 Processes and Issues in Human Geography. When using past papers please check carefully the requirements of the revised specification.                      Spring 2004 Module 5: Q. 1 (a); Q.2 (a) (b) (c),                      Summer 2004 Module 5: Q.2 (a) (b)                      Spring 2005 Module 5: Q.2 (a) (b) (c),                      Summer 2005 Module 5: Q.1 (a); Q.2 (a) (b) (c)                      Spring 2006 Module 5: Q.1 (a) (b) (c) Q2 (b)                      Spring 2007 Module 5: Q2 (a) (b) (c),                      Summer 2007 Module 5: Q2 (a) (b) (c)</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 Population policies</p> <p><b>Learning Outcomes:</b></p> <p>(i) Understand fertility and migration policies in relation to: resource balance; economic, social, cultural and moral considerations;</p> <p>(ii) Evaluate the impact of the policies.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• understand how the population of a country can have an impact on the resources within that country;</li> <li>• recognise that governments can regulate population change, international migration and internal distribution through policies;</li> <li>• identify how fertility and migration policies can have an impact on resource balance;</li> <li>• identify the economic, social, cultural and moral considerations behind each of these policies.</li> <li>• evaluate the impact of such policies (both positive and negative) in achieving a balance between population and resources;</li> </ul>	<p>Royle, S. <i>The Impact of Population Change</i>, pp 22 – 34</p> <p>Jones, H. <i>Population Geography</i>, pp 256-276</p> <p>Chrispin, J. &amp; Jegede, F. (2000) <i>Population Resources and Development</i> pp88-93</p> <p>Waugh, D. (1995) <i>Geography An Integrated Approach</i> p.358-359 (2<sup>nd</sup> ed)</p> <p>Guinness, P. Nagle, G. (1999) <i>Advanced Geography: Concepts and Cases</i></p> <p>Carr, M. (1997) <i>New Patterns: Process and Change in Human Geography</i> p.20-22</p> <p>Royle, S. &amp; Phillips, D. <i>China's Population Policy and its Consequences</i>, Geography Review Sept. 97 11.1 p2-7</p>	<p>Review concepts of over, under and optimum population</p> <p>Class discussion to investigate reasons for implementing fertility and migration policies. Groups classify reasons into economic, social, cultural and moral considerations</p> <p>Pupils work in groups to research information on case studies (e.g. China) from Internet or school library with a view to making a presentation to the class using data projector (PowerPoint presentation).</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Spatial context requirement:</b></p> <p>For (i) and (ii) one national fertility policy e.g. China and one national migration policy e.g. Canada.</p>	<ul style="list-style-type: none"> <li>• use ICT to research and present information.</li> </ul>	<p>Geofile January (1993), China Today.</p> <p>Royle, S. (2000), Scattering and sorrow; migration and older persons on the small islands off Ireland on NINE IBGF site ‘A’ Level materials.</p> <p>Royle, S. (2000) <i>Population and Resources in Contrasting Environments: Part 1, Prince Edward Island, Canada</i>, Geography Review 13.5 p.30-35.</p> <p>Royle, S. (2000) <i>Population and Resources in Contrasting Environments: Part 2, The Republic of the Marshall Islands</i>, Geography Review 13.5 p.36-39.</p>	
<p><b>ASSESSMENT AND REVIEW CCEA PAST PAPERS</b></p>	<p>Specimen Paper Geography Assessment Unit A2 1 Human Geography and Global Issues.</p> <p>Past examination papers: Assessment Unit A2 2 Processes and Issues in Human Geography. When using past papers please check carefully the requirements of the revised specification.</p> <p>Spring 2004 Module 5: Q.1 (b), (c)</p> <p>Summer 2005 Module 5: Q.1 (b) (c)</p> <p>Spring 2006 Module 5: Q.1 (b); Q.2 (c)</p> <p>Summer 2006 Module 5: Q1 (d)</p> <p>Spring 2007 Module 5: Q2 (b); Summer 2007 Module 5: Q1 (b) (c)</p>		

## **A2 MODULE 1: Option A: Impact of Population Change**

### **Resource List**

#### **Content: 1: Natural Population Change**

##### ***Books***

Carr, M. (1997 2<sup>nd</sup> edition) *Patterns, Processes and Change In Human Geography*, Nelson, London.

Chrispin, J. and Jegede, F. (2000 2<sup>nd</sup> edition) *Population, Resources and Development*, Collins Educational.

Jackson, S. (1998) *Britain's Population: Demographic Issues in a Contemporary Society*, Routledge, London.

Royle, S. (2001) *The Impact of Population Change*, Colourpoint Books.

Waugh, D. (1995 2<sup>nd</sup> edition) *Geography: An Integrated Approach*, Nelson: Walton-on-Thames.

##### ***Articles***

Atkins, P., Townsend, J., Raju, S. and Kumar, N. (1999) 'India's Missing Millions', *Geography Review*, 13.1, pp. 2-10.

Barrett, H. (2000) 'Six Billion and Counting: Trends and Prospects for Global Population at the Beginning of the 21<sup>st</sup> Century', *Geography*, 85.2, pp. 107-120.

Buckley, R. (ed.) (1994) *World Population: The Biggest Problem of Them All*, European Schoolbooks: Cheltenham.

Daniel, M.I. (2000) 'The Demographic Impact of HIV/AIDS in Sub-Saharan Africa', *Geography*, 85.1, pp. 46-55.

Sutton, K. (1999) 'Demographic Transition in the Maghreb', *Geography*, 84.2, pp. 111-118.

##### **Other**

[www.un.org/Pubs/CyberSchoolBus](http://www.un.org/Pubs/CyberSchoolBus)

Video: The Geography Collection: Baby Boom (available from SELB –028 3752 5353 TE 1881)

## **Content 2: Migration: Causes, streams and impacts**

### ***Books***

Carr, M. (1997 2<sup>nd</sup> Edition) *Patterns, Processes and Change in Human Geography*, Nelson: London.

Chrispin, J. and Jegede, F. (2000 2<sup>nd</sup> Edition) *Population, Resources and Development*, Collins Educational.

Guinness, P. (1998) *Brazil: Advanced Case Studies*, Hodder and Stoughton Educational.

Guinness, P. and Nagle, G. (1999) *Advanced Geography: Concepts and Cases*, Hodder and Stoughton Educational: London.

Jackson, S. (1998) *Britain's Population: Demographic Issues in a Contemporary Society*, Routledge, London.

Rees, P. (ed.) (1996) *Population Migration in the EU*, Wiley: London. [Case studies of European countries and issues affecting Europe as a whole].

Royle, S. (2001) *The Impact of Population Change*, Colourpoint Books.

Waugh, D. (1995 2<sup>nd</sup> edition) *Geography: An Integrated Approach*, Nelson: Walton-on-Thames.

### ***Articles***

Lewis, G.J. (2000) 'Changing Places in a Rural World; the Population Turnaround [counterurbanisation] in Perspective', *Geography*, 85.2, pp. 157-65.

King, R. (1996) 'Migration and development in the Mediterranean region', *Geography*, 81.1, pp. 3-14.

McGrath, F. (1993) 'The emigration isle [Achill]', *Geographical Magazine*, November, pp. 22-26.

Royle, S.A. (1999) 'Leaving the "dreadful rocks": Irish island emigration and its legacy', *History Ireland*, 7.2, pp. 34-37.

### ***Other***

Royle, S. A. (2000) *Scattering And Sorrow: Migration And Older Persons On The Small Islands Off Ireland*, NINE IBGF site, A level materials.

A good Achill Island website is:

[www.achill-island.com](http://www.achill-island.com)

Video: Brazil 2000, Northern Ireland Educational Film Library, v918, 12788

### **Content 3: Population policies**

#### **Resources: Books**

Carr, M. (1997, 2<sup>nd</sup> Edition) *Patterns, Processes and Change In Human Geography*, Nelson, London.

Chrispin, J. and Jegede, F. (2000, 2<sup>nd</sup> edition) *Population, Resources And Development*.

Guinness, P. and Nagle, G. (1999) *Advanced Geography: Concepts and Cases*, Hodder and Stoughton Educational: London.

Jones, H. (1990, 2<sup>nd</sup> edition) *Population Geography*, Paul Chapman Publications, London.

Waugh, D. (1995, 2<sup>nd</sup> edition) *Geography: An Integrated Approach*, Nelson: Walton-on-Thames.

#### **Articles**

Ghosh, J. and Price, V.J. (1999) 'Canadian Immigration Policy: Responses to Changing Trends', *Geography*, 84.3, pp. 233-40.

Hinrichsen, D. (1999) 'Inside Story: China. A Quiet Revolution in Datonghui', *People and the Planet*, 8.1, pp. 20-22.

Marriott, A. and Sanchez, J. (1998) 'The Integration of Family Planning and Development Activities in India', *Geography*, 83.3, pp. 237-45.

Riley, N.E. (1966) 'China's Missing Girls: Prospects and Policies', *Population Today*, 24, pp. 4-5.

Royle, S.A. and Phillips, D.R. (1997) 'China's Population Policy and its Consequences', *Geography Review*, 11.1, pp. 2-7.

Royle, S.A. (2000) 'Population and Resources in Contrasting Environments: Part 1, Prince Edward Island, Canada', *Geography Review*, 13.4, pp. 36-39.

Royle, S.A. (2000) 'Population and Resources in Contrasting Environments: Part 2, the Republic of the Marshall Islands', *Geography Review*, 13.5, pp. 30-35.

Royle, S. (2001) *The Impact of Population Change*, Colourpoint Books.

Shen, J-F (1998) 'China's Future Population and Development Challenges', *The Geographical Journal*, 164, pp. 155-62.

Young, D. (2000) 'Population Politics', *Geography Review*, 14.1, pp. 2-5.

#### **Other**

Geofile (January 1993) *China today*.

**Specification:** GCE Geography  
**Unit: A2 1:** Human Geography and Global Issues

**Option B:** Planning for Sustainable Settlements

**Element**

1. Sustainable Development
2. Urban land use and planning relation to sustainability
3. Traffic and transport

### **Prior Learning**

Pupils will have studied AS Level Geography.

### **Opportunities for Key Skills**

Throughout the teaching of this unit opportunities are created for the assessment of the following Key Skills.

- ICT; and
- Communication

### **Resources**

It is important to note that a wide variety of texts and resources are included in the schemes so that teachers may select what is relevant to their own needs.

### **Time Duration**

5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 1 Sustainable Development</p> <p><b>Learning Outcomes:</b></p> <p>(i) explain sustainable development with reference to social; economic; and environmental considerations;</p> <p>(ii) demonstrate knowledge and understanding of urban ecological and carbon footprints; and</p> <p>(iii) demonstrate knowledge and understanding of Local Agenda 21 and its impact on planning for sustainability.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• Understand the problems created by urban growth;</li> <li>• Explain the term sustainable development in light of social, economic and environmental considerations.</li> <li>• Understand what is meant by the ecological and carbon footprint of individuals and settlements;</li> <li>• Identify the demands placed on green areas eg; <ul style="list-style-type: none"> <li>- Housing</li> <li>- Industry/ employment</li> </ul> </li> <li>• understand what Agenda 21 is and what it means in planning; research the impact of Agenda 21 on a small-scale case study.</li> </ul>	<p>Ellis G. (2002). Planning for Sustainable Settlements. pp 4-13</p> <p>Nagle G. (1998). Changing Settlements. pp 31, 41-49,50-60</p> <p>Waugh, D. (1995) Geography: An Integrated Approach, pp. 369</p> <p>The Royal Town Planning Institute (2004). Education for Sustainable Development. A Manual for Schools, pp24-25</p> <p>BP resources (CD Rom or <a href="http://www.bp.com">www.bp.com</a>)</p> <p><a href="http://www.belfastcity.gov.uk">www.belfastcity.gov.uk</a></p> <p><a href="http://www.sustainable-development.gov.uk">www.sustainable-development.gov.uk</a></p> <p><a href="http://www.geographyinaction.co.uk/Urban_structure/Belf_Sus.html">www.geographyinaction.co.uk/Urban_structure/Belf_Sus.html</a></p> <p><a href="http://www.gdrc.org/uem/la21/la21.html">www.gdrc.org/uem/la21/la21.html</a></p> <p><a href="http://www.la21.org.uk">www.la21.org.uk</a></p>	<p>Use newspaper resources to identify problems of urban sprawl – look at property pages or magazines to identify where new residential and commercial areas are located</p> <p>Use BP resources to calculate individual carbon footprints (contact BP for CD Rom if you have not got one already – it is free and excellent)</p> <p>Use websites to access information on Local Agenda 21 and get pupils to debate the issue</p> <p>Pupils make notes on key concepts and ideas</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Spatial context requirement:</b></p> <p>For (i) and (ii) general reference to places for illustration purposes</p> <p>For (iii) one small-scale case study where Local Agenda 21 has influenced planning e.g. Bexley</p>			
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen paper Geography Assessment Unit A2 1 Human Geography and Global Issues.                      Past examination papers: Assessment Unit A2 2 Processes and Issues in Human Geography                      When using past paper please check carefully the requirements of the revised specifications.                      Spring 2004 Module 5: Q.5 (a), (b), (c)                      Spring 2005 Module 5: Q.5 (a), (b), (c)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 Urban land use and planning in relation to sustainability</p> <p><b>Learning Outcomes</b> How urban land use and planning relates to sustainability with regard to:</p> <p>(i) The management of residential areas: neighbourhood units; defensible space;</p> <p>(ii) The re-use of industrial areas: the impact of de-industrialisation; brown field developments;</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• understand what makes a city sustainable or unsustainable;</li> <li>• identify the characteristics of a residential area and the issues affecting the sustainable management of them.</li> <li>• identify places within an urban area which are derelict;</li> <li>• explain why brown field developments are fundamental to urban sustainability.</li> </ul>	<p>Cook et al Geography in Focus. pp 132-137</p> <p>Newan, O. (1996) <i>Creating Defensible Space</i> download from <a href="http://www.defensiblespace.com/book.htm">www.defensiblespace.com/book.htm</a></p> <p>Ellis, G. (2002). Planning for Sustainable Settlements. pp 14-15, 22-30</p> <p>Girardet, H. (1996). The Gaia Atlas of Cities</p> <p>Nagle, G. (1998). Changing Settlements. Pp 76-77</p> <p>The Royal Town Planning Institute (2004). Education for Sustainable Development. A Manual for Schools pp14-23, 26-29</p> <p>Prosser, R. (1994). Leisure, Recreation and Tourism. pp 52-53</p> <p>Waugh, D. (1995) Geography: An Integrated Approach. pp. 400-401, 534</p>	<p>Use a questionnaire to establish pupils' perceptions of their neighbourhood and defensible space</p> <p>Mapwork or else use photographs from local newspapers (Belfast Telegraph) or property magazines to locate derelict land and possible brown field developments</p> <p>Short field visit to look at industrial, retail and urban areas within local town or city</p> <p>Fieldwork questionnaire – reaction to shopping centres</p> <p>Use newspaper resources to identify new shopping developments (e.g. new Ikea in Belfast) and the reactions to them</p> <p>Use the internet to research planning issues</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) Retail change: competition between out-of-town shopping and town centres; environmental and social consequences; and</p> <p>(iv) Leisure areas: sports facilities; open space; urban parks.</p> <p>(v) The principles and practice of urban conservation; redevelopment, regeneration and restoration.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• locate out-of-town shopping centres on a map or photograph;</li> <li>• identify the locational advantages of out-of-town shopping centres.</li> <li>• understand why open areas are the “green lung” of the city;</li> <li>• identify leisure areas in major cities or towns and explain why they are important to urban sustainability.</li> <li>• understand why it is important to conserve urban character and heritage;</li> <li>• identify areas in their own town which have been regenerated.</li> </ul>	<p>Geofile No 299 (Jan1997). Los Angeles- urban issues 1996</p> <p>Geofile No 304 (Jan 1997). Decision making exercise; Planning for urban change in Paris</p> <p>Pacione M. Geography Vol 86 (4). The future of the city – cities of the future. pp 275-286</p> <p>University of Southern California (2001) Sprawl hits the wall- confronting the realities of Metropolitan L.A.</p> <p>DOE Planning Service (1997). Planning Policy Statement (PPS5). Retailing and town Centres.</p>	<p>Photograph interpretation of historic buildings and discussion on their significance</p> <p>Students use the internet to research case studies and then create PowerPoint presentations to report to rest of class</p> <p>Students make notes on key ideas and concepts.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Spatial context requirement:</b></p> <p>For (i)-(v) – those characteristics that affect or have affected land use and planning issues and policies in one small-scale case study e.g. Curitiba or Los Angeles.</p>		<p><a href="http://www.drdni.gov.uk/index/regional_planning.htm">www.drdni.gov.uk/index/regional_planning.htm</a></p> <p><a href="http://www.planningni.gov.uk/AreaPlans_Policy/APP.htm">www.planningni.gov.uk/AreaPlans_Policy/APP.htm</a></p>	<p>Students use the internet to research urban sustainability.</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen paper Geography Assessment Unit A2 1 Human Geography and Global Issues.                      Past examination papers: Assessment Unit A2 2 Processes and Issues in Human Geography                      When using past paper please check carefully the requirements of the revised specifications.                      Spring 2004 Module 5: Q.6 (a), (b), (c), (d)                      Summer 2004 Module 5: Q.6 (a), (b), (c)                      Summer 2005 Module 5: Q.6 (a), (b), (c), (d)                      Spring 2006 Module 5: Q.6 (a), (b), (c), (d)                      Summer 2006 Module 5: Q5 (a), (b), (c), (d)                      Summer 2007 Module 5: Q5 (a), (b), (c)                      Summer 1992 Module 6 Decision making exercise: Cardiff Bay</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 Traffic and transport</p> <p><b>Learning Outcomes</b></p> <p>(i) demonstrate knowledge and understanding of transport: modes of transport and their impact on sustainability;</p> <p>(ii) evaluate traffic management strategies including public transport; integrated transport networks; traffic cells; parking policies; pedestrianisation.</p> <p><b>Spatial context requirement:</b> For (i) and (ii) one case study of a city e.g. Belfast or London.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• understand why traffic management strategies are needed;</li> <li>• identify problems created by traffic in urban areas; <ul style="list-style-type: none"> <li>- Pollution</li> <li>- Congestion</li> </ul> </li> <li>• understand how and why public transport methods contribute to sustainability.</li> <li>• understand the benefits of integrating all transport routes;</li> <li>• understand the principle behind traffic cells;</li> <li>• understand how parking policies can benefit shoppers yet disadvantage motorists;</li> </ul>	<p>Ellis G. (2002). Planning for Sustainable Settlements. pp 31-34</p> <p>Flint, C. &amp; Flint, D. (2000) Urbanisation: Changing Environments, pp 120</p> <p>Waugh, D. (1995) Geography: An Integrated Approach, pp. 346, 409-410</p> <p>Belfast City Council Transport Policy (available online)</p> <p>Geofile Sept 1998 No 336. Inner Cities; policies 1945-1998</p> <p>Hogg, N. and Jones, S. (Mar 2002) Transport policy and urban air pollution. Geography Review pp 34-37.</p>	<p>Use maps of London or Belfast to identify cycle paths, bus lanes, one way systems</p> <p>Interpret statistics from car park prices in Belfast</p> <p>Interpret photographs of traffic management strategies</p> <p>Discussion or debate – Plan a new traffic management strategy for your urban area</p> <p>Use the internet to assess the impacts of traffic management strategies</p> <p>Students make notes on key concepts and ideas</p> <p>Short field investigation- look at traffic management strategies in your own town and evaluate their effectiveness.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
	<ul style="list-style-type: none"> <li>identify areas of pedestrianisation and explain their advantage to shoppers and disadvantage to motorists.</li> </ul>	<a href="http://www.drdni.gov.uk/index/public_transport.htm">www.drdni.gov.uk/index/public_transport.htm</a> <a href="http://www.drdni.gov.uk/index/transport_planning.htm">www.drdni.gov.uk/index/transport_planning.htm</a>	
<b>ASSESSMENT AND REVIEW</b>	<p>Specimen paper Geography Assessment Unit A2 1 Human Geography and Global Issues.                      Past examination papers: Assessment Unit A2 2 Processes and Issues in Human Geography                      When using past paper please check carefully the requirements of the revised specifications.                      Summer 2004 Module 5: Q.5 (a), (b), (c), (d)                      Spring 2005 Module 5: Q.6 (a), (b), (c), (d)                      Summer 2005 Module 5: Q.5 (a), (b), (c), (d)                      Spring 2006 Module 5: Q.5 (a), (b), (c)                      Summer 2007 Module 5: Q.6 (a), (b), (c)                      Summer 1997 Module 6 Decision making exercise: Newbury By-pass</p>		

## **A2 MODULE 1: Option B: Planning for Sustainable Settlements**

### **Resource List**

#### **1: Sustainable development**

##### ***Books***

Ellis, G. (2002) *Planning for Sustainable Settlements*, Colourpoint, ISBN 1 898392 86 2

Nagle, G. (1998) *Changing Settlement*, Nelson, ISBN 0 17 490021 X

The Royal Town Planning Institute (2004) *Education for Sustainable Development: A Manual for Schools*.

Waugh, D. (1995, 3<sup>rd</sup> edition) *Geography: An Integrated Approach*, Nelson, ISBN 0 17 444706 X

##### **Other**

BP resources (CD Rom or [www.bp.com](http://www.bp.com))

[www.belfastcity.gov.uk](http://www.belfastcity.gov.uk)

[www.sustainable-development.gov.uk](http://www.sustainable-development.gov.uk)

[www.geographyinaction.co.uk/Urban\\_structure/Belf\\_Sus.html](http://www.geographyinaction.co.uk/Urban_structure/Belf_Sus.html)

[www.gdrc.org/uem/la21/la21.html](http://www.gdrc.org/uem/la21/la21.html)

[www.la21.org.uk](http://www.la21.org.uk)

## **2: Urban land use and planning in relation to sustainability**

### ***Books***

Cook, I., Hordern, B., McGahan, H. & Riston, P. *Geography in Focus*, Causeway Press Limited, ISBN 1 873929 91 9

Ellis, G. (2002) *Planning for Sustainable Settlements*, Colourpoint, ISBN 1 898392 86 2

Girardet, H. (1996) *The Gaia Atlas of Cities*. Gaia Books,

Nagle, G. (1998) *Changing Settlements*, Nelson, ISBN 0 17 490021 X

Prosser, R. (2000), *Leisure, Recreation and Tourism*, Collins Educational, ISBN 0 00326659 8

The Royal Town Planning Institute (2004) *Education for Sustainable Development: A Manual for Schools*

Waugh, D. (1995, 3<sup>rd</sup> edition) *Geography: An Integrated Approach*, Nelson, ISBN 0 17 444706 X

### ***Articles***

Geofile No 299 (Jan1997). *Los Angeles- urban issues 1996*.

Geofile No 304 (Jan1997). *Decision making exercise; Planning for urban change in Paris*.

Pacione M. *Geography* Vol 86 (4). *The future of the city – cities of the future*. pp 275-286

University of Southern California (2001) *Sprawl hits the wall- confronting the realities of Metropolitan L.A.*

DOE Planning Service (199 ). *Planning Policy Statement (PPS5). Retailing and town Centres*.

### ***Other***

[www.drdni.gov.uk/index/regional\\_planning.htm](http://www.drdni.gov.uk/index/regional_planning.htm)

[www.planningni.gov.uk/AreaPlans\\_Policy/APP.htm](http://www.planningni.gov.uk/AreaPlans_Policy/APP.htm)

### **3: Traffic and transport**

#### **Resources: Books**

Ellis, G. (2002). *Planning for sustainable settlements*, Colourpoint, ISBN 1 898392 86 2

Flint, C. & Flint, D. (2000) *Urbanisation: Changing Environments*, Collins Educational, ISBN 0 00 326687 7

Nagle, G. (1998). *Changing Settlements*, Nelson, ISBN 0 17 490021 X

Waugh, D. (1995, 2<sup>nd</sup> edition) *Geography: An Integrated Approach*, Nelson, ISBN 017 444706 X

#### **Articles**

Belfast City Council Transport Policy (available online)

Geofile No 336 (Sept 1998), *Inner Cities: Policies 1945-1998*

Hogg, N. and Jones, S. (Mar 2002). *Transport policy and urban air pollution*. *Geography Review* pp 34-37

#### **Other**

[www.drdni.gov.uk/index/public\\_transport.htm](http://www.drdni.gov.uk/index/public_transport.htm)

[www.drdni.gov.uk/index/transport\\_planning.htm](http://www.drdni.gov.uk/index/transport_planning.htm)

**Specification:** GCE Geography

**Unit: AS 2:** Human Geography and Global Issues

**Option C:** Issues in Ethnic Diversity

**Element**

1. The definition of Ethnicity
2. The process which create and maintain ethnic diversity
3. Ethnic conflict

### **Prior Learning**

AS2 – Human Geography Module

### **Opportunities for Key Skills**

Throughout the teaching of this unit opportunities exist for the assessment of the following Key Skills

- ICT;
- Application of number;
- Improving Own Learning and Performance;
- Communication; and
- Working with others.

### **Resources**

A list of text and other resources are included as part of the scheme. There is only one book which covers all of the topics in this unit. Therefore many of the references are taken from newspapers, news magazines or websites. Time Magazine can be particularly useful as the length of the items and the language used is well suited to A Level students. It is possible to obtain back copies of Time through their website [www.timeeurope.com/customerservice](http://www.timeeurope.com/customerservice).

### **Time Duration**

5 week

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 1. The definition of ethnicity</p> <p><b>Learning Outcomes:</b> Explain the factors that define ethnicity:</p> <p>(i) Primary factors (race, nationality, language, religion and perceived ethnic identity)</p> <p>(ii) Secondary factors (social status, residential concentration, age, gender and caste).</p> <p><b>Spatial context requirement:</b> For (i) and (ii) general reference to places for illustration purposes only</p>	<p>(i) Students should be able to:</p> <ul style="list-style-type: none"> <li>understand that ethnicity is a complex concept which is subjective in its definition;</li> <li>identify and explain the major factors (primary) which divide/unite people.</li> </ul> <p>(ii) Students should be able to:</p> <ul style="list-style-type: none"> <li>appreciate that in today's global society clear cut divisions of people are blurred;</li> <li>develop tolerance and mutual understanding of other cultures;</li> <li>Explain how secondary factors define ethnicity;</li> <li>Identify places (using the primary and secondary factors) where ethnicity is apparent.</li> </ul>	<p>Royle, S. <i>Issues in Ethnic Diversity</i>, Ch 1.</p> <p>Caste System – <a href="http://www.itrs.scu.edu/hinduism/index.html">www.itrs.scu.edu/hinduism/index.html</a></p> <p>McGeary, J. Can the Afghans come together – Time, November 26, 2001</p> <p><a href="http://www.statistics.gov.uk">www.statistics.gov.uk</a> (UK census information).</p> <p><a href="http://www.newsvote.bbc.co.uk">www.newsvote.bbc.co.uk</a> (Citizenship form)</p> <p><a href="http://www.jrf.org.uk/knowledge/findings/foundations">www.jrf.org.uk/knowledge/findings/foundations</a> (social and economic characteristics of ethnic minorities in Britain).</p>	<p>Introduce through discussion the meaning of an ethnic group.</p> <p>Use internet to gather information on major racial and religious groups</p> <p>Use 2001 census data to investigate social/economic characteristics of the UK's ethnic population</p> <p>Discuss nationalism ~ citizenship tests in UK</p> <p>Use choropleth maps to investigate social and economic characteristics of minority groups in ethnically diverse societies</p> <p>Use chi squared tests or location quotient to compare and verify social and economic characteristics of minority groups relative to the national population</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
			<p>Discuss ageism, gender and caste issues using articles in the media e.g. Time magazine</p> <p>Pupils make notes on key ideas and concepts</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen paper Geography Assessment Unit A2 1 Human Geography and Global Issues.                      Past examination papers: Assessment Unit A2 2 Processes and Issues in Human Geography                      When using past papers please check carefully the requirements of the revised specification.                      Spring 2004 Module 5: Q. 3 (a)                      Spring 2005 Module 5: Q. 3 (a)                      Spring 2006 Module 5: Q.3 (c)                      Summer 2006 Module 5: Q4 (a)                      Summer 2007 Module 5: Q3 (a) Q4 (b)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 The processes which create and maintain ethnic diversity</p> <p><b>Learning Outcomes:</b> Demonstrate knowledge and understanding of:</p> <p>(i) processes creating ethnic diversity: colonisation, annexation and international migration;</p> <p>(ii) processes maintaining ethnic diversity: segregation, pluralism, multiculturalism and discrimination;</p> <p>(iii) the economic, social and spatial outcomes of ethnic diversity.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• define migration, colonization, annexation and international migration;</li> <li>• identify how these processes lead to ethnic diversity in one named country.</li> <li>• define segregation, pluralism, multiculturalism and discrimination;</li> <li>• appreciate the role of these processes in bringing about the resultant ethnic diversity in a named city.</li> <li>• identify the economic, social and spatial outcomes of ethnic diversity and understand how they lead to diversity in a named city.</li> </ul>	<p>Royle, S. <i>Issues in Ethnic Diversity</i>, Chapters 2 and 3</p> <p>Gibson, H. (2001), <i>Traitors or Martyrs, British Muslims fighting for the Taliban</i>, Time October 12</p> <p>Mason, D. <i>Race and Ethnicity in Modern Britain</i>, chapters 2-5</p> <p>BBC website World News has interesting information on country profiles</p> <p><a href="http://www.cre.gov.uk">www.cre.gov.uk</a> (useful information on ethnic diversity in Britain)</p> <p>Bradford and Cantle report <a href="http://www.bradford.gov.uk">www.bradford.gov.uk</a> <a href="http://www.race">www.race</a> <a href="http://www.review.org.uk/project.html">www.review.org.uk/project.html</a> <a href="http://www.homeoffice.gov.uk">www.homeoffice.gov.uk</a></p>	<p>Research and take notes on all processes</p> <p>Use political and historical maps of Africa, Asia, South America to observe extent of colonialism</p> <p>Use maps to examine major international migrations</p> <p>Use maps of Middle East to illustrate annexation of Kuwait by Iraq, West Bank and Gaza by Israel</p> <p>Research chosen case studies on the internet</p> <p>Read selected texts and make notes on the relevant points</p> <p>Use current newspaper articles to build a picture of ethnic diversity</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Spatial context requirement:</b></p> <p>For (i) the role of those processes that created ethnic diversity in one country</p> <p>For (ii) and (iii) the role of these processes and their outcomes for one ethnically diverse city eg Jerusalem or Belfast</p>		<p>Territoriality on the Shankill Falls divide Belfast, F W Boal, Irish Geography (needs updating with 2001 census data)</p>	
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen paper Geography Assessment Unit A2 1 Human Geography and Global Issues.                      Past examination papers: Assessment Unit A2 2 Processes and Issues in Human Geography                      When using past papers please check carefully the requirements of the revised specification.                      Spring 2004 Module 5: Q4 (b)                      Summer 2004 Module 5: Q3 (a) (i); (c)                      Spring 2005 Module 5: Q3 (c); Q4 (a) (b)                      Summer 2005 Module 5: Q3 (b); Q4(b)                      Summer 2006 Module 5: Q3 (b) Q4 (b)                      Summer 2007 Module 5: Q3 (b)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 Ethnic conflict</p> <p><b>Learning Outcomes:</b></p> <p>(i) Explain the causes of ethnic conflict; territorial disputes; historical animosities; racism; sectarianism; cultural conflicts; human rights abuses; unequal distribution of resources and political power;</p> <p>(ii) Understand the nature of ethnic conflict including civil disobedience; civil war; terrorism;</p> <p>(iii) Demonstrate knowledge and understanding of outcomes and responses to conflict; social and economic impact; territorial division;</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• understand the causes of conflict as listed opposite;</li> <li>• give reasons for these causes within a national case study.</li> <li>• understand the nature of ethnic conflict; civil disobedience; civil war and terrorism;</li> <li>• explain how this situation has led to the problems which exist in a national scale case study.</li> <li>• identify and understand the outcomes and responses to conflict;</li> <li>• explain the outcomes of conflict in a named case study;</li> </ul>	<p>Royle, S., <i>Issues in Ethnic Diversity</i>, Chapter 4</p> <p>Chisholm, M., and Smith, D. ed, <i>Shared Space, Divided Space</i>, (teacher source)</p> <p>BBC website <a href="http://www.bbc.co.uk">www.bbc.co.uk</a> - world news (select chosen country for up to date information). Also excellent country profiles, e.g. Sri Lanka, former Yugoslavia, Israel.</p>	<p>Make notes on all listed terminology</p> <p>Opportunity for individual pupil/group research into each outcome followed by powerpoint presentation to whole class</p> <p>Class debate on issues arising from study of the outcomes- Give individuals certain governmental roles- attempt to reach a peaceful solution within the country</p> <p>Internet research on chosen case study.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>autonomy; ethnic cleansing; international intervention and peace processes.</p> <p><b>Spatial context requirement:</b></p> <p>For (i), (ii) and (iii) the role of those processes that affect/have affected one national case study of ethnic conflict eg Israel or Sri Lanka.</p>	<ul style="list-style-type: none"> <li>identify the responses to the conflict in a named case study.</li> </ul>		
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen paper Geography Assessment Unit A2 1 Human Geography and Global Issues.                      Past examination papers: Assessment Unit A2 2 Processes and Issues in Human Geography                      When using past papers please check carefully the requirements of the revised specification.                      Spring 2004 Module 5: Q3 (b) Q4 (a)                      Summer 2004 Module 5: Q4 (b) (c) (d)                      Spring 2005 Module 5: Q3 (b); Q4 (c)                      Summer 2005 Module 5: Q3 (b); Q4 (c)                      Spring 2006 Module 5: Q3 (a) (i), (b); Q4 (b) (c)                      Summer 2006 Module 5: Q3 (a)                      Spring 2007 Module 5: Q3 (a)</p>		

## **A2 MODULE 1: Human Geography and Global Issues**

### **Option C: Issues in Ethnic Diversity**

#### **Resource List**

<b>Titles</b>	<b>Author</b>	<b>Publisher</b>	<b>ISBN</b>
Issues in Ethnic Diversity	Royle, S.	Colourpoint	1-898392-89-7
Race and Ethnicity in Modern Britain	Mason, D.	Oxford University Press	0-19-874285-1
Shared Space, Divided Space	Chisholm, M. & Smith, D. (eds)	Unwin Hyman Ltd	0 04 445714 6



**A2 1:  
Human Geography  
and Global Issues:  
Section B**

**Specification:** GCE Geography

**Unit A2 1:** Human Geography and Global Issues

**Section B:** Global Issues.

**Elements**

1. Air pollution
2. Nuclear Energy
3. Agricultural change and its impact
4. Issues in Tourism

### **Prior Learning**

Much within this section may be unfamiliar to pupils. Nevertheless, prior completion of GCSE and AS1 and 2 should prove advantageous.

### **Opportunities for Skills Development**

Throughout the time period given, opportunities should be taken to discuss relevant geographical skills as presented in the specification. This may include, for example, graphical presentation techniques, isoline mapping or satellite imagery, as appropriate.

### **Opportunities for Key Skills**

Throughout the teaching of this unit opportunities exist for the assessment of the following Key Skills

- ICT;
- Communication; and
- Working with Others.

### **Resources**

The list of text and other resources in the scheme are designed so that teachers may select in relation to their own resources.

### **Time Duration**

5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 1 Air pollution</p> <p><b>Learning Outcomes:</b> (i) appreciate the problems of defining pollution;</p> <p>(ii) demonstrate knowledge and understanding of air pollution sources: primary gaseous pollutants: (carbon dioxide, methane, sulphur dioxide, CFCs); secondary gaseous pollutants: (ozone and PANs).</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• appreciate that the production of a definition of pollution is problematic;</li> <li>• provide reasons to explain why this is so.</li> <li>• evaluate the suitability of differing definitions of pollution within differing contexts;</li> <li>• know that pollution incidents may be classified with respect to scale and frequency;</li> <li>• understand difference between primary and secondary pollutants with examples;</li> <li>• appreciate that air pollution may be human induced and intensified by human activity and how.</li> </ul>	<p>Byrne, A. <i>Pollution and its Management</i>, pp.3-18</p> <p>Gillet, J.&amp; Gillet, M. <i>Pollution</i>, p. 5, 30, 33-37; pp. 74-76; pp. 76-8</p> <p>Ramsden, E. N. <i>Chemistry of the Environment</i>, pp.4-5 – definitions pp.27-8, particles contributing to air pollution</p> <p>Guinness, P. &amp; Nagle, G. <i>Advanced Geography: Concepts and Cases</i>, pp.450-451 – an overview of pollution pp,455-457 – air pollution in Beijing</p> <p>Witherick, M. <i>Environment and People</i>, pp.86-7 – general pollution information</p> <p>Elcome, D. <i>The Fragile Environment</i>, p.4-6</p>	<p>Employ small group discussion to arrive at an agreed list of problems in the definition of pollution and an agreed class definition</p> <p>Compare class definition with those offered in texts</p> <p>Define and discuss relevant terminology associated with pollution</p> <p>Distinguish between primary and secondary gaseous pollutants</p> <p>Discuss why understanding of air pollution may be partial/incomplete, and implications</p> <p>Define air pollution and identify the scales at which it might occur: local; regional; global. Provide examples</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) use primary data collection techniques to measure air pollution or to investigate local attitudes to / experience of air pollution</p> <p>(iv) understand and evaluate strategies to manage environmental and health impacts of air pollution</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• appreciate that clean air is beneficial to the human and physical environments and know why;</li> <li>• measure air pollution in the local environment.</li> <li>• for each of the given pollutants, identify environmental and health impacts of the air pollution (direct, indirect, long and short term);</li> <li>• discuss strategies to manage these impacts;</li> <li>• evaluate strategies employed to manage the impacts.</li> </ul>	<p>Elcome, D. <i>Natural Resources</i>, ch.9</p> <p>Nagle, G. <i>Hazards</i>, pp.54-55; pp.96-97 (general) pp.98-102</p> <p>www.scorecard.org - select 'air quality rankings'</p> <p>Ramsden, E. N. <i>Chemistry of the Environment</i>, p. 28 (the Carbon Cycle); p. 32 (SO<sub>2</sub>); pp. 34-6 (Acid Rain); pp. 51-55 (ozone depletion and CFCs)</p> <p>Witherick, M. <i>Environment and People</i>, pp.100-1 Acid Rain and 102-3 isopleths and choropleths relating to SO<sub>2</sub>.</p> <p>Roulston, S. &amp; Reid, M. <i>Skills, Techniques and Decision Making</i>, pp. 58-59, Choropleth mapping</p>	<p><b>CO<sub>2</sub></b>: Examine carbon cycle and role of industrial revolution etc. in release of CO<sub>2</sub> from storage.</p> <p><b>SO<sub>2</sub></b>: Identify ways in which SO<sub>2</sub> is released into atmosphere</p> <p><b>CFCs</b>: Identify sources of CFCs</p> <p><b>Methane</b>: Source and note increasing importance as a greenhouse gas</p> <p>Recap difference between primary and secondary pollutants</p> <p>Conduct a field experiment to measure air pollution e.g. along a busy road and within a housing area</p> <p>Conduct a questionnaire survey to investigate attitudes of home owners or business owners towards the issue of air pollution</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(v) evaluate evidence and express opinions concerning the climate change/global warming debate: should development be curtailed to counteract climate change/global warming?</p> <p><b>Spatial context requirement:</b></p> <p>For (iv) one small scale case study of air pollution and its management eg photochemical smog in Los Angeles</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• research the issue of climate change/global warming;</li> <li>• have an opinion as to the cause and impacts of global warming;</li> <li>• use evidence to back up opinions;</li> <li>• decide whether development should be curtailed to counteract the problem.</li> </ul>	<p>Winfield, A. <i>Environmental Chemistry</i>, pp.6-10</p> <p><a href="http://www.epa.gov/ozone">www.epa.gov/ozone</a></p> <p>Geofile Online January 2002 no.419 – Los Angeles, A Multiple Hazard Area</p> <p>Elcome, D. <i>The Fragile Environment</i>, Ch.2 includes LA, acid rain, global warming, ozone depletion</p> <p>Warburton, P. <i>Atmospheric Processes and Human Influence</i>, pp.27-28; pp.171-172 (Los Angeles).</p> <p><i>Geographical Review</i>. (September 1999), Los Angeles: Smog City Vol.13 No 1</p>	<p>Collect data and graph it and reach valid conclusions</p> <p>Research online to find strategies to manage the impacts of air pollution</p> <p>Watch TV programmes, (The great global warming debate), videos, or look at websites and newspaper articles regarding global warming. Collect the “evidence” and have a class discussion/debate</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen paper A2 1 Human Geography and Global Issues.</p> <p>Past examination papers: Assessment Unit A2 1 Physical Geography and Human Interactions. When using past papers please check carefully the requirements of the revised specifications.</p> <p>Summer 2004 Module 4; Q6 (a)</p> <p>Summer 2005 Module 4: Q5 (a)</p> <p>Summer 2006 Module 4: Q5 (a)</p> <p>Summer 2006 Module 4: Q6 (b)</p> <p>Spring 2007 Module 4: Q5 (d); Q6 (a)</p> <p>Summer 2007 Module 4: Q5 (a), (c)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 Nuclear energy</p> <p><b>Learning Outcomes:</b> (i) Demonstrate knowledge and understanding of the uses of nuclear energy, power generation, nuclear weapons and medical;  (ii) Demonstrate knowledge and understanding of radio-active contamination and its impacts: nuclear weapons and their testing; long term health issues; accidents at power stations; nuclear waste and its management;</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• appreciate that nuclear resource development offers potential to close the energy gap.</li> <li>• appreciate that nuclear resource development has potential to cause severe and chronic pollution of the environment;</li> <li>• recall specific facts with respect to the ways in which radio-active contamination of the environment may occur;</li> <li>• know that radio-active material is handled differently by different authorities;</li> <li>• recall specific facts with respect to the consequences which radio-active contamination may have for both human and physical environments.</li> </ul>	<p>Gillet, J. &amp; Gillet, M. <i>Pollution</i>, pp. 80-84</p> <p>Nagle, G. <i>Advanced Geography</i>, p.368-9</p> <p>Byrne, A. <i>Pollution and its Management</i>, pp.30-31 (general)</p> <p>Petit, C. (2006) It's Scary. It's Expensive. It Could Save the Earth. Nuclear Power Risking a Comeback, National Geographic, Volume 209, No 4</p> <p><a href="http://www.bntva.com/health/MCS/three.htm">www.bntva.com/health/MCS/three.htm</a> British Nuclear Test Veterans Association</p> <p>Ramsden, E.N. <i>Chemistry of the Environment</i>, pp.145-8 – disposal of radio-active waste</p> <p>Nagle, G. <i>Hazards</i>, pp.104-107</p> <p><a href="http://www.chernobyl.org">www.chernobyl.org</a></p>	<p>Identify why energy demand is growing. Note that energy consumption of LEDCs may increase as development proceeds</p> <p>Define the energy gap</p> <p>Discuss why nuclear energy has the potential to address the energy gap</p> <p>Note advantages and disadvantages of nuclear resource development</p> <p>Examine activities responsible for radio-active contamination of the environment such as energy production, nuclear weapons testing, nuclear accidents</p> <p>Identify the types of nuclear waste; note disposal methods and evaluate effectiveness; mention political measures</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) Use primary data collection techniques to investigate local attitudes/issues relating to nuclear energy.</p> <p>(iv) Evaluate evidence and express opinions concerning the nuclear debate; do its actual and potential problems mean nuclear energy should not be used?</p> <p><b>Spatial context requirement:</b> For (i) to (iv): evidence relating to nuclear energy issues in the British Isles. Reference to places other than the British Isles for illustration purposes.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• collect primary data (questionnaire) to investigate attitudes towards nuclear energy;</li> <li>• process the data and reach conclusions.</li> <li>• look at a wide variety of information concerning nuclear energy and evaluate and discuss the pros and cons;</li> <li>• apply/interpret a range of techniques used to depict relevant data/information.</li> </ul>	<p>The Times, 18 Sept 2004, Why we Should all be going to Chernobyl <a href="http://www.timesonline.co.uk/travel">www.timesonline.co.uk/travel</a> <a href="http://www.news.bbc.co.uk/1/hi/programmes/from_our_own_correspondent_-_The_legacy_of_Chernobyl">www.news.bbc.co.uk/1/hi/programmes/from_our_own_correspondent - The legacy of Chernobyl</a></p> <p>Witherick, M. <i>Environment and People</i>, p.363</p> <p>Byrne, A. <i>Pollution and its Management</i>, pp.31-34 (focusing on Chernobyl)</p> <p>Stone, R. (2006) It's Scary. The Long Shadow of Chernobyl, National Geographic, Volume 209, No 4</p>	<p>Examine the consequences of radioactive contamination</p> <p>Note that radio-active material may contaminate: air; water; ecology; human environment</p> <p>Choropleth mapping of radiation intensity</p> <p>Conduct a questionnaire investigation, collate results, reach conclusions and use as a tool for class debate</p> <p>Research issues and documentation on the internet for Case study</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen paper A2 1 Human Geography and Global Issues.</p> <p>Past examination papers: Assessment Unit A2 1 Physical Geography and Human Interactions. When using past papers please check carefully the requirements of the revised specifications.</p> <p>Summer 2004 Module 4: Q6 (b) (c)</p> <p>Summer 2005 Module 4; Q5 (b); Q6 (b)(c)</p> <p>Spring 2006 Module 4: Q6 (a)</p> <p>Spring 2007 Module 4: Q5 (c)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 Agricultural change and its impact</p> <p><b>Learning Outcomes:</b> (i) Demonstrate knowledge and understanding of agricultural change and its impact: technologically advanced inputs and processes; agribusiness, GM crops;</p> <p>(ii) Demonstrate knowledge and understanding of the environmental consequences of change and their management (pollution, reduction of biodiversity and maintaining fertility);</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• know the classification of economic activity into primary, secondary, tertiary sectors;</li> <li>• understand that agriculture is a primary industry undergoing change-technologically advanced inputs and processes, developing as an agribusiness and using GM crops.</li> <li>• appreciate that these changes have varied consequences – some good, some bad;</li> <li>• understand that the changes affect rural society and the environment notably pollution, reduction of biodiversity and maintaining fertility of the soil;</li> <li>• use a case study at regional scale to illustrate these changes and their consequences e.g. Brittany.</li> </ul>	<p>Roulston, S. <i>The Changing Nature of Economic Activity</i>, pp 4-11</p> <p>Guinness, P. &amp; Nagle, G. <i>Advanced Geography</i>, pp 125-127 – Sectors of Economic Activity</p> <p>Nagle, G. <i>Advanced Geography</i>, chapter 16 – useful source for general introduction to farming – good graphs, maps etc for skills, useful material on CAP, GM crops etc. – also provides details of suitable websites</p> <p>Cooke et al, <i>Geography in Focus</i>; Pages 204-207 consequences of change in agriculture Pages 212 – 216 GM crops debate</p> <p>In addition there are on-going debates about this topic in the broadsheet media and on the web.</p> <p><a href="http://www.greenpeace.org/international/news/gm-crops-flunk-the-test">www.greenpeace.org/international/news/gm-crops-flunk-the-test</a></p>	<p>As an introduction review the classification of economic activity into the 3 categories. Class should have definition of each type</p> <p>Create definition of mechanisation, agribusiness and technologically advanced inputs and processes (GM crops as example)</p> <p>Consequences could be examined through case study material</p> <p>Class debate on the pros and cons of using GM crops, CAP, BSE – all issues that could be discussed (note these are suggestions, only GM crops are required on specification)</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) Use primary data collection techniques to investigate local attitudes / issues relating to agricultural change;</p> <p>(iv) Evaluate evidence and express opinions concerning the GM crops debate: do the benefits of GM crops outweigh the potential damage to the environment from their use?</p> <p><b>Spatial context requirement:</b></p> <p>For (i) and (ii) – those aspects of agricultural change and management which affect one regional scale case study eg Brittany. For (iv) general reference to places for illustration purposes only.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• conduct a questionnaire of local farmers to ascertain their views of agricultural change.</li> <li>• research the issue of GM crops, from the point of view of the supporters and critics;</li> <li>• express opinions backed up by evidence.</li> </ul>		<p>Possible IT opportunity – use PowerPoint for presentation. Use of Spearman Rank Correlation to take look at various relationships in agriculture and economics. Send pupils out with a questionnaire to farmers to investigate attitudes towards agricultural change. This could be problematic so an alternative could be to send questionnaires home with pupils who live on a farm?</p> <p>Collate results from questionnaires and reach conclusions which are backed up by the evidence collected. Class debate on GM crops. Perhaps invite someone in from Greenpeace or Department of Agriculture.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen paper A2 1 Human Geography and Global Issues.                      Past examination papers: Assessment Unit A2 2 Processes and Issues in Human Geography. When using past papers please check carefully the requirements of the revised specifications.                      Spring 2004 Module 5: Q8 (a) (b) &amp; (c)                      Spring 2005 Module 5: Q8 (a) (b),                      Summer 2005 Module 5: Q7 (a) (c)                      Spring 2006 Module 5: Q8 (a),                      Summer 2006 Module 5: Q8 (c)                      Summer 2007 Module 5; Q8 (a)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 4 Issues in Tourism</p> <p><b>Learning Outcomes:</b></p> <p>(i) Demonstrate knowledge and understanding of the changing nature and characteristics of tourism (pleasure periphery, product cycle, Butler model);</p> <p>(ii) Appreciate the consequences of change and how it may be managed (pollution, carrying capacity; competition for resources and social sustainability);</p> <p>(iii) Use primary data collection techniques to investigate aspects of tourism and its management.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>know that tourism is an example of a tertiary economic activity undergoing change;</li> <li>understand how and why the scale and range of destinations for tourists are increasing;</li> <li>know the meaning of pleasure periphery, product cycle and Butler’s model.</li> <li>know that changes in tourism have consequences for employment, society and environment;</li> <li>Explain how the consequences of tourism can be managed.</li> <li>Collect primary data via fieldwork or undertake a questionnaire study pertaining to tourism.</li> </ul>	<p>Roulston, S. <i>The Changing Nature of Economic Activity</i>, pp 20-27</p> <p>Guinness, P. and Nagle, G. <i>Advanced Geography</i>, chapter 6 covers all aspects with plenty of examples, graphs etc</p> <p>Prosser, R. <i>Leisure, Recreation and Tourism</i>, chapters 1, 2, 5, 6 and 7. Very useful but teacher guidance essential</p> <p>Nagle, G. <i>Advanced Geography</i>, chapter 20</p> <p>Cook et al, <i>Geography in Focus</i>, pages 289-303. Very good source and includes case study material</p>	<p>Discuss family holidays with your pupils- where have they gone on their holidays. Get them to map the destinations for the whole class and use this as an introduction to pleasure periphery</p> <p>Use graphs and tables of figures to explore the increasing scale and range of destination of tourists</p> <p>Opportunity to revise graphing techniques e.g. line graphs, flow lines, and to learn proportional graphs</p> <p>Define and give notes on the meaning of the following terms in relation to tourism: pleasure periphery, product cycle, carrying capacity, Butler Model</p> <p>Brainstorm session on the possible consequences of tourism – good/bad. Direct students to think of who are the winners/losers in tourism</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iv) Evaluate evidence and express opinions concerning the ecotourism debate: can ecotourism exist?</p> <p><b>Spatial context requirement:</b></p> <p>For (i) and (ii) those aspects of tourism change and management which affect one regional or national scale case study eg Mallorca or Nepal</p> <p>For (iv) general reference to places for illustration purposes only.</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>understand the concept of sustainable tourism and ecotourism.</li> </ul>		<p>Class discussion on the advantage/disadvantage of unplanned tourism.</p> <p>Use pictures (from holiday brochures on web sites of mass tourism e.g. in Spain) to direct pupils to the need for planning/management of tourism.</p> <p>Explain the meaning of sustainability as it applies to tourism.</p> <p>Undertake a questionnaire study in your local tourist area or else send home a questionnaire with a sample of students to ask their neighbours and friends specific questions relating to a particular aspect of tourism.</p> <p>Research ecotourism – some good videos and websites. Class debate. Opinions must be backed up by evidence.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen paper A2 1 Human Geography and Global Issues.                      Past examination papers: Assessment Unit A2 1 Physical Geography and Human Interactions. When using past papers please check carefully the requirements of the revised specifications.                      Spring 2004 Module 5: Q7 (a) (b) &amp; (c),                      Summer 2004 Module 5:Q7 (a)(b)                      Spring 2005 Module 5: Q7,                      Summer 2005 Module 5: Q8 (b)                      Spring 2006 Module 5: Q8 (b) (c),                      Summer 2006 Module 5: Q8 (a), (b)                      Spring 2007 Module 5: Q7 (b),                      Summer 2007 Module 5: Q7 (a), (b).</p>		

## Unit A2 1: Human Geography and Global Issues

### SECTION B: GLOBAL ISSUES

#### Resource List

<b>Titles</b>	<b>Author</b>	<b>Publisher</b>
The Changing Nature of Economic Activity	Roulston, S.	Colourpoint
Advanced Geography, Concepts and Cases	Guinness, P. and Nagle, G.	Hodder Murray
Advanced Geography	Nagle, G.	Oxford University Press
Geography in Focus	Cook, I., Hordern, B., McGahon, H. & Ritson, P.	Causeway Press Ltd
Leisure, Recreation and Tourism	Prosser, R.	Collins Educational
Tourism, Leisure and Recreation	Nagle, G.	Nelson
Pollution and Its Management	Byrne, A.	Colourpoint Books
Pollution	Gillet, J. and Gillet, M.	Hodder & Stoughton
Natural Resources	Elcome, D.	Stanley Thornes
The Fragile Environment	Elcome, D.	Stanley Thornes
Global Challenge: A2 Level Geography for Edexcel B	McNaught and Witherick	Longman
Atmospheric Processes and Human Influence	Warburton, P.	Collins Educational
Weather and Climate	Money, D. C.	Nelson

Geographical Enquiries	Nagle and Spencer	Stanley Thornes
Chemistry of the Environment	Ramsden, E. N.	Stanley Thornes
Geography, An Integrated Approach 2 <sup>nd</sup> Ed	Waugh, D.	Nelson
Environmental Chemistry	Winfield, A.	Cambridge
Environment and People	Witherick, M.	Stanley Thornes
Geofile		Stanley Thornes
Waste Management Strategy: Northern Ireland		



## **A2 2:Physical Geography And Decision Making**

**Specification:** GCE Geography

**Unit A2 1:** Physical Geography and Decision Making

**Option A:** Fluvial and Coastal Environments.

**Elements**

1. Human demands on fluvial and coastal environments
2. River and basin management strategies
3. Coastal Processes, features and management.

**Prior learning**

- AS1 – Physical Geography Module;
- Element 1 (a) – Processes and features in fluvial environments.

**Opportunities for key skills**

Throughout the teaching of this unit opportunities exist for the assessment of the following Key Skills:

- ICT;
- Communication; and
- Working with others.

**Resources**

The list of text and other resources in the scheme are designed so that teachers may select in relation to their own resources.

**Time duration**

5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 1. Human demands on fluvial and coastal environments.</p> <p><b>Learning Outcomes:</b></p> <ul style="list-style-type: none"> <li>Understand increasing demands on coasts, rivers and their valleys.</li> </ul> <p><b>Spatial context requirement:</b> General reference to places for illustration purposes only</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>know the uses and demands placed upon river and valley zones: <ul style="list-style-type: none"> <li>domestic / residential demands</li> <li>agricultural demands</li> <li>industrial activities</li> <li>leisure activities.</li> <li>energy production</li> </ul> </li> <li>know and understand the impacts of floodplain development on valley zones;</li> <li>know and understand the impacts of human occupancy on the coastal zone. This might include knowledge and understanding of coastal activity in pre-industrial, industrial and post-industrial society.</li> </ul>	<p>Charlton, R. &amp; Orford, J. <i>Managing Fluvial and Coastal Environments</i>, pp.3-7</p> <p>Nagle, G. <i>Advanced Geography</i> – pp.64–65, 69, 121</p> <p>Dr J. Orford – <i>GA Lecture Notes (Autumn 2005) – Living by the Coast: Dream or Nightmare.</i></p>	<p>Using OS maps, identify the uses/demands made upon the coast and river and valley zones</p> <p>Make reference to examples such as :</p> <ul style="list-style-type: none"> <li>River Rhine</li> <li>Dorset Coast</li> <li>Miami Beach</li> </ul> <p>To help illustrate students could also consider local examples of demands placed upon rivers or coastal areas of which they have experience</p> <p>Pupils discuss and take notes on demands placed on coastal areas and river and valley zones as outlined in the learning outcomes</p> <p>Class discussion: the increasing residential and economic demands placed on rivers and their valleys.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>ASSESSMENT AND REVIEW</b></p>			<p>Specimen Paper Geography Assessment Unit A2 2 Physical Geography and Decision Making                      Past examination papers: Assessment Unit A2 1 Physical Processes and Human Interactions. When using past papers please check carefully the requirements of the revised specification                      Spring 2006 Module 4: Q.1 (b)                      Summer 2005 Module 4: Q.1 (a); Q.2 (a)                      Spring 2004 Module 4: Q.1 (a); Q.2 (a)</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2. River and basin management strategies</p> <p><b>Learning Outcomes;</b> Students should demonstrate knowledge and understanding of river and basin management strategies including;</p> <p>(i) the need for and impact of channelisation;</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• be able to identify modern approaches to river management;</li> <li>• be able to identify the need for channelisation;</li> <li>• understand channelisation techniques; <ul style="list-style-type: none"> <li>○ Resectioning</li> <li>○ Realignment</li> <li>○ Flood embankments</li> <li>○ Artificial levées</li> <li>○ Revetments</li> <li>○ River training</li> </ul> </li> <li>• be able to identify the impact of channelisation; <ul style="list-style-type: none"> <li>○ Instability</li> <li>○ Maintenance</li> <li>○ Increased flood hazard</li> <li>○ Ecological impacts</li> <li>○ Aesthetic considerations</li> </ul> </li> </ul>	<p>Charlton, R. &amp; Orford, J. <i>Managing Fluvial and Coastal Environments</i>, pp. 8–12</p> <p>Bishop, V. &amp; Prosser, R. <i>Water Resources: Process and Management</i> – chapter 5 p.84</p> <p>General reference to following places possible Ballysally Blagh, Charlton, R. &amp; Orford, J. <i>Managing Fluvial and Coastal environments</i> – p. 12–14</p> <p>River Main Environmental Impact Assessment: Arterial Drainage on the River Main Co. Antrim</p> <p>River Ouse, Cambridgeshire</p> <p>Video on Blackwater drainage scheme.</p>	<p>Class discussion of the modern approaches to basin management and identification of examples at both the local and national scale</p> <p>Using pictorial resources consider channelisation schemes:</p> <ul style="list-style-type: none"> <li>• Discuss the need for channelisation and reasons why channelisation has taken place, looking at specific examples</li> <li>• Discuss the impact of these channelisation methods</li> </ul> <p>Students make detailed notes on their chosen case study giving attention to the need for channelisation, its impacts and habitat protection</p> <p>Students watch video footage to gain a visual understanding of engineering strategies adopted and the impacts of them</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(ii) the challenge of creating environmentally sensitive engineering solutions; and</p> <p><b>Spatial context requirement:</b></p> <p>For (i) and (ii) – general reference to places for illustration only</p>	<ul style="list-style-type: none"> <li>• be able to evaluate the engineering solutions used in river management schemes;</li> <li>• discuss environmentally sensitive approaches to channel engineering;               <ul style="list-style-type: none"> <li>○ Partial dredging</li> <li>○ Distant flood embankments</li> <li>○ Multi-stage channel</li> <li>○ Soft engineering i.e. reeds, woven fences</li> <li>○ River restoration</li> </ul> </li> <li>• appreciate the impact which river engineering has on habitats within and along river channels;</li> <li>• consider whether the need for habitat protection outweighs the need for river engineering.</li> </ul>	<p>Waugh, D. <i>An Integrated Approach</i> (3<sup>rd</sup> edition) pp. 93 -97</p>	<p>Students watch video footage to gain awareness of environmental engineering and river restoration</p> <p>Class debate: the benefits of river management far outweigh the potential environmental impacts</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) the aims, strategies and impact of basin management processes including beneficial outcomes, conflicts of interest and interdependence between places</p> <p><b>Spatial context requirement</b></p> <p>For (iii) one regional scale case study e.g. Colorado river basin</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• be able to understand the aims of basin management are to integrate conflicting demands on rivers, provide flood protection and maintain water quality;</li> <li>• consider the new strategies in relation to sustainable basin management, considering the following methods: <ul style="list-style-type: none"> <li>○ Land use management</li> <li>○ Environmentally sensitive approaches</li> <li>○ Small scale projects</li> <li>○ Floodplain zoning</li> <li>○ Water conservation</li> <li>○ Water efficient irrigation</li> </ul> </li> </ul>	<p><i>Useful website:</i>  <a href="http://www.crwcd.org">www.crwcd.org</a>            (Colorado River Water Conservation District)</p> <p>Charlton, R. &amp; Orford, J. <i>Managing Fluvial and Coastal Environments</i> – p. 15–20</p> <p>Cook et al <i>Geography in Focus</i>, pp. 411–413</p> <p>Bishop, V. &amp; Prosser, R. <i>Water Resources: Process and Management</i> pp. 104–106</p>	<p>Describe the aims of basin management and identify the need for basin management schemes</p> <p>Students watch video to gain knowledge of environmental engineering strategies and impacts</p> <p>Draw diagrams to illustrate the impacts of basin management</p> <p>Study detail of chosen regional case study, e.g. Colorado River basin or Nile basin</p> <p>Colorado Basin:</p> <ul style="list-style-type: none"> <li>• Draw location map.</li> </ul>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
	<ul style="list-style-type: none"> <li>• identify the conflicts of interests between the different groups and conflicts over international drainage basins;</li> <li>• identify the conflicts of interests between places;</li> <li>• address the need for the interdependence between places.</li> </ul>		<p>For the selected case study, put the class into groups and ask each group to research one of the six areas of the case study identified in the specification outline:</p> <ul style="list-style-type: none"> <li>– Aims</li> <li>– Strategies</li> <li>– impacts</li> <li>– Beneficial outcomes</li> <li>– Conflicts of interest</li> <li>– Interdependence</li> </ul> <p>Each group present their findings in the form of a PowerPoint presentation</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit A2 2 Physical Geography and Decision Making                      Past examination papers: Assessment Unit A2 1 Physical Processes and Human Interactions. When using past papers please check carefully the requirements of the revised specification                      Spring 2006 Module 4: Q.1 (c) (i) (ii)                      Spring 2005 Module 4: Q.2 (b) (i) (ii)                      Spring 2005 Module 4: Q.2 (d) (i) (ii)                      Spring 2004 Module 4: Q.1 (c) (i) (ii)                      Summer 2004 Module 4: Q.1 (b) (i) (ii)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3. Coastal processes, features and management</p> <p><b>Learning Outcomes:</b> (i) understand the formation of landforms within dynamic coastal environments ; erosional (stacks, arches and headlands ) and depositional (spits, tombolos and dunes)</p> <p><b>Spatial context requirement:</b> For (i) general reference to places for illustration purposes only.</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• consider the dynamic, nature of coastal environments;</li> <li>• identify the main processes of erosion transportation and deposition;</li> <li>• identify the main sediment cells and budgets found along our coastline;</li> <li>• pupils will identify the main landforms of erosion;</li> <li>• identify the main forms of weathering in coastal areas.</li> </ul>	<p>Charlton, R. &amp; Orford, J. – <i>Managing Fluvial and Coastal Environments</i>, p.21-26</p> <p>Nagle, G. <i>Advanced Geography</i>, Ch 6.</p> <p>Cook et al <i>Geography in Focus</i> pp 458-459; pp. 460 -462; pp. 464 -467; pp. 468-473, pp 473-480</p> <p>Waugh, D. <i>An Integrated Approach (3<sup>rd</sup> edition)</i> pp 109-112; pp 114-117;pp. 140-146; pp149 -152-158</p> <p>Guinness P. &amp; Nagle, G. <i>AS Geography Concepts and Cases, Ch 8</i></p> <p>The Physical Environment – CD Rom</p> <p>Witherick, M. <i>Environment and People</i> p. 50-61</p> <p><a href="http://www.geographyinaction.co.uk/Magilligan">www.geographyinaction.co.uk/Magilligan</a></p>	<p>Pupils take notes and consider the factors, which influence our dynamic coasts</p> <p>Consider map of British Isles and the main sediment cells present along coastlines</p> <p>Draw diagrams of different wave types and make notes on how they influence our coastal environments</p> <p>Draw diagrams and make notes on the processes of wave refraction and longshore drift</p> <p>Draw summary diagrams of the main erosional processes along our coastlines</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(ii) evaluate the arguments for and against coastal protection; and</p>	<ul style="list-style-type: none"> <li>• identify the main processes by which coasts are eroded and determine how rates of erosion vary;</li> <li>• identify the main landforms of deposition;</li> <li>• describe and explain the formation of landforms erosional (stacks, arches and headlands ) and depositional (spits, tombolos and dunes).</li> </ul> <p>Understand the need and purpose of coastal protection:</p> <ul style="list-style-type: none"> <li>• consider arguments for coastal protection;</li> <li>• consider arguments against;</li> <li>• consider how economics determines coastal defences;</li> </ul>	<p>Charlton, R. &amp; Orford, J. <i>Managing Fluvial and Coastal Environments</i> p. 27-29</p> <p>Cook et al, <i>Geography in Focus</i> pp. 485–488</p> <p>Geofile – 338 – Coastal Management – Some Issues – Lynda Evans</p> <p>Waugh, D. <i>An Integrated Approach (3<sup>rd</sup> edition)</i> p. 170, 174 -175</p>	<p>Video footage of different erosional features is very useful in this section</p> <p>Draw diagrams of the main erosional landforms found along our coastlines and make notes</p> <p>Draw diagrams on the main depositional landforms found along our coastlines and make notes</p> <p>Discuss the need and purpose of coastal protection. Case study : One regional example – East Sussex Coastline</p> <p>Consider the hard engineering strategies used and look at their benefits and impact in different areas</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) understand the nature and impact of hard and soft engineering strategies on the human and physical environment</p> <p><b>Spatial context requirement:</b> For (ii) and (iii) – one regional case study, e.g. East Sussex coast or. East Anglia coast</p>	<ul style="list-style-type: none"> <li>• describe the nature of hard engineering strategies;</li> <li>• consider the impacts of hard engineering strategies;</li> <li>• consider soft engineering strategies;</li> <li>• discuss various management strategies and evaluate their viability;</li> <li>• consider which management strategies are going to be environmentally acceptable in the future.</li> </ul>	<p>Video footage is available on the Sussex coast to illustrate</p> <p>Charlton, R. &amp; Orford, J. <i>Managing Fluvial and Coastal Environments</i> pp. 30-31</p> <p>Cook et al, <i>Geography in Focus</i> p.489</p>	<p>Does their presence have a benefit in one area and a negative impact elsewhere?</p> <p>Look at the different methods of soft engineering. Are they more environmentally acceptable? What are their effects in the long and short term?</p> <p>Using Internet research identify hard and soft engineering methods.</p> <p>Discuss what is meant by cost-benefit analysis.</p> <p>Students make notes from Waugh p 170, 174–175.</p> <p>Look at examples of how economics determines coastal defences.</p> <p>What will be the benefits to the area and the impacts further along the coastline?</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>ASSESSMENT AND REVIEW</b></p>			<p>Specimen Paper Geography Assessment Unit A2 2 Physical Geography and Decision Making                      Past examination papers: Assessment Unit A2 1 Physical Processes and Human Interactions. When using past papers please check carefully the requirements of the revised specification                      Spring 2006 Module 4: Q.2 (b) (c) (i) (ii)                      Spring 2006 Module 4: Q.2 (b) (c) (i) (ii)                      Spring 2005 Module 4: Q.1 (b); Q.2 (a) (i) (ii) (iii)                      Spring 2005 Module 4: Q.1 (b); Q.2 (a) (i) (ii) (iii)                      Summer 2005 Module 4: Q.1 (c) (i) (ii); Q.2 (b) (c)                      Summer 2005 Module 4: Q.1 (c) (i) (ii); Q.2 (b) (c)                      Spring 2004 Module 4: Q.2 (b) (i) (ii) (c)                      Spring 2004 Module 4: Q.2 (b) (i) (ii) (c)                      Summer 2004 Module 4: Q.2 (a)                      Summer 2004 Module 4: Q.2 (a)</p>

## Module 4: Physical Processes and Human Interactions

### Unit A: Managing Fluvial and Coastal Environments

#### Resources List

Titles	Author	Publisher
Water Resources, Processes and Management	Bishop, V. & Prosser, R.	Collins Educational
AS Level Geography	Bowen, A. & Pallister, J.	Heinemann
Managing Fluvial and Coastal Environments	Charlton, R. & Orford, J.	Colourpoint
Geography in Focus	Cook, I., Hordern, B. McGahan, H. & Ritson, P.	Causeway Press
AS Geography Concepts and Cases	Guinness P. & Nagle G.	Hodder & Stoughton
Advanced Geography	Nagle, G.	Oxford UP
Environment and People	Witherick, M.	Stanley Thornes
Environmental Impact Assessment Environmental Impact of Channelisation on the River Main, Co Antrim, Northern Ireland.	Wilcock, D., Essery, C.J.	Journal of Environmental Management (1991) pp 32, 127 - 143

Geofile

**Specification:** GCE Geography

**Unit A2 1:** Physical Geography Decision Making

**Section B:** The Nature and Sustainability of Tropical Ecosystems

**Elements**

1. Location and climatic characteristics of major tropical biomes..
2. Ecosystems processes in the tropical forest environment
3. Management and sustainability within tropical ecosystems

### **Prior Learning**

- AS/1 – Physical Geography Module;
- Element 2 (a) – The ecosystem as an open system; and
- Element 3 (a) – Atmospheric processes.

### **Opportunities for Key Skills**

Throughout the teaching of this unit opportunities exist for the assessment of the following Key Skills –

- ICT;
- Communication; and
- Working with others.

### **Resources**

The list of text and other resources in the scheme are designed so that teachers may select in relation to their own resources.

### **Time Duration**

5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b></p> <p>1 Location and climatic characteristics of major tropical biomes.</p> <p><b>Learning Outcomes:</b> Students should be able to apply knowledge of atmospheric processes (including global circulation, Hadley Cell and ITCZ) to explain the location and climatic characteristics of:</p> <ul style="list-style-type: none"> <li>• tropical forests;</li> <li>• tropical grasslands; and</li> <li>• desert zones.</li> </ul> <p><b>Spatial context requirement;</b> Global scale distribution.</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• know and understand the main factors that affect tropical circulation and climate;</li> <li>• be able to apply knowledge of atmospheric processes including global circulation, Hadley cell and ITCZ to explain the location and climatic characteristics of tropical forests, tropical grasslands and desert zones;</li> <li>• be able to recall specific climatic characteristics of three tropical biomes e.g. annual rainfall totals, seasonal variation in rainfall, annual ranges in temperature;</li> <li>• be able to read, describe and interpret climate graphs for the three biomes;</li> </ul>	<p>Thom, M. (2001) <i>The Nature and Vulnerability of Tropical Ecosystems</i>, pp3–7.</p> <p>Waugh, D. (1995, 3<sup>rd</sup> ed) <i>Geography: An Integrated Approach</i>, pp.178-179; 121-132 also pp.121-132</p> <p>O’ Hare, G. (1988) <i>Soils, Vegetation, Ecosystems</i>, pp108-109</p> <p>Hill, M. (1999) <i>Advanced Geography Case Studies</i>, pp.28-35</p> <p>Nagle, G. (2000) <i>Advanced Geography</i>, Ch 10: p.210-216.</p> <p>Cook et al (2000) <i>Geography in Focus</i>, pp.552-557</p>	<p>As an introduction there should be a review of some factors that affect climate e.g. latitude, pressure belts, prevailing winds and ocean currents</p> <p>Brief explanation of the migration of the ITCZ and the effect on seasonal rainfall. This should be done in a maximum of 2 lessons</p> <p>Students complete a blank world map with appropriate key to illustrate the location and distribution of the three tropical biomes. Students label the main tropical rainforest, tropical grasslands and semi-arid areas</p> <p>Students compare a world climatic map with a map showing the major world biomes e.g.</p> <p>Students discuss and take note of the relationship between climate and vegetation</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
	<ul style="list-style-type: none"> <li>• understand that the amount and availability of rainfall in tropical areas influences the density and diversity of vegetation;</li> <li>• acknowledge that there is a degree of latitudinal zonation in vegetation cover in tropical areas.</li> </ul>		<p>Video footage can be used to provide a visual impression of the differences in each ecosystem.</p>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit A2 2 Physical Geography and Decision Making                      Past examination papers: Assessment Unit A2 1 Physical Processes and Human Interactions. When using past papers please check carefully the requirements of the revised specification                      Spring 2005 Module 4: Q. 4 (a) (i) (ii)                      Summer 2005 Module 4: Q. 3 (a)                      Spring 2004 Module 4: Q.3 (a) (i) (ii)                      Summer 2004 Module 4: Q. 4 (a)</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 Ecosystem processes in the tropical forest environment</p> <p><b>Learning Outcomes:</b> Understand the processes in the Tropical Rain Forest, including:</p> <ul style="list-style-type: none"> <li>(i) biomass and productivity;</li> <li>(ii) trophic structure;</li> <li>(iii) nutrient cycling; and</li> <li>(iv) zonal soil profile and characteristics an oxisol (ie latosol)</li> </ul> <p><b>Spatial context requirement:</b> For (i)-(iv) – one regional scale case study of a tropical forest ecosystem, e.g. Amazon</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• understand that climate plays a crucial role in soil formation and vegetation development;</li> <li>• appreciate that there is an interdependent relationship between climate, soil and vegetation;</li> <li>• know and understand the reasons for the climatic climax vegetation;</li> <li>• be able to explain the meaning of gross primary productivity and net primary productivity and understand how they operate in the tropical rainforest environment;</li> <li>• be able to compare and explain nutrient cycling models showing stores and transfers;</li> <li>• be able to draw and label soil profiles for an oxisol.</li> </ul>	<p>Thom, M. (2001) The Nature and Vulnerability of Tropical Ecosystems, pp8–19.</p> <p>Waugh, D. (1995 3<sup>rd</sup> ed) <i>Geography – An Integrated Approach</i>, (Ch 12)</p> <ul style="list-style-type: none"> <li>• Trophic structure: see p.296-297.</li> <li>• Nutrient cycling: see Ch 10/11</li> </ul> <p>Geofact Sheet 25 <i>Energy and Nutrient Cycling</i></p> <p>Witherick, M. (1995) <i>Environment and People</i>, p.186-192</p> <p><i>Ecosystems and Human Activity</i> – RSPB</p> <p>Cook at al <i>Geography in Focus</i>, Ch. 14 Nutrient cycling see p.614-623</p> <p>Prosser, R. (1992) <i>Natural System and Human Response</i>,p.220-224</p> <p>O’Hare, G. (1988) Soils, Vegetation, Ecosystems, for trophic structure see p.98-99.</p>	<p>Review key terms – biomass, nutrient cycling and trophic structure</p> <p>Explain the meaning of gross primary productivity and net primary productivity.</p> <p>Examine the spatial pattern of productivity on a world map.</p> <p>Discuss the role of climate in soil formation with reference to the oxisol</p> <p>Examine the relationship between climate, soil and vegetation in the tropical forest.</p> <p>Students produce annotated drawings of the oxisol.</p>

<b>Specification Content</b>	<b>Learning Outcomes</b>	<b>Resources</b>	<b>Teaching and Learning Activities</b>
<b>ASSESSMENT AND REVIEW</b>	Specimen Paper Geography Assessment Unit A2 2 Physical Geography and Decision Making Past examination papers: Assessment Unit A2 1 Physical Processes and Human Interactions. When using past papers please check carefully the requirements of the revised specification Spring 2006 Module 4: Q. 3 (b) Spring 2005 Module 4: Q.3 (a) Summer 2005 Module 4: Q. 4 (a) (b) (c) Spring 2004 Module 4: Q.4 (a) (i) (ii) (b) Summer 2004 Module 4: Q. 3 (a)		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 Management and sustainability within tropical ecosystems</p> <p><b>Learning Outcomes:</b> (i) Demonstrate knowledge and understanding of the problem of salinisation in an arid or semi arid tropical environment - causes, impact on environment and people, possible solutions;</p> <p><b>Spatial context requirement:</b> One regional scale case study e.g. a region within Pakistan or Sudan</p>	<p>Students should be able to:</p> <ul style="list-style-type: none"> <li>• know and understand the causes of salinisation;</li> <li>• understand the physical and human impact of increased salinity;</li> <li>• outline and evaluate possible solutions to the problem of salinity.</li> </ul>	<p>Thom, M. (2001) <i>The Nature and Vulnerability of Tropical Ecosystems</i>, pp 20–27</p> <p>Nagle, G. (2000) <i>Advanced Geography</i> p.70-71 (general information)</p> <p>Guinness, P. &amp; Nagle, G. (1999) <i>Advanced Geography, Concepts and Cases</i> p.96 (short section on irrigation problems in Pakistan)</p> <p>Bishop, V. &amp; Prosser, R. <i>Water Resources Processes and Management</i>, p.69-73 (problems and benefits associated with Aswan Dam in Nile Basin)</p> <p>Waugh, D. (1987) <i>The World –</i>. (useful map and information on benefits &amp; problems associated with the Aswan Dam)</p> <p>Waugh, D. (1995 3<sup>rd</sup> ed) <i>An Integrated Approach</i>, p. 273</p> <p>Raw, and Atkins, (1999) <i>Agriculture &amp; Food</i>, pp.70-71.</p>	<p>For the selected case study region pupils complete a map exercise to show key physical characteristics</p> <p>Using pictorial resources discuss the value and limitations of traditional and modern methods of irrigation. Reference should be made to case study chosen</p> <p>Discuss the process of salinisation and the conditions under which it occurs with reference to a regional scale case study</p> <p>Students complete a choropleth map to show the climatic variations in the case study region</p> <p>Students independently research the impact of increased salinity and possible solutions.</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(ii) Evaluate attempts to achieve sustainable development in the tropical forest ecosystem.</p> <p><b>Spatial context requirement:</b> one small scale case study e.g. SW Cameroon (the Korup project) or within the Peruvian Amazon</p>	<p>Students will be able to:</p> <ul style="list-style-type: none"> <li>• discuss the pros and cons of large scale deforestation in an LEDC;</li> <li>• examine the attitudes and values that surround the management and/or destruction of tropical forests;</li> <li>• understand the differences between large and small scale short term deforestation.</li> <li>• appreciate the role of human activity in modifying tropical forests;</li> <li>• understand and appreciate the notion of sustainable development;</li> <li>• appreciate the diversity and fragility of the rainforest ecosystem;</li> </ul>	<p>Hill, M. (1999) <i>Advanced Geography Case Studies</i>, p.19-27 Irrigation in the Middle East.</p> <p>Cook et al (2000) <i>Geography in Focus</i>, p.582-583</p> <p>Digby, B. (1995) <i>The Physical Environment</i>, p.20</p> <p>Channel 4 series on Amazonia, 5 programmes containing:</p> <ul style="list-style-type: none"> <li>• how the forest works;</li> <li>• city in the forest (Manaus);</li> <li>• large scale development;</li> <li>• small scale development; and</li> <li>• final discussion.</li> </ul> <p>Collins student Atlas</p> <p>Current deforestation <a href="http://www.brazil.org.uk">www.brazil.org.uk</a></p>	<p>Students make an oral presentation on possible solutions to the problem of salinisation</p> <p>General discussion of development in Amazonia. The last two programmes provide a good introduction to the dichotomy between small and large scale destruction. Place names mentioned should be located/annotated on a blank Amazonia map adapted from Atlas</p> <p>Traditional techniques are succinctly covered on p44 of Bishop and Prosser, but the best resource of all is p.174-195 of Digby. Notes and diagrams adapted from p182 give excellent background to slash and burn and ties in well with the introductory lessons</p> <p>An alternative case study is in Prosser, 218-219</p> <p>Decision Making Exercises in this context</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
	<ul style="list-style-type: none"> <li>• understand that people have different attitudes and values in relation to the conservation of the rainforests;</li> <li>• appreciate how attitudes to development of the rainforest have changed over time.</li> </ul>	<p>Bishop, V and Prosser, R. <i>The Environment</i> (a GCSE text, but provides some good stimulus should/can be embellished)</p> <p>Geography Review ‘The Rainforest Paradox’, Sept 1998</p> <p>Digby, B.(1995) <i>The Physical Environment</i>, especially for slash and burn, the Korup Project, p.183-187</p> <p>Exercise 3 and 4 from page 30 of ‘Ecosystems and Human Activity’, RSPB</p> <p>Geofile No. 154 Geofile No. 323</p> <p>Kidd, A.(1999) <i>Managing Ecosystems</i>. p.40-43</p> <p>Hill, M. (1999) <i>Advanced Geography Case Studies</i>. Ghanaian forest conservation, p.50-53</p> <p>Video: Banking on Disaster</p>	<p>Describe large scale deforestation in Amazonia</p> <p>Draw diagrams of impacts</p> <p>Study detail of <b>one</b> small scale study such as:</p> <p>a) Gola Forest, Sierra Leone pp32-36, RSPB</p> <p>b) Amazonia deforestation p.37-38 Kidd. This can be reinforced using the web site and student Atlas.</p> <p>For selected study:</p> <ul style="list-style-type: none"> <li>• draw a location map;</li> <li>• list reasons for clearance, nature and scale;</li> <li>• describe impacts at various scales</li> </ul> <p>Examine the variety of attitudes regarding tropical forest management. Copy chart from p.29, RSPB</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
			<p>Discussion and note taking from brain storming to highlight “changing attitudes” with regard to the use of tropical forest resources</p> <p>Discussion is essential as the only way to explore these values and attitudes. The last programme in the Amazonian series is a good stimulus to discussion. After discussion, an extended answer should consolidate all the points raised – brainstorm needed, students notes taken</p> <p>Actual small scale case studies to elucidate the notion are as follows:</p> <ul style="list-style-type: none"> <li>• the Korup project (SW Cameroon);</li> <li>• Coca Agroforestry Project (Ecuador).</li> </ul>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<b>ASSESSMENT AND REVIEW</b>	<p>Specimen Paper Geography Assessment Unit A2 2 Physical Geography and Decision Making            Past examination papers: Assessment Unit A2 1 Physical Processes and Human Interactions. When using past papers please check carefully the requirements of the revised specification</p> <p><b>Salinisation:</b>            Spring 2006 Module 4: Q.4 (c) (i) (ii)            Spring 2005 Module 4: Q.4(c)            Summer 2005 Module 4: Q.4 (d)            Spring 2004 Module 4: Q.3 (c) (i) (ii)</p> <p><b>Deforestation:</b>            Spring 2006 Module 4: Q.3 (c)            Spring 2005 Module 4: Q. 3 (c) (i)            Summer 2005 Module 4: Q. 3 (c) (ii)            Summer 2004 Module 4: Q. 4 (b) (c) (ii)            Summer 2004 Module 4: Q. 4 (c) (i)</p>		

## MODULE 4

### Unit B: The Nature and Vulnerability of Tropical Ecosystems

#### Resource List

<b>Titles</b>	<b>Author</b>	<b>Publisher</b>
The Nature and Vulnerability of Tropical Ecosystems	Thom, M.	Colourpoint (2001)
Water Resources, Processes and Management	Bishop, V. & Prosser, R.	Collins Educational (1995)
AS Level Geography	Bowen, A. & Pallister, J.	Heinemann
Geography in Focus	Cook, I., Hordern, B. McGahan, H. and Ritson, P.	Causeway Press Ltd. (2000)
The Physical Environment	Digby, B.	Heinemann (1995)
AS Geography Concepts and Cases	Guinness, P.& Nagle, G.	Hodder & Stoughton (2000)
Advanced Geography Case Studies	Hill, M.	Hodder & Stoughton (1999)
Managing Ecosystems	Kidd, A.	Hodder & Stoughton (1999)
Advanced Geography	Nagle, G.	Oxford University Press (2000)
Advanced Geography; Concepts and Cases	Nagle, G. & Guinness, P.	Oxford University Press (1999)
Soils, Vegetation Ecosystems	O'Hare, G.	Oliver and Boyd (1988)
Natural Systems and Human Responses	Prosser, R.	Nelson (1992)
Agriculture and Food	Raw , & Atkins,	Collins Educational (1999)
Ecosystems and Human Activity	RSPB	Collins Educational (1994)
The World (Out of print)	Waugh, D.	Nelson (1987)
Environment and People	Witherick, M.	Stanley Thornes (1995)
Geofile		Stanley Thornes

**Titles**

**Author**

**Publisher**

Geo Fact Sheets

Geopress

**Specification:** GCE Geography

**Unit A2 1:** Physical Geographu and Decision Making

**Section C:** The Dynamic Earth.

**Elements**

1. Plate tectonics and resulting landforms
2. Volcanic activity and its management
3. Earthquake activity and its management

### **Prior Learning**

GCSE Geography

### **Opportunities for Skills Development**

Throughout the time period given, opportunities should be taken to discuss relevant geographical skills as presented in the specification. This may include, for example, graphical presentation techniques, or satellite imagery, as appropriate.

### **Opportunities for Key Skills**

Throughout the teaching of this unit opportunities exist for the assessment of the following Key Skills:

- ICT;
- Communication; and
- Working with Others.

### **Resources**

The list of text and other resources in the scheme are designed so that teachers may select in relation to their own resources.

### **Time Duration**

5 weeks

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 1. Plate tectonics and resulting landforms</p> <p><b>Learning Outcomes:</b> Demonstrate knowledge and understanding of plate tectonics including:</p> <p>(i) the theory of Plate Tectonics; types of plate margins and evidence of plate movement including magnetic stripping, jigsaw fit and geological evidence; subduction and seafloor spreading;</p> <p>(ii) the causes and distribution of earthquake and volcanic hazards in relation to plate boundaries and hot spots;</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>know and understand the modern theory of Plate Tectonics including the nature of convection currents in the upper mantle;</li> <li>be able to understand and illustrate the dynamic processes of plate construction (seafloor spreading) and destruction (subduction);</li> <li>identify, describe and explain, with examples, the various plate margins – Constructive, Destructive/Collision and Conservative (Transverse);</li> <li>recognise and explain the distribution of earthquake and volcanic activity along plate margins and at hot spots.</li> </ul>	<p>Byrne, A. and Thom, M. <i>Natural Hazards and Human Activity</i>, pp 3-8</p> <p>Waugh, D. <i>Geography: An Integrated Approach 3<sup>rd</sup> Edition</i>. pp 8-21.</p> <p>Cook et al <i>Geography in Focus</i>. pp 304-317, 322-327, 332-333.</p> <p>Ross, S. <i>Natural Hazards</i>. pp 10-14 29-35</p> <p>Skinner M <i>Hazards</i> pp15-31</p> <p>Video - Earth Story - Creation of the earth Continent Building Ring of Fire Plate Tectonics – Puzzle of the Continents (Boulton-Hawker Fims LGD) Volcano – Danger Zone (Channel 4)</p> <p>GeoFile – 170 Plate Tectonics 204 Plate Boundaries 349 Iceland Volcano</p>	<p>Introduction – a review of earth structure and the development of Continental drift and Plate tectonics theory</p> <p>Draw or complete diagrams of the nature of the lithosphere including oceanic and continental plates and the role of convection currents</p> <p>Examine examples of each of the plate margins involving seafloor spreading and subduction processes. The patterns of crustal hazards along these boundaries should be described and explained</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p>(iii) the resulting landforms</p> <ul style="list-style-type: none"> <li>○ fold mountains,</li> <li>○ ocean ridges,</li> <li>○ deep sea trenches</li> <li>○ island arcs</li> </ul> <p><b>Spatial context requirement:</b> For (i) – (iii) general reference to places for illustration purposes only</p>	<ul style="list-style-type: none"> <li>● identify, describe and explain, the formation of fold mountains, ocean ridges, deep sea trenches and island arcs.</li> </ul>	<p>GeoActive 336 Earthquake/Tsunami 2004 340 Bam Earthquake 2003</p> <p><a href="http://www.csmres.jmu.edu/geollab/Fichter/PlateTect/synopsis.html">www.csmres.jmu.edu/geollab/Fichter/PlateTect/synopsis.html</a></p> <p><a href="http://www.pubs.usgs.gov/publications/text/dynamic.html">www.pubs.usgs.gov/publications/text/dynamic.html</a></p> <p>GeoFile: 170 Plate Tectonics 204 Plate Boundaries 349 Iceland Volcano GeoActive 336 Earthquake/Tsunami 340 Bam Earthquake</p>	
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen Paper Geography Assessment Unit A2 2 Physical Geography and Decision Making Past examination papers: Assessment Unit A2 1 Physical Processes and Human Interactions. When using past papers please check carefully the requirements of the revised specification Spring 2006 Module 4: Q.7 Spring 2005 Module 4: Q.7 Summer 2005 Module 4: Q.7 Spring 2004 Module 4: Q.7 Summer 2004 Module 4: Q.7</p>		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 2 Volcanic activity and its management</p> <p><b>Learning Outcomes:</b> (i) understand and evaluate the hazards &amp; benefits associated with volcanic activity social economic and environmental</p> <p><b>Spatial context requirement:</b> For (i) general reference to places for illustration purposes only.</p> <p>(ii) demonstrate knowledge concerning efforts to predict volcanic activity and the limitations of those predictions</p> <p>For (ii) – one small-scale case study, e.g. Pinatubo (1991), Merapi (1987 onwards)</p>	<p>Students will:</p> <ul style="list-style-type: none"> <li>be able to discuss, with reference to examples, both the beneficial and detrimental outcomes of volcanic activity in social, economic and environmental terms;</li> <li>recognise the methods of prediction used for volcanic activity;</li> <li>be able to discuss the limitations of the prediction methods used;</li> <li>identify and evaluate, with detailed reference to a small scale case study, the</li> </ul>	<p>Byrne, A. and Thom, M. <i>Natural Hazards and Human Activity</i>, pp 9-13</p> <p>Waugh, D. <i>Geography: An Integrated Approach</i>, pp 35-36</p> <p>Cook et al <i>Geography in Focus</i>, pp 317-321, 330-331, 336-343.</p> <p>Ross, S. <i>Natural Hazards</i>, pp15-28 (Kobe), 37-45</p> <p>Video- Mt. St. Helens (Savage Earth)</p> <p>Cracks in the Crust (Horizon)</p> <p>'In the path of a killer volcano'- (Mt Pinatubo) (Equinox)</p> <p>GeoFile – 327 Recent research &amp; case studies 401 Montserrat 1995-98</p>	<p>Video footage of a range of types of volcanic activity including hazards and benefits</p> <p>Using exemplar material, describe the potential benefits of such activity to people, their economy and the environment</p> <p>Using exemplar material describe the detrimental outcomes of volcanic activity to people, their economy and the environment (local and global)</p> <p>Describe and discuss the methods of prediction in relation to volcanic activity</p> <p>Identify the limitations of prediction and the problems of failure with reference examples such as Mt St Helens (1980), Nevado del Ruiz (1985) or Mt Unzen (1991) for volcanoes</p>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
	application of a variety of prediction methods to a specific volcanic event.	<a href="http://www.vulcan.wr.usgs.gov/Volcanoes/Philippines/Pinatubo/description_pinatubo.html">www.vulcan.wr.usgs.gov/Volcanoes/Philippines/Pinatubo/description_pinatubo.html</a>	Study a detailed case study of prediction for volcanic activity. Mt. Pinatubo (1991) a successful prediction Merapi (1997 onwards).
<b>ASSESSMENT AND REVIEW</b>	Specimen Paper Geography Assessment Unit A2 2 Physical Geography and Decision Making Past examination papers: Assessment Unit A2 1 Physical Processes and Human Interactions. When using past papers please check carefully the requirements of the revised specification Spring 2006 Module 4: Q.7 Spring 2005 Module 4: Q.7 Summer 2005 Module 4: Q.7 Spring 2004 Module 4: Q.7 Summer 2004 Module 4: Q.7		

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Element:</b> 3 Earthquake activity and its management</p> <p><b>Learning Outcomes:</b></p> <p>(i) understand the effects of earthquake activity (ground deformation, seismic shaking, landslides, liquefaction, fire, floods and tsunami);</p> <p>(ii) demonstrate knowledge concerning efforts to predict earthquake activity and the limitations of those predictions</p> <p>(iii) recognise that the impact and management of the effects of earthquake activity reflect knowledge, perception and level of development</p>	<ul style="list-style-type: none"> <li>• be able to discuss, with reference to examples, the effects of earthquake activity;</li> <li>• recognise the methods of prediction used for earthquake activity;</li> <li>• be able to discuss the limitations of the prediction methods used;</li> <li>• identify and evaluate the effectiveness of management on the impacts of earthquake activity;</li> </ul>	<p>Byrne, A. and Thom, M. <i>Natural Hazards and Human Activity</i></p> <p>Waugh, D. <i>Geography: An Integrated Approach</i>,</p> <p>Cook et al <i>Geography in Focus</i>,</p> <p>Ross, S. <i>Natural Hazards</i>, pp15-28 (Kobe), 37-45</p> <p>Geo Active 336 Earthquake/Tsunami 2004 340 Bam Earthquake 2003</p>	<p>Describe and discuss the methods of prediction in relation to earthquake activity</p> <p>Identify the limitations of prediction and the problems of failure with reference to examples and Los Angeles (1994), Kobe (1995), Gujarat (2001) or Pakistan/Kasmir (2005) earthquakes</p> <p>Study a detailed case study of two small scale earthquakes e.g. Kobe in Japan (MEDC) and Northern Pakistan (LEDC)</p> <p>For both an LEDC and an MEDC earthquake:</p> <ul style="list-style-type: none"> <li>• Identify effects;</li> <li>• discuss management of these effects, before, during and after the event;</li> </ul>

Specification Content	Learning Outcomes	Resources	Teaching and Learning Activities
<p><b>Spatial context requirement:</b> For (iii) two small-scale case studies: one from a MEDC, e.g. Kobe in Japan and one from a LEDC, e.g. northern Pakistan</p>	<ul style="list-style-type: none"> <li>• be able to describe how earthquake management is influenced by a variety of factors;                             <ul style="list-style-type: none"> <li>○ knowledge</li> <li>○ perception</li> <li>○ level of development</li> <li>○ identify and evaluate</li> </ul> </li> <li>• evaluate the factors which influence earthquake management.</li> <li>• be able to contrast two small-scale case studies one LEDC &amp; one MEDC in terms of impact and management.</li> </ul>		<ul style="list-style-type: none"> <li>• identify the influence of knowledge perception; and stage of development</li> <li>• on the management of effects</li> <li>• draw contrasts between the two studies.</li> </ul>
<p><b>ASSESSMENT AND REVIEW</b></p>	<p>Specimen paper Geography Assessment Unit A2 2 Physical Geography and Decision Making                      Past examination papers: Assessment Unit A2 1 Physical Processes and Human Interactions. When using past papers please check carefully the requirements of the revised specification.                      Spring 2004 Module 4 Q 7                      Summer 2004 Module 4 Q 7                      Spring 2005 Module 4 Q 7                      Summer 2005 Module 4 Q 7                      Spring 2006 Module 4 Q 7.</p>		

## Unit A2 2: PHYSICAL PROCESSES AND HUMAN INTERACTIONS

### Option C: The Dynamic Earth

#### Resource List

<b>Titles</b>	<b>Author</b>	<b>Publisher</b>
Natural Hazards and Human Activity	Byrne, A. & Thom M.	Colourpoint
Geography, An Integrated Approach (3 <sup>rd</sup> ed)	Waugh, D.	Nelson
Atmospheric Processes and Human Influence (2 <sup>nd</sup> ed)	Warburton, P.	Collins Educational
Atmospheric Processes and Human Influence	Warburton, P.	Collins Educational
Weather and Climate	Money, D. C.	Nelson
Advanced Geography	Nagle, G.	Oxford University Press
Environment and People	Witherick, M.	Stanley Thornes
Geography in Focus	Cook, I., Hordern, B., McGahan H & Ritson, P.	Causeway Press
Natural Hazards	Ross, S.	Stanley Thornes
Hazards	Skinner, M.	Hodder Murray
Climate and Society	Nagle, G.	Hodder Murray
Natural Hazards: Causes, Consequences and Management (2 <sup>nd</sup> ed)	Frampton, S., Chaffey, J., McNaught, A. & Hardwick, J.	Hodder & Stoughton
Hazards and Responses	Bishop, V.	Collins Educational
Geofile		Stanley Thornes
GeoActive		Stanley Thornes