# IGCSE Geography
## Unit 1: Population Dynamics

**Recommended Prior Knowledge**
An understanding of population distribution, population change and the interrelationship of population and resources.  A good general knowledge, particularly of places in the world.

**Context**
It is recommended that this is the first of the units to be studied.  Due to the fact the population distribution is dependent upon the full range of physical, economic and human factors, the knowledge and understanding gained in this unit will be a useful foundation for all other units.  The skills gained will also have applications throughout.

**Outline**
The scheme of work presents opportunities to develop a wide range of graphical and cartographical techniques.  It also offers opportunities for pupils to present, interpret and offer explanations for a wide variety of data.  It aims to develop an appreciation of global citizenship, as pupils are encouraged to compare the experiences of a selection of countries at different stages of development.  Suggested exercises from the core texts are differentiated.

| Learning Outcomes | | Suggested Teaching Activities | Resources |
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| 1.1a | Describe the growth of the world's population. | Pupils define key terms "population"," population growth rate" and "population explosion".  Pupils use *bar and divided bar* graphs to describe the world population growth in different continents since 1900, along with predictions for 2050. | **The New Wider World** Pages 10 and 11<br><br>Exercise 5 Page 21.<br><br>**Longman Geography for GCSE** Page 108 and 109.<br><br>Question 1 (a) Paper 1/2 May 1998<br><br>http://www.census.gov/ipc/www/world.html<br><br>http://www.un.org/popin/data.html<br><br>http://www.populationaction.org/issues/index.htm |
| 1.1b | Identify and suggest reasons for contrasting patterns of population growth in different parts of the world as influenced by birth and death rates and migration, | Pupils define birth rate, death rate and natural increase. Describe global patterns in rates of natural increase using *choropleth map*.  Pupils draw and annotate Demographic Transition Model and include relevant examples.  Pupils explain the social, | **The New Wider World** Pages 6 and 7.<br><br>Exercise 2 Page 19.  Exercise 7 Page 21.<br><br>**Longman Geography for GCSE** Page 108 and 109 |

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| | especially the impact of HIV/AIDS. | economic and political factors, especially HIV/AIDS, which affect the variations in birth and death rates between countries at different stages of the Demographic Transition Model using core text or Internet reference.  Pupils define migration and actual increase and understand how immigration and emigration can affect global population growth rates. | **Oxford International Student Atlas**<br><br>Pages 18 to 21 and Page 94 to 100<br><br>Question 1(a) Paper 1/2 May 1999<br><br>http://geography.about.com/science/geography/library/weekly/aa090798.htm<br><br>http://www.overpopulation.com/faq/health/infectious_diseases/aids/<br><br>http://cyberschoolbus.un.org/special/health/disease/aidshiv.htm<br><br>http://www.overpopulation.com/faq/health/infectious_diseases/aids/life_expectancy.html<br><br>http://www.pbs.org/newshour/bb/health/july-dec98/aids_10-30.html |
| 1.1a | Describe the problems associated with the growth of the world's population, and show an understanding of the causes and consequences of overpopulation and under population. | Pupils define key terms "over and under population" and understand the link between population and resources in each case. | **The New Wider World** Pages 12 to 15.<br><br>Question 1(b) Paper 1/2 June 2000<br><br>Question 1(b) Paper 1/2 May 1999<br><br>http://overpopulation.org/<br>(Go into: Why Population Matters). |
| 1.1b | Identify and suggest reasons for contrasting patterns of population growth in different parts of the world as influenced by strategies used by decision makers to influence growth rates. | Using examples, discuss the ways in which population growth can be controlled - reduced poverty, improved health, better education, better deal for women, family planning etc - and why this has been easier to achieve in MEDC's.  Discuss the ways in which Governments have responded to the need to either increase or decrease the birth rate.  Suggested case studies: One | **The New Wider World** Pages 12 to 15.<br><br>**Longman Geography for GCSE** Page 118 and 119<br><br>Exercise 7  Page 123<br><br>Question1 Paper 1/2 November 1999. |

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| | | Child Policy in China, Population Control in India and EU policies.<br><br>Whole class debate: One Child Policy in China - reasons why the policy was needed vs. the moral and social impacts that it has had.  Follow up: pupils express their view and justify their opinion. | Question1 (b) Paper 1/2May 1998<br><br>Question 1 (c) Paper 1/2 May 1999<br><br>http://www.needham.mec.edu/high_school/cur/kane97/P6/eep6/eep6.html.<br>Article on one child policy in China - why the policy was needed and impact.<br><br>http://plato.acadiau.ca/courses/soci/Marontate/2533/jenkins/China.html |
| 1.1c | Identify and suggest reasons for different types of population structure as shown by age sex pyramids. | Pupils construct a *population pyramid* using data for their own country.  Define key terms such as "life expectancy" and "infant mortality".  Pupils draw outline of pyramids for each stage of the Demographic Transition Model and annotate to explain the link between the shape of the pyramid and birth rate, death rate, life expectancy and infant mortality, using core text or Internet reference.  Suggested examples: Amazon Rainforest, Kenya, India, UK.  Suggestions: Exercise 3, 4 and 6 from New Wider World (*interpreting population pyramids).* | **The New Wider World** Page 8 and 9.<br><br>Exercise 3, and 6 Pages 20 and 21.<br><br>**Longman Geography for GCSE** Page 112.<br><br>Question1 Paper 1/2 November 1998<br><br>http://geography.about.com/science/geography/cs/populationgeo/index.htm- Census/Population, select Population Geography, then select Animated age-sex pyramids - countries at different levels of development and change over time)<br><br>http://geography.about.com/library/weekly/aa071497.htm<br><br>http://www.census.gov/ipc/www/idbpyr.html Select Population Pyramids - can select any country. |

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| 1.1d | Describe the consequences (benefits and problems) of different patterns of population growth. | Pupils define key terms "economically active", "young dependants", "old dependants" and "dependency ratios".  Pupils produce a method to calculate dependency ratios – complete Exercise 4.  Pupils produce spider diagrams to show: problems caused by high numbers of old dependants in MEDC's and young dependants in LEDC's and discuss the different ways that dependent population are catered for in LEDC's and MEDC's.<br><br>Produce a newspaper article for a geographical journal to describe the trends in the population structure of France, and the problems this will cause. | **The New Wider World** Page 10 and 11.<br><br>Exercise 4 page 20.<br><br>Question 1 Paper 1/2 November 1998<br><br>**Longman Geography for GCSE** Page 113 and 118. |
| 1.1e | Identify the major influences on population movements. | Pupils define key terms "immigration" and "emigration" and classify types of migration using examples. | **The New Wider World** Page 22.<br><br>Exercise 1 Page 33.<br><br>**Oxford International Student Atlas**<br><br>Pages 20<br><br>http://www.angliacampus.com/public/sec/geog/migrate/<br><br>http://www.nidi.nl/pushpull/index.html |

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| 1.1e | Identify the major influences on population movements. | Pupils are introduced to key terms "push and pull factors" and brainstorm these for rural to urban migration in LEDC's.  Pupils write an account of a migrant to show the reasons for leaving, the attractions of the urban area and problems encountered using a case study such as the movement from NE to SE Brazil.  The study of this migration should include the positive and negative impact of this migration upon the receiving and losing area, along with strategies being used to alleviate the problems. | **The New Wider World** Pages 78 to 89.<br><br>Exercises 1 to 5  Pages 90 to 91<br><br>**Longman Geography for GCSE** Pages 134 and 135 and 140 to 141.<br><br>**Oxford International Student Atlas**<br><br>Page 20 |
| 1.1e | Identify the major influences on population movements. | Pupils then produce a case study such as the international migration of Turkish Guest workers to Germany or Mexican workers to the USA, to include push and pull factors and the positive and negative impact upon receiving and losing countries. | **The New Wider World** Page 28 and 29.<br><br>Exercises 3 and 4 Page 33.<br><br>**Longman Geography for GCSE** Pages 134 and 135 and 120 to 121.<br><br>Question1 (c) Paper 1/2 May 1998<br><br>http://www.mtholyoke.edu/acad/germ/ |
| 1.1e | Identify the major influences on population movements. | Pupils define key term refugee and make a list of reasons for forced migrations with examples.  Discuss the problems that face governments in having to provide for refugees. | **The New Wider World** Page 23.<br><br>Exercise 2 Page 33. |

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| 1.1e | Identify the major influences on population density and distribution. | Pupils define key terms: distribution, density, sparsely and densely populated.  Use world map to describe the distribution and density of population on a global scale (general patterns and named examples).  Opportunity to discuss the advantages and disadvantages of the cartographical methods of presenting population data – *choropleth, dot and topographical maps.* | **The New Wider World Page 4 and 5**.<br><br>Exercise 1 Page 19.<br><br>**Longman Geography for GCSE**<br><br>http://www.brazil.org.uk/page.php?cid=154&offset=3<br><br>Pages 106 and 107.<br><br>Questions 1 Page 122.<br><br>Question1 (a) Paper 1 June 2000 |
| 1.1e | Identify the major influences on population density and distribution. | Pupils account for global differences in population using physical, economic and human factors using examples of densely and sparsely populated areas.  Suggested examples: North West Europe, Ganges Delta, Nile Valley and North East USA (dense).  Amazon Rainforest, Himalayas, Greenland and Sahara Desert (sparse).  Pupils could cross-reference distribution or density map with a variety of atlas maps/data e.g. relief, resources, climate.  Pupils should include references to localised areas of high density within otherwise sparsely populated areas and be able to explain such anomalies. | **The New Wider World** Pages 4 and 5.<br><br>Case Study of Brazil Pages 16 to 17<br><br>**Longman Geography for GCSE** Pages 106 and 107.<br><br>Case Study of UK Pages 114 to 115<br><br>**Oxford International Student Atlas**<br><br>Page 18 and 19<br><br>http://www.bbc.co.uk/schools/gcsebitesize/geography/population/1worldpoprev1.shtml |