Assessment Objectives Grid for Geography - G2

	Knowledge and Understanding	Application	Skills	Total	Key Question
Question 1					
(a)		**2**	**3**	**5**	**1.6**
(b)	**8**	**2**		**10**	**1.6**
(c)	**7**	**3**		**10**	**1.2/3**
	15	**7**	**3**	**25**	
Question 2					
(a)		**2**	**3**	**5**	**2.1/5/6**
(b)	**8**	**2**		**10**	**2.6**
(c)	**7**	**3**		**10**	**2.3**
	15	**7**	**3**	**25**	
Question 3					
(a)			**7**	**7**	
(b)	**4**	**4**		**8**	
(c)	**2**		**8**	**10**	
	6	**4**	**15**	**25**	
	36 **(48%)**	**18** **(24%)**	**21** **(28%)**		

Using the mark bands

The aim is to find the descriptor that conveys most accurately the level attained by the candidate, using the best-fit model. A best-fit approach means that marks should be awarded for a response that most fairly matches different aspects of the descriptor.

GCE GEOGRAPHY G2

CHANGING HUMAN ENVIRONMENTS

Q.1 (a) Use *Figure 1* to describe changes in the percentage of population aged 65 years or more. [5]

Several approaches may be credited:

- A year by year approach quantifying **the changes** in the same year in different regions.
- A regional approach quantifying **changes** over time between regions.
- Using the world as a control and describing how different regions compare/vary with the world situation.
  N.B. Figures are percentages not total numbers.

Award one mark for a **change** and one mark for an illustrative confirmation of that change up to 4 marks, with a further mark for a recognition of an overall impression of change and/or a world view. For example a simple statement of "Africa is 3,3,6" is a lift worth one mark whereas "risen by 3" is exemplification, worth 2 marks.

(b) Outline policies to tackle the demographic challenge of ageing societies. [10]

Answers may include some or all of the following policies:

- Pro-natalist. There are not enough vigorous, innovative and willing young workers to pay taxes to look after the old, so the economy will stagnate. The government, therefore, provides incentives to encourage births (e.g. extending maternity and paternity leave, maternity grants, child allowance, family tax credit, child trust fund).
- Encourage immigration.
- Increase economic productivity as the "working population" goes into decline.
- Raise the retirement age.
- Increase taxes to pay for pensions and health care of the old.
- Provide less generous pensions**.**

Level 3: 8-10 marks	Developed knowledge and detailed understanding which outlines policies to tackle the demographic challenge of ageing societies. Good development of example(s) of where policies have been introduced.
Level 2: 4-7 marks	Some knowledge and understanding which outline policies to tackle the demographic challenge of ageing societies. Example(s) of where policies have been introduced are evident and enhance the explanation.
Level 1: 0-3 marks	Basic knowledge and understanding of policies to tackle the demographic challenge of ageing societies. Limited detail. No use of example(s) of where policies have been introduced.

(c) Explain why populations change over time. [10]

Change in population may include size, age, gender, ethnicity. Answers may take a variety of approaches.

- A review of the changes in birth rates and death rates in an area through time.
- Essentially describing the stages in the **demographic transition**.
- One **case study** may be chosen with description and explanation of the demographic history and development, including migration, of that country or region.
- A more **generalised** and broad review of the demographic transition with the addition of migration and a selection of relevant data from several countries/ regions.
- Focusing entirely on **migration** as the main factor in demographic change.
- Concentrating on population changes which are entirely **ethnic/social**.

All approaches have their merits.

The demographic transition approach

Although no country today is in Stage 1, some remote regions are, and all regions at one time were, at the first stage of population development. It is, therefore appropriate to state the demographic characteristics at the very beginning of population development and then to consider in Stage 2 the changes from this base point.

Stage 1: of the demographic transition is characterised by high birth and death rates. So population numbers fluctuate in the short term, but with no long term increase or decrease. Reasons for high birth rates (which also apply in stage 2): • Lack of health care so high infant mortality, so dying babies need to be replaced. • Children act as an insurance against illness and old age of the parents. • Children can work and add to the family income. • Lack of family planning advice and guidance. • Lack of contraceptive aids. • Religious objection to contraceptive use. • Cultural/ religious traditions encourage large families. Reasons for high death rates: • Poor medical resources, hence high infant mortality and disease. • Lack of environmental control may lead to famine. • War could break out over scarce resources /territorial disputes.	**Stage 2:** population begins to increase. • Births continue at a high level as in stage 1 for cultural, social and religious reasons. • Death rates begin to fall due to health care improvements such as vaccinations. and social policy reforms such as on sewerage systems.

<table>
<tr>
<td>Stage 3: population continues to increase very quickly.

Death rate continues to fall, now joined by a falling birth rate due to:

• Better health care.
• Better pensions.
• Use of contraception.
• Falling infant mortality.
• Good education on birth control.
• Women having careers.
• Later age of marriage.
• More materialistic society.
• Economic uncertainty (especially Eastern Europe).</td>
<td>Stage 4: population growth slows.

Birth and death rates are still falling and birth rate comes close to death rate.</td>
</tr>
<tr>
<td colspan="2">Stage 5: population begins to decline.

Birth rate steadies or falls slightly whilst death rate increases due to:

Lifecycle
• Medical technology can keep more people alive into their 70s, 80s and 90s so the number of older people increases, but then all these old people die together in their 70s, 80s and 90s. With so many old people dying, this leads to a relatively high death rate for a country.

Lifestyle
• Obesity caused by ill-advised diet choice and lack of exercise (heart attacks).
• Sedentary occupations, lack of exercise (heart attacks).
• Personal abuse: drugs, alcohol, smoking (cancer).
• Unprotected sex (STDs, AIDS).
• Suicides.
• Murders.
• Industrial accidents and road deaths.

World War II.
• The baby-boomers of the late 1940s to early 1950s are within the pensioner bulge predicted.</td>
</tr>
<tr>
<td colspan="2">Migration is relevant to the demographic transition only in how changes in the total numbers of people by migration influence the numbers being born or dying. A good example of this is the UK in recent years.

Some candidates may illustrate their account with a diagram of the demographic transition and/or population pyramids. Credit these if accurate and relevant.</td>
</tr>
</table>

The migration approach

The types of migration are varied:

Voluntary
- Retirement to a more pleasant climate (UK to southern Spain).
- To find employment (North Wales to Liverpool).
- To avoid taxation (UK to Monaco).

Forced
- Refugees and asylum seekers: reasons include famine/war (Afghanistan, Ethiopia and Sudan).
- Environmental (Soufriere Hills volcano, Montserrat).
- Slum clearance in UK inner cities.

Migrations can be permanent (UK to Australia) or temporary (second homes).

Migrations can be internal (from the NE USA to the "Sunshine" southern states) or external (Eastern Europeans to Western Europe).

Demographic impacts of migration
- Total numbers of people which may either increase or decrease which may lead to over or under population.
- Birth and death rate variation due to age selective migration.
- The gender ratio: where a migration is dominated by either male (construction workers from India to Dubai) or females (Philippine females out migrating to MEDCs).
- Age: such as retirement migration.
- Ethnic/social/cultural changes.

Those candidates who do not link their explanation with changing population characteristics should be limited to Level 2. Credit relevant diagrams.

Level 3: 8-10 marks	Developed knowledge and detailed understanding explaining why populations change over time. Good development of example(s).
Level 2: 4-7 marks	Some knowledge and understanding explaining why populations change over time. Example(s) are evident.
Level 1: 0-3 marks	Basic knowledge and understanding of why populations change over time. Little use of example(s).

Q.2 (a) Use *Figure 2* to describe changes within the settlement hierarchy in Scotland. [5]

Overall the flow diagram demonstrates counter urbanisation to the rural-urban fringe, with depopulation of remote rural settlements.

- Urban Areas had a net loss of 972 people in 2001. This loss represented 3267 people leaving urban areas to accessible rural ones, but receiving some replacement population from settlements further down the hierarchy; 460 from accessible small towns, 657 people from remote small towns and approximately double that number, 1178, from remote rural areas.

- Accessible small towns had a net loss of 330 people, this represented only a third of the losses of urban areas to which they lost 460 people, but they gained a total of 177 combined from remote small towns and remote rural.

- Accessible rural have seen the greatest change in the hierarchy by gaining a massive 3317 people, nearly all, 3267, from urban areas.

- Remote small towns changed their net population the least gaining only 197 people mainly due to a large influx (798) from remote rural.

- Remote rural was the biggest loser, not receiving any people and losing a total of 2212 people distributed between every other settlement category in the hierarchy.

Award one mark for a change and one mark for an illustrative confirmation of that change, with a further mark for a recognition of an overall impression of change within the hierarchy. For example a simple statement of lift e.g. '-972,' is one mark whereas a statement with 'settlement with an increase of +3317' is one mark with extra information from the resource being a further mark. Award a maximum of 3 marks for straight lift of figures.

(b) Outline how the social profile of rural settlements is changing. [10]

Social profile could include age, gender, employment, wealth, ethnicity, family status, language, occupancy pattern, social values, deprivation. Although the question asks for **how** the social profile is changing, elements of **why** will inevitably also appear. Award candidates who focus on how the social profile changes and who may use reasons for the change to support the answer.

One or both of the following approaches is acceptable; case study and place detail will enhance the answer and are likely in answers accessing Level 2 and above.

Rural-urban fringe and rural settlements

Counter urbanisation has led to urban people coming to live in 'suburbanised' villages to change completely the social make-up from one based on the family-run primary industry to a dormitory community with different attitudes and values. This often leads to conflicts about future village development.

Extreme rural settlements

Abandonment by locals is often occurring as they sell up at inflated prices to second homers; this also leads to the younger locals leaving as house prices become unaffordable. The traditional rural services close down as the community is now mainly occupied only at weekends and in the summer by a different set of usually more wealthy and professional urban folk with a different set of social values from the indigenous community. This abandonment is often exacerbated by the lack of economic opportunities and the lack of social, leisure and recreation facilities for the younger element. This deprivation will impact on the social well-being of the local community. Language issues may arise in certain parts of the UK.

Level 3: 8-10 marks	Developed knowledge and detailed understanding describing how the social profile of rural settlements is changing. Good development of example(s).
Level 2: 4-7 marks	Some knowledge and understanding describing how the social profile of rural settlements is changing. Example(s) are evident and enhance the explanation.
Level 1: 0-3 marks	Basic knowledge and understanding of how the social profile of rural settlements is changing. Little use of example(s).

(c) Evaluate the success of an urban regeneration scheme. [10]

Answers can include: redevelopment, renovation, gentrification, regeneration, renewal.

An urban regeneration scheme can be seen as any scheme within an urban area which changes the existing land use in a way that reinvigorates the use of that land. Schemes may be in any part of the built up area: CBD, inner city, inner suburb, outer suburb. Do not accept 'new build' on 'greenfield' sites.

"Success" could be the personal opinion of the candidate or differing views and attitudes of interested parties such as the original local residents, the local council, an environmental group, pensioners, the government. Success may be perceived to be entirely positive or negative or a mixture, but the changes are unlikely to be welcomed by all interested parties.

Schemes which are planned or in the process of being completed cannot be judged on their success so cannot achieve a Level 3 mark. Rural schemes are limited to Level 1.

Level 3: 8-10 marks	Developed knowledge and detailed understanding of the success of an urban regeneration scheme. Well balanced between descriptive information of a case study and reasons for success with a good range of views. Broad and balanced evaluation which may include both positive and negative aspects of policies of established schemes. Good development of example(s).
Level 2: 4-7 marks	Some knowledge and understanding of the success of an urban regeneration scheme. Expansive description dominates. Evaluation may be fragile or be implicit. Example(s) are evident.
Level 1: 0-3 marks	Basic knowledge and understanding of the success of an urban regeneration scheme. Basic description, not evaluation. Little use of example(s).

Q.3 (a) Use *Figure 3* to describe the pattern of multiple deprivation in the City of Leicester. [7]

A purely descriptive answer is required and can achieve full marks. The size, shape and location of areas in various conditions of deprivation are expected using the key, scale and orientation provided. Some element of explanation may also be present, but treat this as background material and/or elaborative comment. Do not award excessive credit for explanatory comment.

Suggested comments:

General patterns might include statements such as radial, annular/concentric, elements of dispersion or nucleation.

The most deprived areas

- The inner city to the northeast and east of the city centre, extending south to north approximately 3 kilometres.
- The remaining areas are concentrated in the middle and outer suburbs to the west, north and south.
- A large area extends to 3 km in length along the western city boundary.

Not quite the most deprived

- These areas occupy much of the inner city, especially to the east, the very southern tip and are more prevalent in the western middle and outer suburbs.
- These areas occupy a large expanse of city boundary in seven separate locations dispersed around the city's edge.

The least deprived areas

- Two small areas are in the western middle suburbs, about 4 kilometres from the city centre, each being no more than approximately 1 square kilometre.
- The remaining five areas are all on the edge of the built up area and vary considerably in size.
- The largest areas are those in the north and south south-east approximately 7 to 10 square kilometres. Smaller areas are on the city's edge in the southwest with two on the eastern edge.

Not quite the least deprived areas

- These areas represent perhaps the largest coverage within the city and dominate much of the eastern middle and outer suburbs.

Level 3: 6-7 marks	Developed description of the pattern of multiple deprivation using a good variety of key/scale/orientation information.
Level 2: 3-5 marks	Some description of the pattern of multiple deprivation using some key/scale/orientation information.
Level 1: 0-2 marks	Basic description of the pattern of multiple deprivation with very limited use of key/scale/orientation.

(b) Outline the advantages and limitations of the mapping technique used in *Figure 3.* [8]

Choropleth mapping

The areas mapped may be naturally occurring, as with land cover types, or may be arbitrarily defined by people as in the case of census enumeration districts. Choropleth maps can be used for both qualitative and quantitative data. In mapping quantitative data, the data are usually classified into categories. The main purpose of choropleth mapping is to discover and present spatial patterns. Conveying the actual data values is seen as a secondary purpose, as this can best be done with a table.

Advantages:
- Spatial patterns can be quickly visualised to give a good impression of change over space and variations in spatial distribution which is commonly at the heart of geographical analysis.
- Coloured maps can be very visually appealing and add interest to any analysis of spatial distribution.
- Anomalies can easily be identified.
- Can be easily completed by hand or by computer.
- In the case of some sensitive data such as victims of crime, choropleths can hide specific locations so avoid breaching data protection.

Limitations:
- It gives a false impression of abrupt change at the boundaries.
- Variations within each area are hidden, particularly if a wide data range is used.
- Reading exact data figures from the map is not possible.
- When areas are of vastly different sizes, too much influence is given for the data in the larger areas.
- Colours and/or shading used must degrade clearly from high visibility and attention attraction through to a pale non-descript shading in order for an accurate visual impression of the data to be gained. Maps which have a more haphazard shading regime, or too many categories of colour are likely to mislead and/or confuse.
- Choropleth maps are limited in the type of data they can display and cannot successfully show discrete data such as variation in footfall for example.

Candidates may refer to their own experience of relevant choropleth mapping and/or other examples of choropleths they have studied.

Candidates evaluating Figure 3 **only**, may reach lower Level 3. Those that solely focus on characteristics, such as key, north arrow, scale, source, border, title are self-limiting to Level 1.

Level 3: 7-8 marks	A detailed and developed outline of the advantages and limitations of the mapping technique.
Level 2: 4-6 marks	A competent outline of the advantages and limitations of the mapping technique.
Level 1: 0-3 marks	A basic outline the advantages and limitations of the mapping technique.

(c) Describe and explain how you planned your investigation into a changing human environment. [10]

You should state clearly the question that you have investigated.

Marking will depend on the quality of response and must be adjusted to suit individual studies presented.

Two approaches can be credited.

1. Planning the initial stage of the investigation

Page 16 of the specification states what is expected. There is also the WJEC document entitled "*Enquiry approach which can be applied to G1, G2 and G3b*" available on the WJEC website. The advice that this document gives on the initial planning stage is given below.

- Develop your own knowledge of the topic by consulting geographical literature or searching the internet.
- Decide on an issue to be investigated and develop your knowledge of the places being studied.
- Decide on the location for the investigation and develop your knowledge of the place(s) being studied.
- Visit your chosen location for a pilot survey.
- Undertake a risk assessment.
- Obtain any equipment (if required) checking availability and how to operate it.
- Prepare recording sheets/design questionnaire surveys.
- Decide on sampling strategies.
- Check weather conditions if relevant.
- Decide on day, date and time of survey.
- Arrange appointments if your investigation involves interviews/visits.

A research investigation would not require the elements involved in primary fieldwork collection, but a variety of pre-planning ideas would be expected. These would include discussion of the initial aim, hypothesis and objectives and a variety of specific secondary data resources would have to be thought through before commencement of the study.

2. Planning the route to enquiry with five suggested stages

1. Planning
2. Data collection
3. Data refinement and display (presentation)
4. Description, analysis and interpretation
5. Conclusion and evaluation

This approach is broader than the initial planning stage, but it is acceptable to include the other 4 stages in the route to enquiry when contemplating the finished enquiry report. Such an answer would put less emphasis on stage 1 but would gain credit for incorporating the idea of overall planning to encompass the whole process of the enquiry form first thoughts to the finished written and produced report.

Credit highly any valuable, positive and geographically appropriate comments within the context of a valid geographical enquiry.

Credit with caution simplistic, self-evident, generalised and vague comments.

Generic answers without reference to a practical study or a research enquiry cannot achieve Level 3.

Level 3: 8-10 marks	Developed knowledge and detailed and developed understanding of the investigation planning process. Good development using the context of the investigation.
Level 2: 4-7 marks	Some knowledge and developed understanding of the investigation planning process. Some development using the context of the investigation.
Level 1: 0-3 marks	Basic knowledge and understanding of the investigation planning process. Little or no use of planning and/or the investigation.