INTRODUCTION

This marking scheme was used by WJEC for the 2018 examination. It was finalised after detailed discussion at examiners’ conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates’ responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

It is hoped that this information will be of assistance to centres but it is recognised at the same time that, without the benefit of participation in the examiners’ conference, teachers may have different views on certain matters of detail or interpretation.

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.
The Assessment of Quality of Written Communication at AS

Opportunities for assessment of quality of written communication are found within each of the Assessment Objectives and thus within all questions that demand continuous prose that are marked out of ten.

For each of the ten mark questions in G1 and G2, the following criteria for quality of written communication should be applied to the levels of assessment.

**Mark Band Criteria for the Assessment of Quality of Written Communication for 10 mark questions at AS.**

<table>
<thead>
<tr>
<th>Level 3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Information is organised clearly and coherently and arguments are</td>
<td>logically developed and tightly structured.</td>
</tr>
<tr>
<td>• Candidate writes in continuous prose using relevant and accurate</td>
<td>geographical vocabulary.</td>
</tr>
<tr>
<td>• There are relatively few errors of spelling, punctuation and grammar.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Information is relatively clear but points and arguments are not always</td>
<td>direct or logically developed.</td>
</tr>
<tr>
<td>• The use of geographical vocabulary is variable and prose style may</td>
<td>lack precision or accuracy.</td>
</tr>
<tr>
<td>• There are some errors of spelling, punctuation and grammar that may</td>
<td>make the meaning unclear.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• Information is randomly organised and lacks clarity.</td>
<td></td>
</tr>
<tr>
<td>• Statements are brief and bald and the language is simplistic with</td>
<td>limited use of geographical vocabulary.</td>
</tr>
<tr>
<td>• Spelling, punctuation and grammar are weak with errors that may be</td>
<td>intrusive.</td>
</tr>
<tr>
<td>•</td>
<td></td>
</tr>
</tbody>
</table>
### 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.
Q.1 (a) Use *Figure 1* to describe the world distribution of the percentage of women aged 15-49 with HIV. [5]

Allow 1 mark for a comment about location with an extra mark for information from the resource to support that comment, up to a maximum of 5 marks.

Some suggested responses are given below:

- Sub-Saharan Africa has by far the greatest percentage of women with HIV (1 mark).
- The highest percentage, over 20% (1 mark), is in southern Africa (1 mark).
- The second highest (10 to 19.9%) (1 mark) is located further north, but still in southern Africa (1 mark).
- The third and fourth highest, from 2 to 9.9%, are located in west and east Africa (2 marks).
- Outside Africa (1 mark) the largest percentage of women with HIV is in Russia which has 1 to 1.9% of women with HIV (1 mark).
- The lowest are north Africa, North America, western South America, western Europe and Australasia which have less than 1% of women with HIV (2 marks).
- Most of South-East Asia also has less than 1% (2 marks).
- But some countries, such as China, have no data (2 marks).

Award a maximum of 3 marks for direct lifts and no world distribution e.g. Belize at 20+.

(b) **Explain why birth rates differ in Stages 2 and 5 of the demographic transition.** [10]

There is likely to be confusion between stages, particularly as populations change rather rapidly and statistics constantly go out of date. So below are the major birth rate characteristics for all stages. Correct reasons may be given, but any exemplar country provided may be inaccurate today.

For example a candidate may give reasons for a stage 2 country, but provide a stage 3 example. Similarly, some stage 5 information may be provided, but the country quoted is currently in stage 4, but is heading for stage 5. As long as the reasons and supporting figures are correct a named country may be incorrect today, but this would not preclude a mark in Level 3.

As well as confusion between stages, there could be confusion in terminology.

**Birth rate** is the annual number of births per 1,000 total population.

Please note that that the specification, when referring to the demographic transition, states "...variations in fertility and mortality rates....". So some answers may be couched in terms of fertility rates defined by the Population Research Bureaux as:

**Total fertility rate** is the average number of children a woman would have assuming that age-specific birth rates remain constant throughout her child bearing years (usually considered to be between the ages of 15 to 49).
As long as it is clear that the candidate understands the terminology used, fertility rates can be accepted into a Level 3 response. If there is confusion in terminology (e.g., writes 'birth rate', but provides a fertility rate figure) then a Level 3 response would not be achievable.

Some responses may include statistics such as those below to illustrate their case studies and should be credited.

Stage 2: Niger 49; Chad 47.
Stage 3: Mexico 19; Argentina 18.
Stage 4: UK 12; Canada 11.
Stage 5: Germany 9; Japan 8; Italy 8; Romania 9.

For information:
- the average worldwide birth rate is 20.
- the average for developed countries is 11.
- the average for developing countries is 22.
- the average for developing countries, excluding China, is 24.
- the average for the least developed countries is 33.

Reasons for a relatively high BR in stage 2:
- Children needed to help on the farm.
- Children needed as a pension.
- Children needed as a health-care service.
- More children needed to replace those who die young (high infant mortality (e.g. Angola 93)).
- Contraception not widely available.
- Contraception not culturally accepted.
- Lack of education regarding family planning (high school fees).

Stage 3 countries would have lower BRs because of the following developments which begin in stage 2:
- Establishment of medical centres with health checks and vaccinations against malaria and diarrhoea reducing infant mortality.
- Contraceptive advice available at health centres.
- Education is more affordable with fewer children in the family.

For example, the total population of India is 1.33 billion with a BR of 22, in Kerala the BR is 14, and fertility has dropped from 7 to 1.8 due to:
- Sterilisation of women.
- Health care.
- Contraceptive advice:
- Education on family planning.
- High (90%) literacy rate amongst women.
- Education gives women confidence to take control of their own lives.
- Economic changes bring stability to society such as a minimum wage, owning property, the establishment of trade unions to argue for workers’ rights.
Stage 4 and 5 countries have low BRs; some factors encouraging this include the following:

- The baby boomers (1946-1954) have reached pension age: by 2021 20% of the population of the UK will be pensioners. Pensioners tend not to have many babies.
- Infant mortality is low, (e.g. UK 3.9, Finland 1.7), so very little need to replace those who die young.
- The introduction of the pill and other efficient contraceptives since the 1960s has enabled choices about babies to be made.
- Many women have chosen to follow a career, delay marriage and delay a family so giving less time to produce many babies.
- People can choose a more materialistic lifestyle instead of having babies.

Some stage 5 countries have low, but increasing, BRs in stage 5; e.g. UK and France, now 12, was lower. Russia, 8 in 1999, 13 in 2012. This is due to a variety of factors in different countries including:

- In-migration of the baby-producing age ranges.
- Government incentives to produce babies to counteract an ageing population (e.g. extending both maternity and paternity leave, maternity grants, child allowance, family tax credit, allocating days and time off work for procreation!).

(Figures from www.prb.org data sheet 2016.)

<table>
<thead>
<tr>
<th>Level 3 8-10 marks</th>
<th>Good knowledge and understanding of why birth rates differ in stages 2 and 5 of the demographic transition. Good balance between the stages. Examples are evident and enhance the explanation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2 4-7 marks</td>
<td>Some knowledge and understanding of why birth rates differ in stages 2 and 5 of the demographic transition. Some imbalance between the stages. Some use of examples.</td>
</tr>
<tr>
<td>Level 1 0-3 marks</td>
<td>Basic knowledge of differing birth rates in stages 2 and 5 of the demographic transition. Only one stage attempted. Little use of examples.</td>
</tr>
</tbody>
</table>
(c) Outline the contrasting characteristics of two types of migration. [10]

Note - WJEC's list of command words defines contrast as requiring only differences. Do not credit similarities.

Characteristics of migration may include some of the following:
- age selective
- sex selective
- race selective
- religion selective
- wealth selective
- involve few people or millions
- occur over a variety of distances (including “circulation” e.g. commuting)
- can be permanent or temporary
- can be national or international.

Some suggestions of types of migrations which could be used follow, but these suggestions do not preclude other valid examples.

- Voluntary (counter-urbanisation) and forced (refugees from Syria to Jordan).
- Permanent (retirement migration from the UK to Spain) and temporary (student accommodation: overseas employment, perhaps in the diplomatic service).
- Reasons for migrations provide contrasts: economic (Bulgarians to the UK); social (holidays); environmental (fleeing from a tectonic event such as the Soufriere volcano in Montserrat); political (civil wars occasioning many people movements such as countries in North Africa and the Middle East); demographic overpopulation leading to resource depletion (many examples in Africa).

Any two types of migration at any scale can qualify as a correct answer with differences between them emphasised, thus qualifying for higher credit.

Be careful not to over credit the characteristics of an out-migration with the inverse characteristics of the associated in-migration, such as economic migration from eastern to western Europe leading to a lack of young males in the exporting country but also meaning a surfeit of young males in the receiving country. This provides only one inverse characteristic of one type of migration. For full credit the two migrations need to be of quite distinctly different types.

<table>
<thead>
<tr>
<th>Level 3</th>
<th>8–10 marks</th>
<th>Good knowledge and understanding of the contrasting characteristics of two types of migration. Good development of examples.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>4–7 marks</td>
<td>Some knowledge and understanding of the contrasting characteristics of two types of migration. The migrations could be well described, but contrasts are undeveloped. Examples are evident and enhance contrasts.</td>
</tr>
<tr>
<td>Level 1</td>
<td>0–3 marks</td>
<td>Basic knowledge of the contrasting characteristics of one or two types of migration. Description without contrasts. Similarities/comparisons included. Little use of examples.</td>
</tr>
</tbody>
</table>
Q.2 (a) Use Figure 2 to describe and locate the variety of land uses in this rural-urban fringe. [5]

Suggestions:
- A commuter dormitory village (1 mark) to the NW (1 mark), stretching approximately one kilometre from east to west (1 mark).
- A reservoir in the NW.
- A motorway junction, centre west.
- Main road / motorway / one from E to W the other from SE to NW.
- Agricultural land to the north of the E-W motorway.
- Trees at the motorway intersection, centre west.
- A golf course SE of the motorway intersection.
- Trees following a river snaking from NE to SW.
- Dominated by suburban housing estates either side of the SE–NW motorway.
- Industrial estate/shopping centre between the river and the E-W motorway to the E.
- Flat regular agricultural fields in SE corner.

One mark for describing a land use with associated marks for using locating factors up to a maximum of 5 marks.

Max 3 if no use of orientation and/or scale.
Max 4 if vague use of orientation and/or scale.

Allow reference to land uses, e.g. motorway, for relative location.

(b) Explain recent changes in the rural-urban fringe. [10]

Pull factors to the fringe:
- Cheaper land, so bigger houses are more affordable (NOT CHEAPER HOUSES).
- Advancements in physical communications, i.e. motorway and outer ring road construction making the fringe more accessible.
- The increase in personal mobility, i.e. more cars.
- Tele-communications, mobiles and broadband allow businesses to locate in more remote locations so more jobs are available in the fringe.
- Tele-communications in the fringe also allows people to work effectively from home, hence encouraging more people to move into the fringe.
- More disposable income has enabled people to purchase relatively expensive rural housing.
- Relaxing of green belt and rural land planning restrictions to build more housing.
- The perception of a low crime rate, low levels of noise and other atmospheric and land and water pollution.
- The perception of schools which are full of bright, obedient children.
- The perception of road traffic which is less frequent.

Often such perceptions, although pull factors, turn out to be just that… perceptions!
Push factors from urban areas:
- Noisy, smelly, polluted, derelict areas, particularly in some inner city locations.
- Fear of crime and vandalism.
- Graffiti prone areas where drugs and prostitution may upset the local community.
- An influx of a different cultural group into the neighbourhood.
- The closure of businesses, hence the loss of a job, so a new start is required.

Other related reasons:
- Businesses (retail, warehouse/distribution, cinemas, and golf courses) now occupy fringe positions; thus fringe residents no longer have to visit the town centre for such services, hence encouraging a snowball effect.
- Park and ride car parks are established in the fringe encouraging more fringe occupation.

Answers would usefully incorporate one or more specific case studies of fringe development as exemplification. Accept reference to Green Belt if linked to explanation of change.

Totally rural and extreme rural examples, such as Snowdonia National Park, are not fringe locations and are therefore not credit worthy as case studies, but may derive some credit for the reasons for change which may be applicable to both fringe and extreme rural such as the growth in car ownership. Suggest lower/middle Level 2 if exemplification is entirely based on extreme rural but some reasoning is valid for fringe. If all reasoning is applicable to extreme rural then only a Level 1 mark is possible which includes zero.

The question is explain changes, and not describe how changes have occurred. A description of change without reasoning can only reach Level 2.

<table>
<thead>
<tr>
<th>Level 3 8-10 marks</th>
<th>Good knowledge and understanding of the reasons for recent changes in the rural-urban fringe. Good development of example(s).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2 4-7 marks</td>
<td>Some knowledge and understanding of the reasons for recent changes in the rural-urban fringe. Pure description of changes. Example(s) are evident.</td>
</tr>
<tr>
<td>Level 1 0-3 marks</td>
<td>Basic knowledge of the reasons for recent changes in the rural-urban fringe. Lack of focus on rural-urban fringe locations. Little or no use of example(s).</td>
</tr>
</tbody>
</table>
(c) Explain the development of ghettos within urban settlements. [10]

Three definitions of a ghetto follow:

- A ghetto is a “portion of a city in which members of a minority group live especially because of social, legal or economic pressure”.
- A poor, densely populated city district occupied by a minority ethnic group linked together by economic hardship and social restrictions.
- Any segregated mode of living or working that results from bias or stereotyping.

These definitions encompass broad ideas and may be interpreted to include studentification and poor working-class white people on UK council estates as well as the richer enclaves of cities. So accept broad interpretations of a ghetto. ‘Development’ may be interpreted as the original creation of a ghetto or as the continuing changes that occur within a ghetto.

The most commonly recognised ghetto would lie within the inner city of an urban area and be composed of a group of people segregated from the indigenous population by their unified religion, e.g. Jewish; colour, e.g. black; language, e.g. Polish. Often a lack of money is also regarded as identifying a low class group separated from the rest of a more wealthy society.

Suggestions

Voluntary ghettoisation

Demographic: Young people, such as students, choose to live in the inner city to be close to the city-centre-entertainment facilities and perhaps an inner city university.

Cultural/political: Although people have a theoretical free choice of where to live, many voluntarily choose to live close to other members of the same group to gain a homely feeling of belonging and a feeling of security and comfort in familiar surroundings.

- Feelings of isolation are reduced and provide a sense of community and security.
- An ethnic cluster is a defensive reaction related to fear of conflict with surrounding groups.
- Avoidance of outside contact so residents can support each other and establish their own shops, services and places of worship to serve their community’s needs.
- Preservation of identity and promotion of cultural heritage. Groups with their own language, religion and a social organisation often have a strong wish to remain distinctive.
- The attack function as a group can plan and carry out activities which promote solidarity and help to ensure survival in a possibly hostile environment. These activities can be peaceful as in protests against racial discrimination.

Economic: Others may choose the inner city to avoid commuting to a job as a shop assistant in the city centre. Some may choose to live in the inner city as they cannot afford a car and the inner city is well served by buses feeding into and out of the city centre and the centre may be within walking distance.
Imposed ghettoisation

Cultural/political: Violence, harassment and threatening behaviour will prevent certain ethnic groups from living integrated with others. Serbs and Moslems in Bosnia for example; Catholics and Protestants in Belfast is another good example as is a non-white skin colour in areas of some council housing estates in the UK and a non-black skin colour in the inner city area of Harlem, New York. Councils using points systems to allocate housing are another example.

Economic: Gatekeepers financially impose barriers to integration with money lending policies.

Intra- and extra–urban migrations are often implicit in moving different groups of people to their current ghetto location: so answers may relevantly include some of the following points:

- Filtering from the inner city to the suburbs and possible rural areas (counter-urbanisation) opens the way for migrants to enter the urban area from outside to take up vacated cheap property.
- Cross-settlement suburb to suburb movements.
- Re-urbanisation often originates from rural areas and ends usually in a redeveloped inner city forming a wealthy enclave often surrounded by poorer areas (London Docklands): the inverse of the traditional idea of a ghetto, but acceptable.

Note, the question is explain and not describe, answers only describing ghetto characteristics can only achieve a maximum of low Level 2.

<table>
<thead>
<tr>
<th>Level 3</th>
<th>8–10 marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good knowledge and understanding of some of the reasons for the development of ghettos within urban settlements. Good development of example(s).</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 2</th>
<th>4–7 marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Some knowledge and understanding of the reasons for the development of ghettos within urban settlements. Some description only of ghetto characteristics. Example(s) are evident.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 1</th>
<th>0–3 marks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Either basic knowledge of the reasons for the development of ghettos within urban settlements. or basic description of ghetto characteristics. Little use of example(s).</td>
<td></td>
</tr>
</tbody>
</table>
Q.3 (a) Use Figure 3 to describe the outcomes of the environmental quality survey. [7]

The following points about locations could be made and an overview comment, such as those below, will lift the answer into Level 3. Credit effective, constructive use of values.

Overview
- Location 1 has a generally poor environmental quality, but not as bad as location 3.
- Location 2 has the best environment.
- Location 3 has entirely negative results so has the poorest environmental quality.

Location 1
- Provides the worst environmental variable score of -5 for provision of open space.
- Has a highly negative score of -4 for graffiti.
- Has some good environmental aspects, however, namely condition of buildings, with a score of 2, condition of pavements also with a score of 2, and volume of traffic with a score of 1.

Location 2
- Received some, high positive scores with a maximum of 5 for both condition of buildings and provision of open space. Condition of pavements received 4, graffiti 3 and litter 2.
- Had only two negative scores out of the seven variables being noise at -3 and volume of traffic at -2. The two negatives could have been linked.

Location 3
- Has a total negative score of 18 out of 35.
- The worst environmental trait is noise, -4, followed by litter and condition of pavements at -3 each.
- Despite having all negative scores, it has a better score for open space at -2 than location 1 at -5.

Environmental characteristics
- Noise is the only characteristic not to vary between negative and positive, it is always negative.
- The least variable, most consistent, score between negative and positive was for volume of traffic which only varied by 3 points from -2 to 1.
- The most variable environmental characteristic was the provision of open space with a full range of 10 points from -5 to 5.

<table>
<thead>
<tr>
<th>Level 3 6-7 marks</th>
<th>Developed description of the outcomes of the environmental quality survey. An integrated account using environmental variable scores constructively as well as locations and environmental variables. An overview is evident.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2 3-5 marks</td>
<td>Some description of the outcomes of the environmental quality survey. Environmental variable scores are quoted and integrated within the description. Limited overview.</td>
</tr>
<tr>
<td>Level 1 0-2 marks</td>
<td>Basic generalised description of the outcomes of the environmental quality survey. Narrow use of data derived from the resource.</td>
</tr>
</tbody>
</table>
(b) Outline the strengths and weaknesses of one method of sampling used when studying a human environment. [8]

Candidates may describe sampling techniques from the point of view of their own fieldwork experience, or they may provide generic descriptions and information with short exemplars. Answers may take their lead from the sampled locations in Figure 3. Answers which solely focus on physical environment sampling exemplars are restricted to low Level 2.

Answers may display several approaches and strengths and weaknesses could include:

**Strengths**
- Generic strengths of the concept of sampling.
- Justification of one sampling method being more advantageous than another for a particular purpose.
- Relating the experience of the practical advantages of a sampling technique, e.g. within a questionnaire survey.

**Weaknesses**
- Generic ideas on the concept of sampling. For example, only a limited proportion of the total statistical population is taken so how valid is this proportion as a representative sample?
- Using an inappropriate sampling technique for a particular purpose will have inherent weaknesses: for example, generating a random point sample on the map of an area in order to locate points at which to sample traffic. Many redundant random points would be located away from roads, so a systematic or pragmatic sample along roads would be more appropriate. Thus this is a weaknesses of the random sampling technique in this instance.
- Issues with the collection of sampling data such as a systematic street questionnaire when the designated participant refuses to comply.

What follows is a range of information from which answers may draw.

**What is sampling?**
- Sampling is a ‘short-cut’ method for investigating a whole population.
- Data is gathered on a small part of the whole ‘parent population’ or ‘sampling frame’ and used to inform what the whole picture is like. Why sample?
- In reality there is simply not enough time, energy, money, labour, equipment or access to suitable sites to measure every single ‘item’ or site within the ‘parent population’ or whole ‘sampling frame’. Therefore an appropriate sampling strategy is adopted to obtain a representative, and statistically valid, sample of the whole.

**Sampling considerations**
- Larger sample sizes are more accurate representations of the whole.
- The sample size chosen is a balance between obtaining a statistically valid representation, and the time, energy, money, labour, equipment and access available.
- A sampling strategy made with the minimum of bias is the most statistically valid.
- Most approaches assume that the parent population has a ‘normal distribution’ where most items or individuals clustered close to the mean, with few extremes.
Sampling techniques:

<table>
<thead>
<tr>
<th>There are four main types of sampling strategy:</th>
<th>Within these types, there are three methods.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Random</td>
<td>(a) Point</td>
</tr>
<tr>
<td>2. Systematic</td>
<td>(b) Line</td>
</tr>
<tr>
<td>3. Stratified</td>
<td>(c) Area</td>
</tr>
<tr>
<td>4. Pragmatic</td>
<td></td>
</tr>
</tbody>
</table>

**Random Sampling**
- Least biased of all sampling techniques: there is no subjectivity - each member of the total population has an equal chance of being selected.
- Can be obtained using random number tables.
- Microsoft Excel has a function to produce random numbers.

**Systematic Sampling**
- Samples are chosen in an orderly or regular way.
- They are evenly / regularly distributed in a spatial context, e.g. every 2 metres along a transect line.
- They can be at equal / regular intervals in a temporal context, e.g. every half hour or at set times of the day.
- They can be regularly ‘numbered’, e.g. every 10th house or person.

**Stratified sampling**
- This method is used when the parent population or sampling frame is made up of sub-sets of known size. These sub-sets make up different proportions of the total, and therefore sampling should be stratified to ensure that results are proportional and representative of the whole.

**Pragmatic sampling**
- Sensible readjustments must be made if, for whatever reason, one of the above three methods fails to suit. For example, a predetermined sampling site has access problems so a pragmatic alternative is sought.

<table>
<thead>
<tr>
<th>Level 3 7-8marks</th>
<th>Good knowledge and understanding used to develop an outline of the strengths and weaknesses of one method of sampling in a human environment. Good development of real fieldwork and/or generic example(s).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2 4-6marks</td>
<td>Some knowledge and understanding used to develop an outline of the strengths and weaknesses of one method of sampling in a human environment. Reality and/or generic elaboration is imprecise.</td>
</tr>
<tr>
<td>Level 1 0-3marks</td>
<td>Basic outline of the strengths and/or weaknesses of one method of sampling in a human environment. Little use of examples.</td>
</tr>
</tbody>
</table>
Describe 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 from first thoughts to the finished written and produced report.

Generic answers without reference to a practical study or a research enquiry cannot achieve Level 3.
The planning process for a physical investigation has many similarities with that for a human investigation. So candidates that use physical exemplars should not be credited for exemplification, but require credit for the planning process deriving a lower Level 2 mark limit.

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

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

<table>
<thead>
<tr>
<th>Level 3</th>
<th>8-10 marks</th>
<th>Good knowledge and developed understanding to describe a human investigation planning process. Good development using the context of the investigation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level 2</td>
<td>4-7 marks</td>
<td>Some knowledge and understanding to describe a human investigation planning process. Some development using the context of the investigation.</td>
</tr>
<tr>
<td>Level 1</td>
<td>0-3 marks</td>
<td>Basic knowledge to describe a human investigation planning process. Little or no use of context.</td>
</tr>
</tbody>
</table>