

Mark Scheme (Results)

Summer 2016

GCSE Geography A (5GA1H/01)
Unit 1: Geographical Skills and
Challenges

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General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Placing a mark within a level mark band

- The instructions below tell you how to reward responses within a level. Follow these unless there is an instruction given within a level. However, where a level has specific guidance about how to place an answer within a level, **always** follow that guidance.
- **2 mark bands**
Start with the presumption that the mark will be the higher of the two.
An answer which is poorly supported gets the lower mark.
- **3 mark bands**
Start with a presumption that the mark will be the middle of the three.
An answer which is poorly supported gets the lower mark.
An answer which is well supported gets the higher mark.
- **4 mark bands**
Start with a presumption that the mark will be the upper middle mark of the four.
An answer which is poorly supported gets a lower mark.
An answer which is well supported and shows depth or breadth of coverage gets the higher mark.

- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:

i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear

ii) select and use a form and style of writing appropriate to purpose and to complex subject matter

iii) organise information clearly and coherently, using specialist vocabulary when appropriate.

Spelling, Punctuation and Grammar Marking Guidance

- The spelling, punctuation and grammar assessment criteria are common to GCSE English Literature, GCSE History, GCSE Geography and GCSE Religious Studies.
- All candidates, whichever subject they are being assessed on, must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Spelling, punctuation and grammar marking criteria should be applied positively. Candidates must be rewarded for what they have demonstrated rather than penalised for errors.
- Examiners should mark according to the marking criteria. All marks on the marking criteria should be used appropriately.
- All the marks on the marking criteria are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the marking criteria.
- Examiners should be prepared to award zero marks if the candidate's response is not worthy of credit according to the marking criteria.
- When examiners are in doubt regarding the application of the marking criteria to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked unless the candidate has replaced it with an alternative response.
- Handwriting may make it difficult to see if spelling, punctuation and grammar are correct. Examiners must make every effort to assess spelling, punctuation and grammar fairly and if they genuinely cannot make an assessment, the team leader must be consulted.
- Specialist terms do not always require the use of complex terminology but the vocabulary used should be appropriate to the subject and the question.
- Work by candidates with an amanuensis, scribe or typed script should be assessed for spelling, punctuation and grammar.
- Examiners are advised to consider the marking criteria in the following way:
 - How well does the response communicate the meaning?
 - What range of specialist terms is used?
 - How accurate is the spelling, punctuation and grammar?

| Question Number | Answer | Mark |
|-----------------|-----------------|------|
| 1(a) (i) | Church Stretton | 1 |

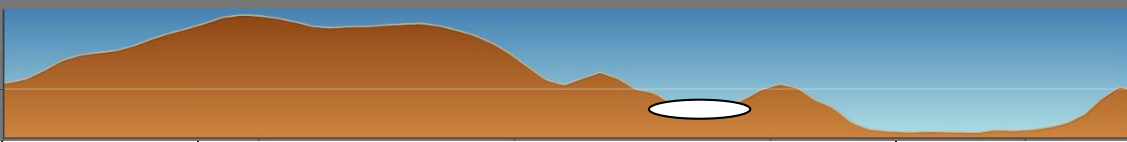
| Question Number | Answer | Mark |
|-----------------|--------------------------------------|------|
| 1(a) (ii) | West North west Accept W or NW | 1 |

| Question Number | Answer | Mark |
|-----------------|---|------|
| 1(a) (iii) | 2.45 (km) Accept 2.2 - 2.7 range Allow correct without units. | 1 |

| Question Number | Answer | Reject | Mark |
|-----------------|--|---|-------------------------------------|
| 1(b) | <p>The piece of land on which a settlement is built is the settlement site. There are many reasons why a site might be chosen for the development of a settlement.</p> <p>For Little Stretton candidates will be using map evidence rather than any specific knowledge of the place. Ideas include - defence (1), shelter (1), water supply (1), stream (1) flat land (1) river crossing (1) accessibility (1).</p> <p>Accept other ideas that are relevant.</p> <p>Note: limit to 2 marks if just listing of factors with no development and / or explanation.</p> | Roads (with no reference to accessibility / communication). | <p>3</p> <p>1+(1+1) (1+1+1)</p> |

| Question Number | Answer | Reject | Mark |
|-----------------|--|--|---------------------------------------|
| 1(c) | <p>A number of reasons can be provided, e.g.</p> <ul style="list-style-type: none"> • The main corridor of roads is running north east to south west as it follows the valley (1) which would make the road easier to build (1). • There are few roads east-west as the land is hilly/mountainous (1) and therefore difficult to build roads on (1). • Railway line / road connect settlements (1) which are in the valley (1). <p>Accept other valid ideas.</p> <p>Max 3 requires explicit reference to map or Figure 1c, e.g. road or place name, but this is not an additional mark.</p> | “easy transport” as a development idea on its own without reference to access. | <p>3</p> <p>1+(1+1)</p> |

| Question Number | Answer | Mark |
|-----------------|--|-------------------------------------|
| 2(a)(i) | <p>X Viewpoint/hill summit/trig or triangulation point or pillar/ footpath</p> <p>Y Car park/parking/road/(visible) earthwork/tumulus</p> <p>Z Road or track or path/school/caravan or camp site</p> | <p>3</p> <p>1+1+1</p> |

| Question Number | Answer | Mark |
|--|--|----------|
| 2(a)(ii) | <p>Letter V / line in correct location. See below for allowable area.</p> <p>Arrow-head not required.</p> | 1 |
|  | | |
| | | |

| Question Number | Answer | Mark |
|-----------------|--|--------------|
| 2(b)(i) | Correct position of sites 5 and 6 1 mark for each Allow a small error of inaccuracy: +/-1 one small square on the graph paper only | 2 1+1 |

Mean depth (m)

| Distance from source (m) | Mean depth (m) |
|--------------------------|----------------|
| 100 | 0.05 |
| 200 | 0.06 |
| 400 | 0.08 |
| 500 | 0.07 |
| 1000 | 0.15 |
| 1150 | 0.20 |
| 1800 | 0.22 |
| 2500 | 0.28 |
| 3200 | 0.30 |
| 3600 | 0.26 |

| Question Number | Answer | Reject | Mark |
|-----------------|---|--|---------------------------|
| 2(b)(ii) | Generally strong (1) Positive (1) Few/no outliers/anomalies (1) Comments about slight fluctuations / variations (1) e.g. site 4 which is lower (1) Site 10 is unusual (1) because the depth is lower than site 9 and the overall trend (1). A statement about / describing relationship, i.e. further away from source, greater average depth (1) credit specific data to support this statement (1) | Weak No-correlation. Description of data not in the context of a relationship. | 3 1+1+1 (1+1)+1 |

| Question Number | Answer | Mark |
|-----------------|---|---|
| 3(a)(i) | <p>It's an ageing population (1). Look to be similar numbers of males and females (1). Age 60+ has the most people in it (35%) (1) 0-14 years looks to be the smallest category (15% males and females) (1). Top heavy age pyramid is characteristic of HIC (1).</p> <p>Accept 30-44 as the smallest category (1) OR 0-14 and 30-44 very similar characteristics (1).</p> <p>Must use data for max 3.</p> | <p>3 (1+1+1) (1+1)+1 1+1+1</p> |

| Question Number | Answer | Reject | Mark |
|-----------------|---|--|-----------------|
| 3(a)(ii) | <p>Out of date / is not updated very often (1) Is a snapshot of the population on one day (1). Census doesn't count all people / doesn't include everyone (1) Doesn't allow for migration / population flows and changes in an area (1). People fill in the forms incorrectly / don't always tell the truth (1). Can be difficult / complicated to find the data you want online (1).</p> <p>Accept other valid ideas.</p> | <p>Long time to collect the information</p> <p>Inaccurate / unreliable (without reason)</p> <p>Expensive</p> | <p>1</p> |

| Question Number | Answer | Reject | Mark |
|-----------------|--|---|--|
| 3(b) | <p>Find out population from a named website, e.g. Neighbourhood Statistics (1) which would tell you age (1) and income (1). Or use Excel/spreadsheet to calculate statistics (1) e.g. median / average (1) or to provide rankings of data (sort) (1) or to use the filter function (1) etc. Use a spreadsheet to make a graph / represent data (1). Use GIS to make a map (1) that would allow the use of statistical tools (1) and to show layers of information (1).</p> <p>Answer must be an explanation for max 3, with clear development.</p> | <p>“Use the internet” without any further development</p> <p>Find more population data and information (without idea of comparison to other data)</p> | <p>3</p> <p>1+(1+1) (1+1+1)</p> |

| Question Number | Answer | Reject | Mark |
|-----------------|--|-----------------------------------|---|
| 4(a)(i) | <p>Greater decreases in the southern hemisphere than the north (1). South America will be especially hit by decrease (1) whereas NW Europe will see up to 100% increase. Highest northern latitudes generally see the biggest increase in crop yield (1)</p> <p>Credit reference to other locations and places. Credit for anomalies, e.g. Chile</p> <p>Note: has to be some idea of pattern for max 3, e.g. globally or regionally. This might be through comparison.</p> | <p>Any description of causes.</p> | <p>3</p> <p>1+(1+1) (1+1+1) 1+1+1</p> |

| Question Number | Acceptable Answer | Reject | Mark |
|-----------------|---|---|--|
| 4(a)(ii) | <p>There are a number of possible human activities/actions, e.g.</p> <ul style="list-style-type: none"> • burning of fossil fuels increases CO₂ in the atmosphere (1) which is a greenhouse gas (1) leading to the (enhanced) greenhouse effect (1) • intensification of agriculture has led to more methane concentrations (1) a powerful greenhouse gas (1) • deforestation leading to more CO₂ in the atmosphere (1) which causes greenhouse effect (1) • industrialisation / globalisation has led to more global manufacturing (1) producing greenhouse gas emissions. • people becoming richer (1) using more energy (1) e.g. more cars ownership/use of consumer goods (1). <p>Note approximate percentages of global greenhouse gas emissions by sector (IPPC 2014): Electricity + Heat Production 25%, Agriculture + Forestry 25%, transport 15%, Industry 20%.</p> <p>Accept other reasonable ideas, including a rise in temperatures altering albedo etc.</p> <p>Note - response must link cause to climate change.</p> | <p>volcano impacts, Milankovitch, plate tectonics, etc. External forcing's.</p> | <p>4</p> <p>(1+1)+(1+1) (1+1+1)+1 (1+1+1+1)</p> |

| Question Number | Answer | Reject | Mark |
|-----------------|---|----------------------------------|--|
| 4(b)(i) | <p>Release particulate matter/ash into the atmosphere, which can block incoming solar radiation (1) through reflection/back-scattering (1). This could lead to cooling (1). Effects on a global scale may be small, but historically could have led to marked cooling, e.g. Little Ice Age (1). Sulphur dioxide is converted into sulphuric acid (1) forming aerosols, (causing more reflection and cooling) (1). Sulphur dioxide is released (1) this indirectly causes cooling. Gas is released from volcanoes may include CO₂, which is a greenhouse gas causing warming (1) (although this is much smaller than human emissions).</p> <p>Note - 1) Max 1 for things emitted by volcano (ash, SO₂, gas, CO₂ etc.). 2) SO₂ is not recognised as a greenhouse gas. 3) There is not additional credit for examples - the question is process focused requiring an explanation.</p> | Any description of human causes. | 3 1+(1+1) (1+1+1) |

| Question Number | Answer | Reject | Mark |
|-----------------|---|--|-------------------------------------|
| 4(b)(ii) | <p>There are a number of attitudes (could be individual government or company):</p> <p>“Non-believers” (1) who think that it is a made-up issue/conspiracy (1).</p> <p>“Believers” (1) who regard the scientific evidence as clear and undeniable (1).</p> <p>There are some people who are neither one thing nor the other (1) and may debate the cause (1) and/or the effects (1).</p> <p>Climate change is regarded as a problem e.g. by environmentalists, internationally (1) and this may be linked to other problems such as sea level rise (1).</p> <p>People may want to slow down or reduce climate change (1) e.g. by reducing their personal eco-footprint (1).</p> <p>Note: attitudes must be implicit or explicit, and any development of impacts or actions must be in the context of an attitude.</p> | Kyoto etc without reference to an attitude | <p>2</p> <p>(1+1)</p> |

| Question Number | Answer | Reject | Mark |
|-----------------|--|--|---|
| 5(a) | <p>There may have also been a significant reduction in injuries (1). Buses are safer (1) compared to other transport, e.g. cars / walking / cycling (1). The road may have been improved to accommodate the BRT system (1). More use of public transport may improve the air quality (1) as fewer vehicles are being used (1). Schemes reduce congestion (1) which create less pollution / gases etc (1). Schemes reduce the number of vehicles on the road (1).</p> <p>Accept other valid ideas, including use of data to support an idea.</p> <p>Note use of resource if not required for max 4 marks.</p> | <p>Reduces deaths (without use of any data) as in question stem.</p> | <p>4</p> <p>(1+1)+(1+1)</p> <p>1+(1+1+1)</p> <p>1+1+1+1</p> |

| Question Number | Indicative content | |
|--|--|---|
| <p>*5 (b) QWC i-ii-iii exp</p> | <p>Examples and management initiatives can be taken from any location, but many will use textbook examples. Must be in the context of tropical rainforests.</p> <div style="border: 1px solid black; padding: 5px;"> <p><u>Madagascar.</u> In 2001 Givaudan, a Swiss company sent a team to Madagascar to survey for new fragrances. It developed 40 aromas that were then sold. The company shared the profits with local communities through conservation and development initiatives, thereby maintaining the forest.</p> <p><u>Bolivia.</u> Another form of management is through carbon credits. LICs can set aside some of their forest and receive carbon credits. Industrialised countries can then buy these credits off the country and in this way the developing country earns money from its forest. The largest carbon credit project in the world is in Bolivia. The project is based in the Noel Kempff National Park, which is an area of 1.5m hectares, and has been an UNESCO World Heritage site since 2000. Bolivia has received £25m by selling the carbon credits of this area. The money has gone straight to the communities who live in the areas as compensation. This means that they are no longer dependent on logging and destroying the forest to farm to earn a living.</p> <p><u>Ecuador.</u> Texaco has agreed to pay \$40 million to cover its share for the clean-up of, amongst other things, some 160 of the 600 waste pits created. But the chief of the local Secoya tribe stated that \$6 billion was needed to do the job properly. Maxus energy who extracts oil from Yasuni National Park has built an underground pipeline which has less of an environmental impact. It has provided schools for the local Huaorani and Quichua tribes and invested \$60 million in environmental protection.</p> </div> <p>Note - do not credit impacts.</p> <p>This is an evaluative question so candidates should be well rewarded when attempting to communicate ideas that include evaluative ideas. Thereby showing a greater level of understanding and linkage to the command set.</p> | |
| Level | Mark | Descriptor |
| Level 0 | 0 | No acceptable response. |
| Level 1 | 1-3 | An attempt to describe at least one management technique. Case study material may be described, but is not always relevant to the answer (must be located and linked to tropical rainforests). For top of level some attempt to give reasons or explanation. Generally clearly communicated but with limited use of geographical terminology. |

| | | |
|--------------|-----|---|
| Level 2 | 4-6 | One clear explanation of an approach to managing forests. Likely to be a located case study which developed to illustrate one or more of the explanations. For top of level must have two or more management techniques, with some explanation linked to at least one. Well communicated with good use of geographical terminology. |
| Level 3 | 7-9 | Good explanation of tropical rainforest management schemes. In this band expect two or more explanations combined with a small element of discussion / evaluation. For top of band there will be better depth and or range. Well communicated with good use of geographical terminology. |
| SPaG Level 0 | 0 | Errors severely hinder the meaning of the response or candidate does not spell, punctuate or use the rules of grammar within the context of the demands of the question. |
| SPaG Level 1 | 1 | <i>Threshold performance</i> Candidate spells, punctuates and uses the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately. |
| SPaG Level 2 | 2-3 | <i>Intermediate performance</i> Candidate spells, punctuates and uses the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility. |
| SPaG Level 3 | 4 | <i>High performance</i> Candidate spells, punctuates and uses the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision. |