



Oxford Cambridge and RSA

**GCSE (9–1) Geography B (Geography for Enquiring Minds)**  
**J384/01** Our Natural World

MARK SCHEME

Duration: 1 hour 15 minutes

MAXIMUM MARK 70

**This document consists of 20 pages**

**MARKING INSTRUCTIONS****PREPARATION FOR MARKING  
SCORIS**

1. Make sure that you have accessed and completed the relevant training packages for on-screen marking: *RM assessor Online Training*; *OCR Essential Guide to Marking*.
2. Make sure that you have read and understood the mark scheme and the question paper for this unit. These are posted on the RM Cambridge Assessment Support Portal <http://www.rm.com/support/ca>
3. Log-in to RM assessor and mark the **required number** of practice responses (“scripts”) and the **number of required** standardisation responses.

YOU MUST MARK 10 PRACTICE AND 10 STANDARDISATION RESPONSES BEFORE YOU CAN BE APPROVED TO MARK LIVE SCRIPTS.

**MARKING**

1. Mark strictly to the mark scheme.
2. Marks awarded must relate directly to the marking criteria.
3. The schedule of dates is very important. It is essential that you meet the RM assessor 50% and 100% deadlines. If you experience problems, you must contact your Team Leader without delay.
4. If you are in any doubt about applying the mark scheme, consult your Team Leader by telephone or the RM assessor messaging system, or by email.
5. **Crossed Out Responses**  
Where a candidate has crossed out a response and provided a clear alternative then the crossed out response is not marked. Where no alternative response has been provided, examiners may give candidates the benefit of the doubt and mark the crossed out response where legible.

**Rubric Error Responses – Optional Questions**

Where candidates have a choice of question across a whole paper or a whole section and have provided more answers than required, then all responses are marked and the highest mark allowable within the rubric is given. Enter a mark for each question answered into RM assessor, which will select the highest mark from those awarded. (*The underlying assumption is that the candidate has penalised themselves by attempting more questions than necessary in the time allowed.*)

**Multiple Choice Question Responses**

When a multiple choice question has only a single, correct response and a candidate provides two responses (even if one of these responses is correct), then no mark should be awarded (as it is not possible to determine which was the first response selected by the candidate).

*When a question requires candidates to select more than one option/multiple options, then local marking arrangements need to ensure consistency of approach.*

**Contradictory Responses**

When a candidate provides contradictory responses, then no mark should be awarded, even if one of the answers is correct.

**Short Answer Questions** (requiring only a list by way of a response, usually worth only **one mark per response**)

Where candidates are required to provide a set number of short answer responses then only the set number of responses should be marked. The response space should be marked from left to right on each line and then line by line until the required number of responses have been considered. The remaining responses should not then be marked. Examiners will have to apply judgement as to whether a 'second response' on a line is a development of the 'first response', rather than a separate, discrete response. *(The underlying assumption is that the candidate is attempting to hedge their bets and therefore getting undue benefit rather than engaging with the question and giving the most relevant/correct responses.)*

**Short Answer Questions** (requiring a more developed response, worth **two or more marks**)

If the candidates are required to provide a description of, say, three items or factors and four items or factors are provided, then mark on a similar basis – that is downwards (as it is unlikely in this situation that a candidate will provide more than one response in each section of the response space.)

**Longer Answer Questions** (requiring a developed response)

Where candidates have provided two (or more) responses to a medium or high tariff question which only required a single (developed) response and not crossed out the first response, then only the first response should be marked. Examiners will need to apply professional judgement as to whether the second (or a subsequent) response is a 'new start' or simply a poorly expressed continuation of the first response.

6. Always check the pages (and additional objects if present) at the end of the response in case any answers have been continued there. If the candidate has continued an answer there then add a tick to confirm that the work has been seen.
7. Award No Response (NR) if:
  - there is nothing written in the answer space.

Award Zero '0' if:

















- anything is written in the answer space and is not worthy of credit (this includes text and symbols).

Team Leaders must confirm the correct use of the NR button with their markers before live marking commences and should check this when reviewing scripts.

8. The RM assessor **comments box** is used by your team leader to explain the marking of the practice responses. Please refer to these comments when checking your practice responses. **Do not use the comments box for any other reason.**  
If you have any questions or comments for your team leader, use the phone, the RM assessor messaging system, or e-mail.
9. Assistant Examiners will send a brief report on the performance of candidates to their Team Leader via email by the end of the marking period. The report should contain notes on particular strengths displayed as well as common errors or weaknesses. Constructive criticism of the question paper/mark scheme is also appreciated.
10. For answers marked by levels of response: Not applicable in F501
- To determine the level** – start at the highest level and work down until you reach the level that matches the answer
  - To determine the mark within the level**, consider the following:

Descriptor	Award mark
On the borderline of this level and the one below	At bottom of level
Just enough achievement on balance for this level	Above bottom and either below middle or at middle of level (depending on number of marks available)
Meets the criteria but with some slight inconsistency	Above middle and either below top of level or at middle of level (depending on number of marks available)
Consistently meets the criteria for this level	At top of level

## 11. Annotations

Annotation	Meaning
	Blank page
	Noted but no credit given
	Tick
	Unclear
	Cross
	Omission mark
	Level 1
	Level 2
	Level 3
	Level 4
	Development
	Relevant place detail
	Benefit of doubt
	Tick
	Communicate findings
	Not Relevant

## 12. Subject Specific Marking Instructions

### INTRODUCTION

Your first task as an Examiner is to become thoroughly familiar with the material on which the examination depends. This material includes:

- the specification, especially the assessment objectives
- the question paper and its rubrics
- the mark scheme.

You should ensure that you have copies of these materials.

You should ensure also that you are familiar with the administrative procedures related to the marking process. These are set out in the OCR booklet **Instructions for Examiners**. If you are examining for the first time, please read carefully **Appendix 5 Introduction to Script Marking: Notes for New Examiners**.

Please ask for help or guidance whenever you need it. Your first point of contact is your Team Leader.

**USING THE MARK SCHEME**

Please study this Mark Scheme carefully. The Mark Scheme is an integral part of the process that begins with the setting of the question paper and ends with the awarding of grades. Question papers and Mark Schemes are developed in association with each other so that issues of differentiation and positive achievement can be addressed from the very start.

This Mark Scheme is a working document; it is not exhaustive; it does not provide 'correct' answers. The Mark Scheme can only provide 'best guesses' about how the question will work out, and it is subject to revision after we have looked at a wide range of scripts.

The Examiners' Standardisation Meeting will ensure that the Mark Scheme covers the range of candidates' responses to the questions, and that all Examiners understand and apply the Mark Scheme in the same way. The Mark Scheme will be discussed and amended at the meeting, and administrative procedures will be confirmed. Co-ordination scripts will be issued at the meeting to exemplify aspects of candidates' responses and achievements; the co-ordination scripts then become part of this Mark Scheme.

Before the Standardisation Meeting, you should read and mark in pencil a number of scripts, in order to gain an impression of the range of responses and achievement that may be expected.

In your marking, you will encounter valid responses which are not covered by the Mark Scheme: these responses must be credited. You will encounter answers which fall outside the 'target range' of Bands for the paper which you are marking. Please mark these answers according to the marking criteria.

Please read carefully all the scripts in your allocation and make every effort to look positively for achievement throughout the ability range. Always be prepared to use the full range of marks.

**LEVELS OF RESPONSE QUESTIONS:**

The indicative content indicates the expected parameters for candidates' answers, but be prepared to recognise and credit unexpected approaches where they show relevance.

Using 'best-fit', decide first which set of level descriptors best describes the overall quality of the answer. Once the level is located, adjust the mark concentrating on features of the answer which make it stronger or weaker following the guidelines for refinement.

**Highest mark:** If clear evidence of all the qualities in the level descriptors is shown, the HIGHEST Mark should be awarded.

**Lowest mark:** If the answer shows the candidate to be borderline (i.e. they have achieved all the qualities of the levels below and show limited evidence of meeting the criteria of the level in question) the LOWEST mark should be awarded.

**Middle mark:** This mark should be used for candidates who are secure in the level. They are not 'borderline' but they have only achieved some of the qualities in the level descriptors.

Be prepared to use the full range of marks. Do not reserve (e.g.) highest level marks 'in case' something turns up of a quality you have not yet seen. If an answer gives clear evidence of the qualities described in the level descriptors, reward appropriately.



	<b>AO1</b>	<b>AO2</b>	<b>AO3</b>
<b>Comprehensive</b>	A range of detailed and accurate knowledge that is fully relevant to the question.	A range of detailed and accurate understanding that is fully relevant to the question.	Detailed and accurate interpretation through the application of relevant knowledge and understanding. Detailed and accurate analysis through the application of relevant knowledge and understanding. Detailed and substantiated evaluation through the application of relevant knowledge and understanding. Detailed and substantiated judgement through the application of relevant knowledge and understanding.
<b>Thorough</b>	A range of accurate knowledge that is relevant to the question.	A range of accurate understanding that is relevant to the question.	Accurate interpretation through the application of relevant knowledge and understanding. Accurate analysis through the application of relevant knowledge and understanding. Supported evaluation through the application of relevant knowledge and understanding. Supported judgement through the application of relevant knowledge and understanding.
<b>Reasonable</b>	Some knowledge that is relevant to the question.	Some understanding that is relevant to the question.	Some accuracy in interpretation through the application of some relevant knowledge and understanding. Some accuracy in analysis through the application of some relevant knowledge and understanding. Partially supported evaluation through the application of some relevant knowledge and understanding. Partially supported judgement through the application of some relevant knowledge and understanding.
<b>Basic</b>	Limited knowledge that is relevant to the topic or question.	Limited understanding that is relevant to the topic or question.	Limited accuracy in interpretation through lack of application of relevant knowledge and understanding. Limited accuracy in analysis through lack of application of relevant knowledge and understanding. Un-supported evaluation through lack of application of knowledge and understanding. Un-supported judgement through lack of application of knowledge and understanding.

Question		Answer	Mark	Guidance
1	(a)	<p>A weather event that is significantly different from the average/ usual weather pattern (✓)</p> <p>A weather event that can cause a threat to life (✓)</p> <p>A weather event that can cause damage (to property) (✓)</p>	1	<p>(✓)</p> <p>Do not credit Weather that it is extreme Examples with no attempt to define the key word.</p>
	(b)	<p>Warm water moves eastwards instead of westwards (✓)</p> <p>Warmer temperatures occur in South America (✓)</p> <p>Easterly winds are weaker across the Pacific Ocean (✓)</p> <p>Lack of cold water along coast of South America (✓)</p> <p>Trade winds swap direction/ Westerly (✓)</p> <p>Low pressure (✓)</p> <p>More rainfall in South America (✓)</p> <p>Drought (✓)</p> <p>Increased risk of flooding (✓)</p> <p>Increased risk of mud slides (✓)</p>	3	<p>3 x 1 (✓) for valid points interpreted from the resource suggesting how South America may be affected during an El Niño year</p> <p>Credit Impacts on the Central and South Pacific Changes in weather in South America, as they can be inferred from understanding Fig. 1. Winds may either weaken or reverse direction</p> <p>Do not credit A second contradictory idea without making it clear that 2 different parts of South America are affected.</p>
	(c)	A: Bar graph (✓)	1	<p>(✓)</p> <p>Mark any clear indication of an answer. If two answers are given, then award 0.</p>

	(*d)	<p><b>Level 3 (6–8marks)</b> An answer at this level demonstrates <b>thorough</b> knowledge (AO1) and <b>reasonable</b> understanding (AO2) of the technological developments that are used to mitigate the impacts of a tectonic hazard. There will be a <b>thorough</b> analysis of the technological developments used to mitigate the impacts of a tectonic hazard (AO3). This will be shown by including <b>well-developed</b> ideas about the technological developments used to mitigate the impacts of a tectonic hazard. There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</p> <p><b>Level 2 (3–5 marks)</b> An answer at this level demonstrates <b>reasonable</b> knowledge (AO1) and <b>basic</b> understanding (AO2) of the technological developments that are used to mitigate the impacts of a tectonic hazard. There will be a <b>reasonable</b> analysis of the technological developments used to mitigate the impacts of a tectonic hazard (AO3). This will be shown by including <b>developed</b> ideas about the technological developments used to mitigate the impacts of a tectonic hazard. There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</p> <p><b>Level 1 (1–2 marks)</b> An answer at this level demonstrates <b>basic</b> knowledge (AO1) and <b>basic</b> understanding (AO2) of the technological developments that are used to mitigate the impacts of a tectonic hazard. There will be a <b>basic</b> analysis of the technological developments used to mitigate the impacts of a tectonic hazard (AO3). This will be shown by including <b>simple</b> ideas about the technological developments used to mitigate the impacts of a tectonic hazard. The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.</p>	8	<p><b>Indicative Content</b> Responses could include: Building design Prediction Early warning systems</p> <p>Note that all technological developments must be hazard-appropriate</p> <p>Example of a <b>well-developed</b> idea: Early warning systems involve automatic texts that are activated if seismometers detect potential earthquakes. Although the technology only gives a few seconds warning it can be enough for people to hide under tables protecting themselves from falling rubble. The disadvantage of this system is it is very expensive and may be impractical for an LIDC where not everyone may own such a device.</p> <p>Example of a <b>developed</b> idea: In Iceland, seismographs are used to monitor volcanic eruptions. If abnormal movement is detected, warnings are sent out to everyone via mobile phones.</p> <p>Example of a <b>simple</b> idea: Monitoring the volcano using seismometers to detect if their might an eruption and action can be taken.</p> <p>Max 3 marks if a non-tectonic hazard is assessed.</p>
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			<b>0 marks</b> No response worthy of credit.		
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Question		Answer	Mark	Guidance
2	(a)	B: Large-scale, long-term changes in average temperature and weather patterns (✓)	1	(✓) Mark any clear indication of an answer. If two answers are given, then award 0.
	(b)	<p>There are cycles/ fluctuations in the data (✓) between 75,000 and 120,000 years in length (DEV). The cooling is relatively gradual with more sudden warming (✓) (C)</p> <p>There are around cycles of cooling and warming (✓) between about 3°C above current temperature and -9°C below current temperature (DEV). The warming is relatively rapid (✓) (C)</p> <p>The overall trend shows a fluctuating change in temperature (✓). 125,000 years ago, there was a warm climate with a temperature of 2°C above present compared to -9°C below present, 140,000 years ago (DEV) This happens every 75,00 to 120,000 years (✓) (C)</p>	4	<p>2 x 1 (✓) for describing the trend 1 x 1 (DEV) for appropriate use of data 1 x 1 (C) for communicating the answer in an appropriate and logical order</p> <p>Ensure that the data used is temperature change from present.</p> <p>Credit A rapid increase in temperature A rapid decrease in temperature</p> <p>Do not credit A gradual increase in temperature A gradual decrease in temperature</p>
	(c)	<p>The painting shows what the temperature was like when it was painted (✓)</p> <p>The River Thames is frozen which we don't see now (✓)</p> <p>The climate has got warmer since the painting was created (✓)</p>	2	<p>2 x 1 for valid explanations of how the painting could be used as evidence for climate change</p> <p>Development awarded with (✓) as a further valid explanation</p> <p>Do not credit The River Thames was frozen The climate has changed</p>

	(d)	<p><b>Level 3 (5-6 marks)</b> An answer at this level demonstrates <b>thorough</b> understanding why climate change is considered to be a global issue (AO2).</p> <p>This will be shown by including <b>well-developed</b> ideas about climate change and why it is considered to be a global issue.</p> <p><b>Level 2 (3-4 marks)</b> An answer at this level demonstrates <b>reasonable</b> understanding why climate change is considered to be a global issue (AO2).</p> <p>This will be shown by including <b>developed</b> ideas about climate change and why it is considered to be a global issue.</p> <p><b>Level 1 (1-2 marks)</b> An answer at this level demonstrates <b>basic</b> understanding why climate change is considered to be a global issue (AO2).</p> <p>This will be shown by including <b>simple</b> ideas about climate change and why it is considered to be a global issue.</p> <p><b>0 marks</b> No response worthy of credit.</p>	6	<p><b>Indicative Content</b> A range of social, economic and environmental impacts should be considered worldwide, such as: Impacts of sea level rise Increase in extreme weather events</p> <p>The global nature of causes of climate change and the release of CO<sub>2</sub> from countries around the world.</p> <p>The reduction of CO<sub>2</sub> requires co-operation from countries all around the world.</p> <p>Example of a <b>well-developed</b> idea: If temperatures become too high, then places such as Tuvalu may become uninhabitable due to sea level rise. This may cause migration as people are forced to move, leading to overcrowding in the areas they are travelling to. This can lead to food shortages with products having to be exported in from other locations.</p> <p>Example of a <b>developed</b> idea: Global warming causes polar ice caps to melt which flood low-lying islands in other parts of the world.</p> <p>Example of a <b>simple</b> idea: Polar ice caps melt and sea level rises.</p>
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Question		Answer	Mark	Guidance
3	(a)	C: Isoline (✓)	1	(✓)
	(b)	Lowland (✓) Flat (✓) Plain (✓)	1	(✓) Do not allow coastal plain
	(c)	The majority of the upland areas are found in the north (✓) and the west (✓) of the UK.  The majority of upland areas are found in the north (✓) of the UK with the highest upland areas being in Scotland (✓) (C)	3	2 x 1 (✓) for describing the distribution of upland areas 1 x 1 (C) for communicating the answer in an appropriate and logical order  Mark where upland areas are located, do not award marks for where they are not located.  Communication mark awarded if the answer deals has a UK wide distribution first and a smaller sub-division of the UK afterwards or vice versa.
	(d)	<b>The rate at which different rock types erode:</b> Bar graph (✓)  <b>The rate of erosion of rocks at one place over time:</b> Line graph (✓)  <b>The different rock types found in a river deposit:</b> Pie chart (✓)	2	3 correct = 2 marks (✓) 1 or 2 correct = 1 mark (✓)

	(e)	<p><b>Case study – UK river basin</b></p> <p><b>Level 3 (5-6 marks)</b> An answer at this level demonstrates <b>thorough</b> knowledge of the geology and resultant landforms in the chosen UK river basin (AO1) with a <b>thorough</b> understanding of the influence of geology in the formation of river landforms within the chosen river basin (AO2). This will be shown by including <b>well-developed</b> ideas about the influence of geology in the formation of river landforms within the chosen river basin. The answer must also include place-specific details for the named river basin.</p> <p><b>Level 2 (3-4 marks)</b> An answer at this level demonstrates <b>reasonable</b> knowledge of the geology and resultant landforms in the chosen UK river basin (AO1) with a <b>reasonable</b> understanding of the influence of geology in the formation of river landforms within the chosen river basin (AO2). This will be shown by including <b>developed</b> ideas about the influence of geology in the formation of river landforms within the chosen river basin. Developed ideas but no place-specific details credited up to <b>bottom</b> of level.</p> <p><b>Level 1 (1-2 marks)</b> An answer at this level demonstrates <b>basic</b> knowledge of the geology and resultant landforms in the chosen UK river basin (AO1) with a <b>basic</b> understanding of the influence of geology in the formation of river landforms within the chosen river basin (AO2). This will be shown by including <b>simple</b> ideas about the influence of geology in the formation of river landforms within the chosen river basin.</p> <p>Simple ideas or appropriate named example only credited at <b>bottom</b> of level.</p> <p><b>0 marks</b> No response worthy of credit.</p>	6	<p><b>Indicative Content</b></p> <p>Geology River landforms (appropriate) – e.g. waterfall, gorge. Meanders are an acceptable landform but need to be linked to the geology of the area to reach Level 2.</p> <p>Example of a <b>well-developed</b> idea: In the upper course of a river where there is a layer of hard rock (e.g. dolerite) overlying a layer of soft rock (e.g. limestone), the vertical erosion processes will wear away the soft rock more quickly, deepening the river bed and creating a steep drop called a waterfall. The softer rock is eroded more quickly creating an overhang of harder rock. This happens at High Force waterfall on the River Tees.</p> <p>Example of a <b>developed</b> idea: Waterfalls are formed where a layer of hard rock lies on top of a layer of soft rock. The river erodes the soft rock, leaving a steep drop called a waterfall.</p> <p>Example of a <b>simple</b> idea: Waterfalls are formed where hard rock lies on top of soft rock.</p> <p>Maximum Level 1 for a non-UK river.</p>
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Question		Answer	Mark	Guidance
4	(a)	C: The interdependence of plants and animals with the environment they live in (✓)	1	(✓)
	(b)	Short roots (✓) Grow very slowly (✓) Small leaves (✓) Low/ short / small (✓) Ability to stop growing (✓) Small surface area to volume ratio (✓) Compact (✓) Short growing season (✓) Survive with low levels of nutrients (✓) Survive with low levels of water (✓) Rapid reproduction (✓)	2	2 x 1 (✓) for valid feature of Arctic flora  Do not credit Can survive in cold conditions
	(c)	C: The sea ice has decreased most rapidly between 2000 and 2015 (✓)	1	(✓)
	(d)	There are fewer nutrients in the soil/ not very fertile (✓) Thin layer of topsoil / organic matter / humus (✓) Torrential / heavy rain leaching them out of the soil (✓) Soils become acidic (✓) Nutrients are taken up by plants quickly (✓) Lack of nutrients from weathered rock/ deep subsoil (✓) Undisturbed soil (✓)	3	3 x 1 (✓) for appropriate suggestions as to why tropical rainforest soils are considered to be amongst the poorest in the world  Credit Answers that are linked to nutrient cycling in the rainforest.  Do not credit Soil erosion Human activities making the soil poorer



	(e)	<p><b>Case study: sustainable management of an area of tropical rainforest</b></p> <p><b>Level 3 (5-6 marks)</b>  An answer at this level demonstrates <b>thorough</b> knowledge of one way in which an area of tropical rainforest is being sustainably managed (AO1) with a <b>thorough</b> evaluation of the effectiveness of the sustainable management (AO3). This will be shown by including <b>well-developed</b> ideas about one way in which an area of tropical rainforest is being sustainably managed and its effectiveness. The answer must also include place-specific details for the named management scheme.</p> <p><b>Level 2 (3-4 marks)</b>  An answer at this level demonstrates <b>reasonable</b> knowledge of one way in which an area of tropical rainforest is being sustainably managed (AO1) with a <b>reasonable</b> evaluation of the effectiveness of the sustainable management (AO3). This will be shown by including <b>developed</b> ideas about one way in which an area of tropical rainforest is being sustainably managed and its effectiveness. Developed ideas but no place-specific details credited up to <b>bottom</b> of level.</p> <p><b>Level 1 (1-2 marks)</b>  An answer at this level demonstrates <b>basic</b> knowledge of one way in which an area of tropical rainforest is being sustainably managed (AO1) with a <b>basic</b> evaluation of the effectiveness of the sustainable management (AO3). This will be shown by including <b>simple</b> ideas about one way in which an area of tropical rainforest is being sustainably managed and its effectiveness. Simple ideas or appropriate named example only credited at <b>bottom</b> of level.</p> <p><b>0 marks</b>  No response worthy of credit.</p>	6	<p><b>Indicative Content</b></p> <p>Case study: can be at local or regional scale</p> <p>Examples could include: ecotourism, community programmes, biosphere reserves, sustainable forestry</p> <p>Example of a <b>well-developed</b> idea:  The Puerto Nariño ecotourism scheme uses fishermen to help monitor the river ecosystems in the rainforest. This is quite effective as the number of fish have increased as the fishermen know the river and are well placed to spot illegal fishermen who might be threatening the habitat. The scheme has not been fully successful as there have been some fishermen who decided to fish illegally themselves.</p> <p>Example of a <b>developed</b> idea:  In Puerto Nariño the fishermen are employed to help stop illegal fishing and this has been quite successful as there has been an increase in the number of species.</p> <p>Example of a <b>simple</b> idea:  Scientists monitor the number of species.</p> <p>Credit  River areas in tropical rainforest</p> <p>Only mark the first strategy that the candidate identifies. This could be multiple techniques within one strategy, for instance, in an ecotourism resort they may use local sourced wood, buffer zones and restricted areas.</p>
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Question		Answer	Mark	Guidance
5	(a)	<p>Longshore drift is moving sand South (✓)</p> <p>There is a much greater drop on the south side of the groyne than the north side (✓)</p> <p>The highest drop on the south side is 54cm but only 32cm on the north side (DEV)</p> <p>The difference in the drop between the North and South side of the groyne is varied (✓)</p> <p>The drop ranges from 14cm to 22 cm (DEV)</p> <p>The largest difference is groyne 5/ the smallest difference is at groyne 1 and 4 (✓)</p> <p>The drop on the North side of the groyne is more consistent than the drop on the South side (✓)</p> <p>There is no relationship between the position on the beach and the size of the drop (✓)</p>	4	<p>2 x 1 (✓) for describing the pattern of data shown.</p> <p>1 x 1 (DEV) for using data from the table</p> <p>1 x 1 (C) for communicating the answer in an appropriate and logical order.</p> <p>Do not credit</p> <p>The difference in drop between the North and South side of the groyne is consistent.</p>
	(b)	<p>Largest mean sediment size is to the south/south west of the shoreline shown/ the (four) smallest sites for sediment size are all towards the north of the shore (✓)</p> <p>Only the two sites furthest south have a mean sediment size above 2.5 (✓)</p> <p>The smallest variation in sediment size is towards the north of the beach (✓)</p> <p>The largest sediment size is at the 2<sup>nd</sup> most southerly site (✓)</p>	2	<p>2 x 1 (✓) for valid points about the pattern of beach sediment size along the shore</p> <p>Development awarded with (✓) as a further valid explanation</p> <p>No credit for</p> <p>Up/ down</p> <p>Top/ bottom</p> <p>Data can be used to exemplify a valid pattern only.</p>
	(c)	<p>Insert a scale (✓)</p> <p>Add units for the mean sediment size (✓)</p> <p>Show the precise values for each location (✓)</p> <p>Distance between sites (✓)</p> <p>Direction of longshore drift/ prevailing wind (✓)</p> <p>Presence/ absence of sea defences (✓)</p> <p>More even interval in the key (✓)</p> <p>Location (✓)</p> <p>Title (✓)</p>	1	<p>(✓) for valid suggestion for a way Fig. 4 could be adapted</p> <p>Credit data presentation techniques rather than data collection techniques (more sites).</p>

	(d*)	<p><b>Own Fieldwork</b></p> <p><b>Level 3 (6–8 marks)</b> An answer at this level demonstrates a <b>thorough</b> evaluation (AO3) of the primary data collection methods used with a <b>thorough</b> judgement as to the extent of their success (AO3). This will be shown by including <b>well-developed</b> ideas. There is a well-developed line of reasoning which is clear and logically structured. The information presented is relevant and substantiated.</p> <p><b>Level 2 (3–5 marks)</b> An answer at this level demonstrates a <b>reasonable</b> evaluation (AO3) of the primary data collection methods used with a <b>reasonable</b> judgement as to the extent of their success (AO3). This will be shown by including <b>developed</b> ideas. There is a line of reasoning presented with some structure. The information presented is in the most-part relevant and supported by some evidence.</p> <p><b>Level 1 (1–2 marks)</b> An answer at this level demonstrates a <b>basic</b> evaluation (AO3) of the primary data collection methods used with a <b>basic</b> judgement as to the extent of their success (AO3). This will be shown by including <b>simple</b> ideas. The information is basic and communicated in an unstructured way. The information is supported by limited evidence and the relationship to the evidence may not be clear.</p> <p><b>0 marks</b> No response or no response worthy of credit.</p>	8	<p>This question will be marked using 3 levels:</p> <p><b>Indicative content</b> Evaluation of the success of data collection methods, this could include both positive and negative reflections, allowing the candidate to make a judgement on its success.</p> <p>Examples of <b>well-developed</b> ideas: To a large extent our data collection methods were successful. We measured the velocity of the river at different locations along the rivers course; we did this five times and took a mean at each location which increased the accuracy of the results, this was important to produce more secure analysis and conclusions. However a limitation is that at times the float used to measure velocity got caught in the stones in the river bed, this meant that human intervention was required and would have affected the final mean.</p> <p>Examples of <b>developed</b> ideas: I feel our data collection was successful. We measured the velocity of the river; we did this five times to increase the accuracy of the results. This was an effective method as I was able to compare the velocity at different points along the river which helped answer the overall question. However at times the float used to measure velocity got caught in the stones.</p> <p>Examples of <b>simple</b> ideas: We floated an orange down the river and timed how long it took. This worked well as we could work out the rivers' speed.</p>
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			Spelling, punctuation and grammar and the use of specialist terminology (SPaG) are assessed using the separate marking grid in Appendix 1.	3	
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**Appendix 1****Spelling, punctuation and grammar and the use of specialist terminology (SPaG) assessment grid**

<b><i>High performance 3 marks</i></b>
<ul style="list-style-type: none"> <li>• Learners spell and punctuate with consistent accuracy</li> <li>• Learners use rules of grammar with effective control of meaning overall</li> <li>• Learners use a wide range of specialist terms as appropriate</li> </ul>
<b><i>Intermediate performance 2 marks</i></b>
<ul style="list-style-type: none"> <li>• Learners spell and punctuate with considerable accuracy</li> <li>• Learners use rules of grammar with general control of meaning overall</li> <li>• Learners use a good range of specialist terms as appropriate</li> </ul>
<b><i>Threshold performance 1 mark</i></b>
<ul style="list-style-type: none"> <li>• Learners spell and punctuate with reasonable accuracy</li> <li>• Learners use rules of grammar with some control of meaning and any errors do not significantly hinder overall</li> <li>• Learners use a limited range of specialist terms as appropriate</li> </ul>
<b><i>0 marks</i></b>
<ul style="list-style-type: none"> <li>• The learner writes nothing</li> <li>• The learner's response does not relate to the question</li> <li>• The learner's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning</li> </ul>