Rewarding Learning

General Certificate of Secondary Education
2019

Geography

Unit 3

Fieldwork

[GGY31]

THURSDAY 13 JUNE, MORNING

MARK SCHEME

General Marking Instructions

Introduction
Mark schemes are intended to ensure that the GCSE examinations are marked consistently and fairly. The mark schemes provide markers with an indication of the nature and range of candidates' responses likely to be worthy of credit. They also set out the criteria which they should apply in allocating marks to candidates' responses.

Assessment objectives
Below are the assessment objectives for GCSE Geography.

Candidates must show they are able to:

AO1 Demonstrate geographical knowledge and understanding of:

- Places, environments, processes and concepts; and
- The inter-relationships between places, environments and processes;

AO2 Apply knowledge and understanding to analyse, interpret and evaluate geographical information and issues and to make judgements; and

AO3 Select, adapt and use a variety of skills and techniques to investigate questions and issues and communicate findings.

Quality of candidates' responses
In marking the examination papers, examiners should be looking for a quality of response reflecting the level of maturity which may reasonably be expected of a 16-year-old which is the age at which the majority of candidates sit their GCSE examinations.

Flexibility in marking
Mark schemes are not intended to be totally prescriptive. No mark scheme can cover all the responses which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If the answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner.

Positive marking
Examiners are encouraged to be positive in their marking, giving appropriate credit for what candidates know, understand and can do rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range of any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected of a 16-year-old GCSE candidate.

Awarding zero marks
Marks should only be awarded for valid responses and no marks should be awarded for an answer which is completely incorrect or inappropriate.

Marking calculations
In marking answers involving calculations, examiners should apply the 'own figure rule' so that candidates are not penalised more than once for a computational error.

Types of mark schemes
Mark schemes for tasks or questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication.

Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided.

Levels of response
Tasks and questions requiring candidates to respond in extended writing are marked in terms of levels of response. In deciding which level of response to award, examiners should look for the 'best fit' bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement. The following guidance is provided to assist examiners.

- **Threshold performance:** Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.
- **Intermediate performance:** Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.
- **High performance:** Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

Quality of written communication
Quality of written communication is taken into account in assessing candidates' responses to all tasks and questions that require them to respond in extended written form. These tasks and questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication.

For conciseness, quality of written communication is distinguished within levels of response as follows:

Level 1: Quality of written communication is basic.
Level 2: Quality of written communication is good.
Level 3: Quality of written communication is excellent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below.

Level 1
Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. A limited range of specialist terms is used appropriately.

Level 2
Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. A good range of specialist terms is used appropriately.

Level 3
Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. Candidates present, and organise effectively, relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. A wide range of specialist terms is used skilfully and with precision.

1 Study **Fig. 1** which shows the geographical enquiry process.

AVAILABLE MARKS

Complete **Fig. 1** by naming the three missing stages of the geographical enquiry process.

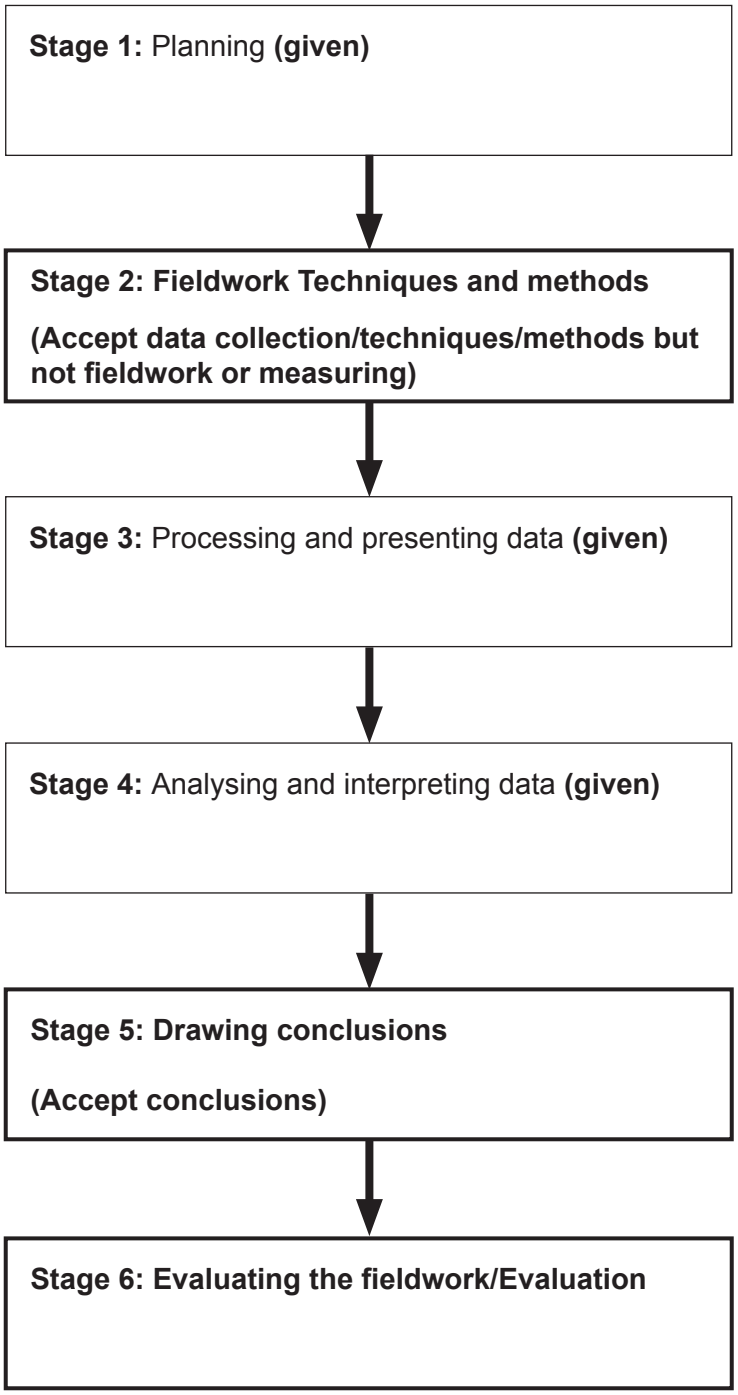

Fig. 1

(3 × [1]) [3] 3

2 State **one** risk considered when planning your fieldwork investigation **and** explain how you reduced this risk.

AVAILABLE MARKS

Candidates should identify **one** risk from their fieldwork, identified during the planning stage of **their** fieldwork.

Answers might include but are not limited to: injury from falling on slippery river banks, potential drowning due to falling into the river or the sea, being knocked down by traffic, getting an infection from the water.

Candidates are then required to explain how they attempted to reduce the risk identified.

If explanation does not relate to stated risk award max of [1]
Award [0] for a response not worthy of credit

Award [1] for the identification of a suitable risk factor,
e.g. One risk is that students could slip on the rocks, fall into the river and drown. [1]

Award [1] for a basic explanation referring to how the stated risk was reduced,
e.g. To minimise this, you could use a safety rope.

Award [2] for a limited explanation of how the stated risk was reduced,
e.g. To minimise this, students could hang a safety rope from one side of the river to the other.

Award [3] for a detailed explanation of how the stated risk was reduced,
e.g. To minimise this, students could hang a safety rope from one side of the river to the other. This would give them something to hold on if they felt they were going to fall. [3]

4

AVAILABLE MARKS

3 (i) When you planned your fieldwork you stated at least two hypotheses. State **one** hypothesis and use the graph paper to present the data for this hypothesis. Your graph must be drawn using only data from your table of data.

The candidate must clearly state a hypothesis in the space provided. If the candidate does not write their chosen hypothesis in the space provided, the submitted statement of fieldwork aims and hypotheses must be checked to establish the likely hypothesis.

The breakdown of marks is as follows:

Title [2]
Award [1] for a basic title/partial title,
e.g. A graph showing pebble size

Award [2] for a full title that refers to both variables,
e.g. A bar chart showing how pebble size changes downstream

Technique [1]
Award [1] for the use of an appropriate graphical technique to present the data from the table of data.

Accuracy [3]
Award [1] for plotting precisely and accurately some of the available data, less than 50% of the available data is plotted accurately.
Award [2] for plotting precisely and accurately the majority of the available data. There will be errors in the plotting of the data; however, a minimum of 50% of the available data will be plotted accurately.
Award [3] for plotting precisely and accurately all of the data.

Conventions [2]
Award [1] where at least one convention is missing or incomplete,
e.g. one axis label missing or there are no units of measurement.
Award [2] for all relevant conventions shown in full (both axes labelled including relevant units, provision of a key if appropriate, scaling as required. [8]

(ii) Explain why you chose to draw this type of graph.

Award [0] for a response not worthy of credit.

Award [1] for a basic explanation justifying their chosen graphical technique,
e.g. It allows me to show the two variables.
e.g. This graph allows me to plot two sets of data.

Award [2] for a limited explanation justifying their chosen graphical technique,
e.g. I chose a scattergraph as it allows me to show the relationship between the cross-sectional area and distance downstream.
e.g. I chose this graphical technique as it allows me to show the pattern of how pebble size changes.

Award [3] for a detailed explanation justifying their chosen graphical technique,
e.g. I chose a scattergraph as it allows me to show the relationship between cross-sectional area and distance downstream. I added a best-fit line to the graph which gives a visual presentation of the relationship I expected to see based on my hypothesis. [3]

(iii) Describe the pattern or relationship that your graph shows. Use figures to support your answer.

AVAILABLE MARKS

Candidates are required to describe their graph as it relates to the stated hypothesis. The description should refer to the overall pattern, trend or relationship shown. Specific values should be quoted (e.g. start and finish). The presence of any anomalies should be described including value/s.

Award [0] for an answer not worthy of credit.

Award [1]–[2] for a partial or incomplete analysis, e.g. figures may be omitted, clear anomalies are ignored.

Award [3]–[4] for a detailed analysis which describes the overall pattern or trend shown quoting specific values (e.g. start and finish); describes any anomalies present including appropriate values. [4]

(iv) Suggest a geographical reason for the pattern or relationship shown in your graph.

The focus of this question is explanation (interpretation) and not analysis (description). If the response is purely analysis award [0].

The explanation **must** be related to the data presented in the graph in **Question 3(i)**. The geographical reason must relate to the relationship, pattern or trend shown. Alternatively, the candidate may propose reasons to explain why no obvious pattern, trend or relationship is evident on the graph.

Award [0] for a response not worthy of credit.

Award [1] for a basic geographical reason related to the relationship or trend shown.

Award [2] for a limited geographical reason related to the relationship or trend shown.

Award [3] for a detailed geographical reason related to the relationship or trend shown. [3] 18

4 Choose a **different** hypothesis from the one you used in **Question 3** and write it out below. Describe the data collection method used to collect the primary data for **this** hypothesis.

AVAILABLE MARKS

If the same hypothesis is used award maximum of Level 1.

Candidates are required to describe how the data collection/methodology for their chosen hypothesis was carried out. Answers must focus on the collection of primary data only.

Where there is no link between the data collection methods described to the hypothesis listed in the submitted statement of aims and hypotheses award [0].

Award [0] for a response not worthy of credit.

Level 1 ([1])
A basic response with a vague attempt to describe the data collection methods linked to the hypothesis,
e.g. We used a tape measure.
Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. A limited range of specialist terms is used appropriately.

Level 2 ([2]–[3])
A limited response that provides some depth and description of the way that the data was collected,
e.g. We stretched a tape measure from one bank of the river to the other and used a meter stick to measure the depth [2] at regular intervals [3].
Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. A good range of specialist terms is used appropriately.

Level 3 ([4]–[5])
A detailed response that gives clear, precise instructions about what equipment was used and how it was used to collect the data required,
e.g. We stretched a tape measure from one bank of the river to the other and held it very tightly above the level of the water. We used a wooden metre stick to record the depth of the water. We recorded the depth from one river bank to the other at 15 cm intervals. [4] We measured the depth of the water in cm and recorded our results onto a data collection sheet [5].
Candidates present and organise effectively relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. A wide range of specialist terms is used skilfully and with precision. [5] 5

5 **(i)** State **one** secondary source used in your fieldwork enquiry.

AVAILABLE MARKS

Award [1] for the correct identification of a secondary source that could have been used in the fieldwork investigation. A wide range of acceptable answers can be included here including maps and textbooks.

Award [0] for a response not worthy of credit. [1]

(ii) Outline how this source was used in your investigation.
The answer here must relate to the specific secondary source named in **(i)** and must fit in with the particular fieldwork described in the fieldwork statement.

Award [0] for a response not worthy of credit or a source **not** related to the investigation.

Award [1] for a basic response that attempts to show how the secondary source was used to support the particular fieldwork,
e.g. A map was used to help us to find the different sites that we wanted to visit for the river study.

Award [2] for a response that gives a clear indication of how the secondary source was used within the fieldwork study,
e.g. A map was used to help us find the different sites that we wanted to visit for a river study. The map helped us to make sure that we could access each site safely. [2] 3

			AVAILABLE MARKS
6	(i)	Describe **one** possible problem of your data collection methods. The data collection method must relate to one of the variables shown on the table of data submitted with the paper. Award [0] for a response not worthy of credit. Award [1] for a basic description referring to a problem related to data collection methods, e.g. There were too many vehicles to count. Award [2] for a limited description referring to a clear problem related to data collection methods, e.g. The town centre was very busy when we carried out our traffic counts so we might have missed some vehicles. Award [3] for a detailed description referring to a clear problem related to data collection methods, e.g. We collected our data on market day, this meant that the town was very busy and it was difficult to make sure we logged the type of every vehicle that passed us as we completed our traffic count. [3]	
	(ii)	Describe how you could extend your study. The suggested extension to the study must relate to the fieldwork undertaken by the candidate. Award [0] for a response not worthy of credit. Award [1]–[2] for a limited description referring to how the candidate could extend the study, e.g. Visit more sites along the river [1]. e.g. Visit more sites along the river so that we can get a better picture of how it changes from source to mouth [2]. Award [3]–[4] for a sound description referring to how the candidate could extend the study, e.g. Our aim was to investigate how river characteristics change along the River Shimna. We could have extended the study by including other variables such as gradient to give us a more detailed picture of how the River Shimna changes from its source to its mouth [3]. e.g. Our aim was to investigate how river characteristics change along the River Shimna. We could have extended the study by including other variables such as gradient. This would have allowed us to investigate other relationships such as the relationship between velocity and gradient [4]. [4]	7
		Total	**40**