



Rewarding Learning

**General Certificate of Secondary Education
2025**

Geography

Unit 3

Fieldwork

[GGY31]

FRIDAY 6 JUNE, AFTERNOON

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.

Where one response is required to gain a mark, candidates will not gain credit if a correct response is given alongside one or more incorrect responses. This is referred to as 'listing'.

- 1 Study **Fig. 1** which shows the stages of the geographical enquiry process.

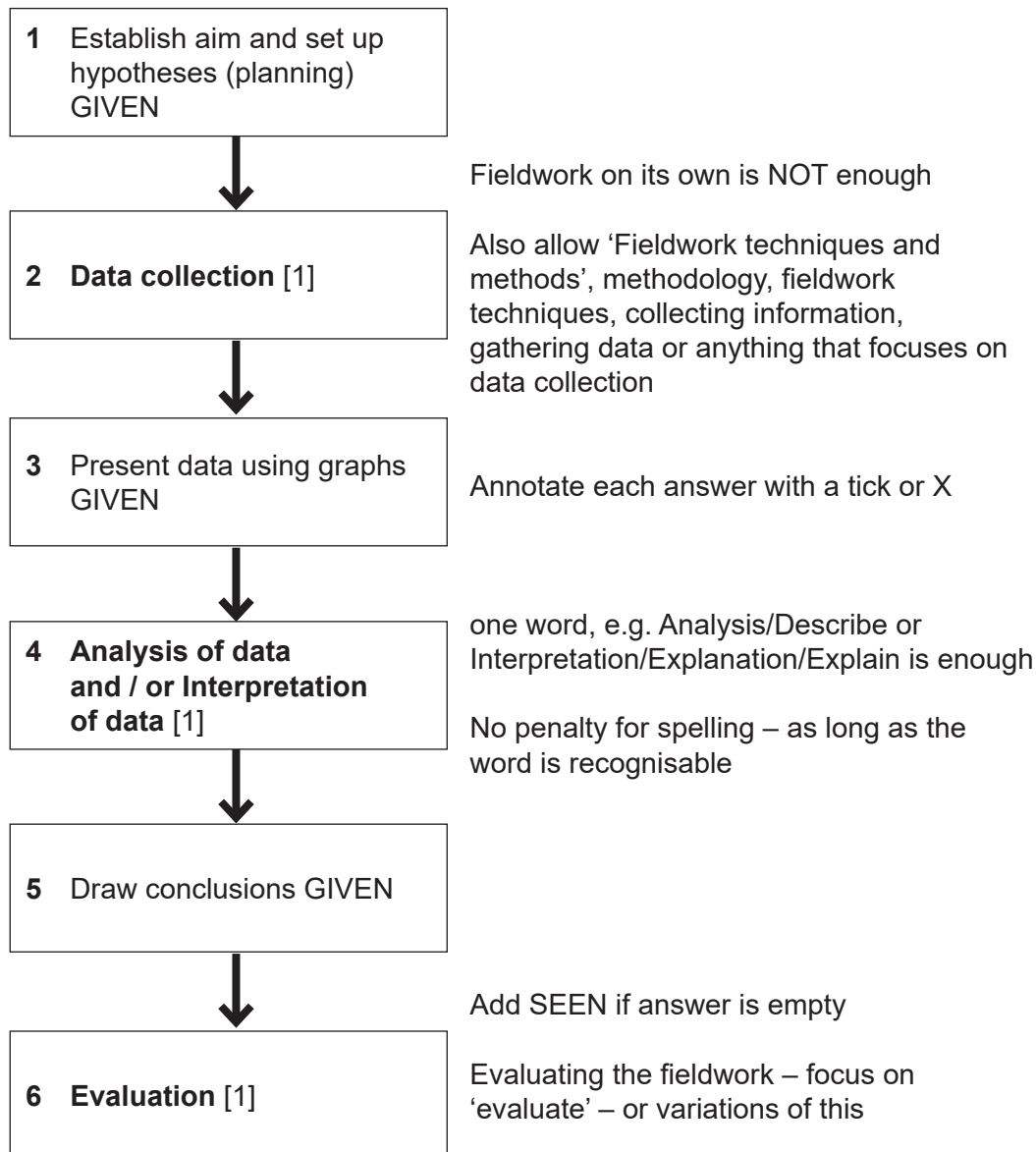


Fig. 1

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

[1] per correct named missing stage. Alternative answers may be acceptable.

3 × [1]

- 2 (i) Outline the difference between primary and secondary sources of data.

Award [1] for accurate statements on **one** source

first hand is acceptable [1]

secondary is data taken by someone else [1]

Not collected by yourself [1]

e.g. Primary data is (personally) collected in the field [1]

3

Award [2] for an accurate comparative statement on the type of data e.g. primary data is personally collected in the field [1] but secondary data is already published in books, or available from maps or the internet [1] There is no requirement to identify the source – answer should focus on definition of what a primary and secondary source is. [2]

- (ii) Identify and explain the contribution of **one** primary and **one** secondary data source to your investigation.

Award one mark for naming the source of data related to the investigation and one mark for why the source was used in their investigation.

Primary Data:

We/I is important in answer to indicate Primary data

e.g. We collected data on load size/shape from the river [1] to see if it changed downstream [2]

e.g. We counted the number of pedestrians who passed us in the street [1] to see if the number changed with distance from the CBD [2]

Secondary Data:

Bradshaw model, Powers roundness scale/Conversion tables, Census data are all enough for [1]

OS Maps or Google Maps MUST also have more detail, e.g. sheet number or place name.

e.g. I used an OS map of _____ (named place/sheet number) [1] to measure how far the sites were from the source of the river [2]

e.g. I looked up Powers Index [1] to see how rounded the load was in the river [2]

Sources should be named precisely, e.g. GCSE Geography Textbook is enough for [1]

BBC Weather report/Met Office weather forecast is enough for [1] [2 × 2 = 4]

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Alternative answers which refer back to obtaining results to analyse or to prove one of our hypotheses can be credited.

CSA is not a source but a calculation.

Photos of the sites can be credited, though candidate must clearly show whether these are primary or secondary.

- 3 (i) When you planned your fieldwork you stated at least two hypotheses.

State one hypothesis below and draw a graph for it, using data from your table.

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

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

Chosen hypothesis:

e.g. The pebble size in the Bloody Bridge River decreases with distance downstream.

Title [2]

Award [1] for a basic title/partial title, e.g. if whole of hypothesis is not covered in the graph

Annotate

Ti – 2

Te – 1

A – 3

C – 2

e.g. A graph showing pebble size

e.g. A graph showing width/depth of river (if hypothesis refers to both variables, then both must be stated in title)

Award [2] for a full title that refers to both variables

e.g. A bar chart showing how pebble size changes downstream

e.g. A graph showing how width and depth change downstream in the River _____

If answer refers to a table or wrong type of graph – only award 1 mark if both variables are listed.

Technique [1]

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

- Scatter graph – can be either continuous or discrete – i.e. sites or Distance from the source along the horizontal axes. Do not penalise if x and y axes are the wrong way round
- Line graph – continuous data – must be Dist from the source. Sites **cannot** be a line graph as sites are not usually in a continuous/linear/consecutive pattern.
- Bar chart – Discrete data – must be sites only.

If a student has both sites and distance from the source on their graph – only penalise if not correctly used – it is likely that this is OK for the technique mark.

NB – Page 17, Paragraph 3 from the Paper 3 Chief Examiner's report for 2024 contains further guidance on graphs.

Accuracy [3]

Please mark each data point and tick each correct answer and X any that are incorrect

If no table in Statement, then no accuracy marks can be awarded

Accuracy needs to be checked carefully with the table of data.

If graph scale goes off the area of the graph paper – remove one mark from the Accuracy mark.

Additional lines on graphs that are not required Penalty [–1]

Penalty of [–1] if graph does not have accurate use of shading, a ruler and the consistency of approach

Penalty of [–1] if scale for graph does not start at zero unless graph has an axis break. Graph does not need to have zero, but should start at zero

Use professional judgement for accuracy within the scale given by the candidate

Scatter graphs do not require a best fit line.

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; one axis label may be missing or there are no units of measurement
Sites along x axis is not the same as distance downstream unless stated.

Award [2] where conventions have been followed and units of measurement are included.

Check that both axes mentioned in title are written as axes labels [8]

- (ii) Analyse (describe) the pattern or relationship that your graph shows. Use figures to support your answer.

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

Do not credit interpretation/explanation.

Description must link to the graph drawn.

Look for units of measurement. Penalty of [-1] if units not included.

Award [0] for an answer not worthy of credit

Award [1] for a basic analysis of the graph presented in part (i)

e.g. the river gets deeper

e.g. the number of pedestrians decreases with distance from the centre

Award [2] for a limited analysis which may be partial or incomplete, figures may be omitted, clear anomalies are ignored

e.g. the river becomes deeper near the mouth where it measured 52 cms

e.g. the no. of pedestrians per hour decreased from ____ at the town centre to ____ at location ____

Award [3] for a detailed answer which describes the overall pattern/ trend shown quoting specific values (e.g. start and finish); describes any anomalies present including appropriate figure/s; if no anomaly is present, this should be stated OR alternatively ensure that detail is precise for [3]
e.g. the graph shows that the river becomes deeper from its source where it measured 15 cms, to its mouth where it measured 62 cms. However, site 3 is an anomaly because instead of becoming deeper it actually became 13 cms shallower than site 2

e.g. the no of pedestrians per hour decreased from ____ at the town centre to ____ at location ____; but there was an anomaly at location ____ where the number of pedestrians increased to ____ per hour [3]

- (iii) Using your knowledge of geographical theory, interpret (explain) the pattern/trend shown on your graph.

The focus of this question is on **explanation** and not analysis. If the given answer only analyses the graph – award [0]

The explanation/interpretation must be related to the data displayed on the graph in part (i). The answer will require the use of geographical theory to explain the relationship, trend or pattern shown in the graph.

Alternatively, the candidate may propose reasons to explain why there is no obvious pattern, trend or relationship evident in the graph.

Award [0] for a response not worthy or credit

Level 1 ([1]–[2])

A basic interpretation/explanation of the graph which does not fully explain all aspects of the graph and does not use geographical theory to explain the relevant pattern or trend shown by the graph.

e.g. the river is deeper at Site 5 because it has eroded the riverbed [1]

e.g. the number of pedestrians decreases with distance from the CBD because there are fewer shops located further from the centre of the town. [2]

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 ([3]–[4])

A limited explanation of the graph which covers the main pattern/trend/relationship. However, use of geographical theory is simple and requires further detail. Equally, an answer containing lots of geographical theory but lacking interpretation of the graph will be confined to this level.

e.g. the river gets deeper from Sites 1 to 5 because the bed has been eroded by abrasion/corrasion; this process wears down the riverbed making the depth of the river increase. [3]

e.g. the number of pedestrians decreases with distance from the CBD because there are fewer shops located further from the centre of the town and more large chain stores selling higher order goods in the town centre. [3]

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 ([5]–[6])

NB – needs a link back to graph for Level 3.

Short comment also required beside Level box.

A detailed answer which provides a comprehensive interpretation/explanation of the graph and has covered the main pattern/trend/relationship and has integrated relevant geographical theory, using specialist terminology as appropriate.

e.g. the river becomes deeper from its source to its mouth due to erosion by abrasion, which is when rock fragments carried by the river grind against the riverbed; this grinding causes the river channel to become deeper. The grinding is more powerful during a flood [5] when large fragments of rock are rolled along the riverbed and may have been recently eroded from the bank

and deposited at Site 3 making the river more shallow at Site 3 compared to Site 2. [6]

e.g. the number of pedestrians decreases with distance from the CBD because there are fewer shops located further from the centre of the town and more large chain stores selling higher order goods in the town centre which attract people from other nearby settlements into the CBD; the anomaly of the increase in the number of pedestrians further from the CBD at location ___ may be explained by the row of shops at the garage attracting more customers than expected this far from the town centre. [6]

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. [6]

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- 4 Name one piece of equipment you used to collect data for the hypothesis stated in **3 (i)** and explain how you used it to ensure the accuracy and reliability of your data collection.

Award [0] for an answer not worthy of credit, such as one which discusses different data collection to that stated in **3 (i)**.

Name of equipment – no mark awarded but credited in the explanation of how it ensured accuracy and reliability of the data collection

e.g. a ruler to measure the depth of the river

e.g. a tally table and stopwatch to record the number of pedestrians passing in 20 minute slots of time

Award [1] for a basic explanation of how named equipment was used with little reference to ensuring accuracy and reliability

e.g. We put the ruler into the water in the middle of the river and took a reading of the depth

e.g. We counted the number of pedestrians who passed our checkpoint in 20 minutes; we recorded the numbers in a table

Award [2] for an explanation which relates to accuracy and reliability of the data

e.g. We held the ruler straight into the river at regular distances across the river channel and noted the depths in cm and then we recorded the depths in a table

e.g. We used a stop watch to count the number of pedestrians who passed our checkpoint in 20 minutes; we recorded the numbers in a table using a tally chart; Two people were at each checkpoint so we could concentrate on counting accurately.

Award [3] for an explanation of how the equipment was used to help make data collection accurate and reliable

Answers should go beyond methodology and discuss how equipment was used to find accurate and reliable results.

e.g. At each site, the same person put the ruler vertically upright in the river at regular intervals 5 times across the river channel and noted the depths in cm in a table and then took an average of the readings to find an average depth at each site; this helped to average out places where large boulders on the bed made the bed more shallow (and so made our data more accurate)

e.g. We used a stopwatch to count the number of pedestrians who passed our checkpoint in both directions in 20 minutes; two people were at each checkpoint so we could concentrate on counting accurately in only one direction; we

recorded the numbers in a table using a tally chart and we worked together to add the two directions together and we repeated the measurements twice to ensure that our results were reliable

AVAILABLE
MARKS

3

- 5 Choose a **different** hypothesis from the one you used in **Question 3** and write it below.

There are no marks for writing out the second hypothesis.

Note: check to confirm that the candidate is using a different hypothesis from the one which was used in **Question 3**.

Evaluate the conclusion reached for this second hypothesis. If the same hypothesis is used for **(ii)** as addressed in Question 3 maximum Level 1 marks.
If no hypothesis listed = Max [1]

Award [0] for a response not worthy of credit

Level 1 ([1])

A brief response that may simply state the conclusion for the given hypothesis or gives a simplistic evaluation

[1] for statement of conclusion

[2] for Positives of Eval

[2] for Negatives of Eval

Please use – and + to annotate.

e.g. The size and shape of stones from the source to the mouth became smaller and more rounded

e.g. Our conclusion was that the hypothesis was proved correct

e.g. We proved that land uses changed from commercial to residential with distance from the CBD

Level 2 ([2]–[3])

A more detailed response that provides some evaluation of the conclusion which may refer to a problem or limitation with data collection or alternatively a positive of the data collection.

Annotate as

S – 1 (Statement of Conclusion)

P – 2 (Positives)

N – 2 (Negatives)

e.g. We proved our hypothesis was correct – that the stones got smaller and more rounded from the source to the mouth of the river [2] although this conclusion is not totally true because there were some anomalies as there were large stones found downstream which we have not fully investigated [3]

e.g. We proved our hypothesis was correct – that land uses changed from commercial to residential with distance from the CBD but we found some commercial land uses farther from the CBD [2] such as a car showroom and some offices which we had not expected [3]

Level 3 ([4]–[5])

A detailed response that provides a good evaluation of the conclusion reached in relation to the stated hypothesis. Answers at this level will be balanced and will have a full evaluation of the issues related to the conclusion

e.g. We concluded that stones got smaller and more rounded from the source to the mouth. This conclusion is not totally reliable because sometimes only the large stones in the river were selected for measuring and not the smaller stones which might have caused bias in the results; this reduced the reliability of our conclusion. However, one strength of proving our hypothesis was that

we measured 20 stones at each of the sites which provided a wide selection of stones [4] and so we can be confident our conclusion was accurate and our hypothesis proved [5]

e.g. We proved our hypothesis was correct – that land uses changed from commercial to residential with distance from the CBD but we found some commercial land uses farther from the CBD such as a car showroom and some offices which we had not expected; however we know that land values are high in the CBD and there is little space for car parking so some functions are more easily accessible farther from the CBD where there is ample parking for customers in offices in the suburbs of settlements [4]; this means we cannot state that our hypothesis is fully proven as there are anomalies and we would need to extend our fieldwork to find out the reasons why particular offices locate out of the town centre [5]

AVAILABLE
MARKS

5

- 6 (i) Outline two risks considered when planning your data collection for **this** hypothesis.

Award [0] for a response not worthy of credit

Candidates should identify two different risks in collecting data for their investigation.

Answers might include, but are not limited to:

- Injury from falling down slippery riverbanks
- Accidents when crossing roads in urban fieldwork

One word is not enough to outline the risks

Risks must be appropriate for the investigation topic.

Look for risk of injury in answers.

Risk + Explanation = [2]

Weather conditions is not enough – needs detail on impact of weather e.g. rain, sun, etc.

Specific diseases needed rather than vague answers.

Answers that are similar like slipping on rocks should only be credited once.

Mitigations are acceptable as considerations of risk

e.g. The weather conditions just before our river study could cause very heavy rain [1] so the level of the water in the river rises too high and the riverbanks become slippery and unsafe to access [2]

e.g. We could catch Weil's disease from having our hands in the river water to pick up stones [1] from the bed and then touching sweets/eating food without washing our hands [2]

e.g. Someone may not look out for traffic and step off the pavement and be injured in a traffic accident [1] because they were so focussed on moving quickly to the next checkpoint to record the land use of buildings [2]

[2 × 2 = 4]

- (ii) Outline **two** ways you could extend the scope of your geographical fieldwork study in relation to your stated aim.

Award [0] for an answer not worthy of credit and should be something which is not included in the Table of data.

Credit the collection of new or additional data with reference to what should be collected

Award [1] for each correct answer

Do not credit improvements – answer needs to change scope of the

fieldwork.
e.g. We could repeat our fieldwork on a different day/month/time and compare with our previous results
e.g. We could extend the area which we have studied by including more sites or checkpoints to see how the river changes from source to mouth
e.g. We could compare our settlement with another town to see how the land use changes with distance from the CBD and if the anomalies also occur with another settlement

[1 × 2 = 2]

Total

AVAILABLE MARKS
6
40