GCSE MARKING SCHEME

SUMMER 2019

GEOGRAPHY - COMPONENT 3
SPECIFICATION A and SPECIFICATION B
C111U30-1 and C112U30-1

INTRODUCTION

This marking scheme was used by WJEC for the 2019 examination. It was finalised after detailed discussion at examiners' conferences by all the examiners involved in the assessment. The conference was held shortly after the paper was taken so that reference could be made to the full range of candidates' responses, with photocopied scripts forming the basis of discussion. The aim of the conference was to ensure that the marking scheme was interpreted and applied in the same way by all examiners.

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

WJEC regrets that it cannot enter into any discussion or correspondence about this marking scheme.

EDUQAS GCSE GEOGRAPHY
SPECIFICATION A and SPECIFICATION B

COMPONENT 3

Summer 2019 Mark Scheme

Instructions for examiners of GCSE Geography when applying the marking scheme

1. Positive marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, rather than adopting the approach of penalising him/her for any omissions. It should be possible for a very good response to achieve full marks and a very poor one to achieve zero marks.

Marks must **not** be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme.

GCSE Geography marking schemes are presented in a common format as shown below:

This box contains the sub-question

The columns to the right indicate the assessment objective(s) targeted by the question and its mark tariff.

3 (a) (i) Describe the location of the island of Lefkada.	AO1	AO2.1	AO2.2	AO3	AO4	**Total**
					2	**2**

Credit two simple statements based on map evidence. Credit accurate use of compass points max 1 Credit accurate use of scale line max 1	In western Greece (1) In Ionian Sea (1) north of Cephalonia (1) 275km (+/-10) from Athens (1) 280km (+/-10) from Thessaloniki (1)

This box contains the rationale i.e. it explains the principles that must be applied when marking each sub-question. The examiner must apply this rationale when applying the marking scheme to the response.

This box contains the candidates' expected responses for point-based marking. For some sub-questions, those with a closed question, this box will indicate the only response that is acceptable. For more open-ended sub-questions this box will illustrate a number of likely responses that are credit worthy. It may be that this list will be extended at the examiner's conference after actual scripts have been read. For banded mark schemes this box contains indicative content. For further details see below under Banded mark schemes Stage 2.

2. Tick marking

Low tariff questions should be marked using a points-based system. Each credit worthy response should be ticked at the appropriate place on the response. The number of ticks must equal the mark awarded for the sub-question. The mark scheme should be applied precisely using the expected outcomes box as a guide to the responses that are acceptable. Do **not** use crosses to indicate answers that are incorrect. If the candidate has not attempted the question, then the examiner should enter a dash (-) or use the not attempted icon on E-marker.

3. Banded mark schemes

Banded mark schemes are divided so that each band has a relevant descriptor. The descriptor for the band provides a description of the performance level for that band. Each band contains a range of marks. Examiners should first read and annotate, using the comment bank, a learner's answer to pick out the evidence that is being assessed in that question. **Do not use ticks** on the candidate's response. Once the annotation is complete, the mark scheme can be applied. This is done as a two-stage process.

Stage 1 – Deciding on the band

When deciding on a band, the answer should be viewed holistically. Beginning at the lowest band, examiners should look at the learner's answer and check whether it matches the descriptor for that band. Examiners should look at the descriptor for that band and see if it matches the qualities shown in the learner's answer. If the descriptor at the lowest band is satisfied, examiners should move up to the next band and repeat this process for each band until the descriptor matches the answer.

If an answer covers different aspects of different bands within the mark scheme, a 'best fit' approach should be adopted to decide on the band and then the learner's response should be used to decide on the mark within the band. For instance, if a response is mainly in band 2 but with a limited amount of band 3 content, the answer would be placed in band 2, but the mark awarded would be close to the top of band 2 as a result of the band 3 content.

Examiners should not seek to mark candidates down as a result of small omissions in minor areas of an answer.

Stage 2 – Deciding on the mark

Once the band has been decided, examiners can then assign a mark. During standardising (marking conference), detailed advice from the Principal Examiner on the qualities of each mark band will be given. Examiners will then receive examples of answers in each mark band that have been awarded a mark by the Principal Examiner. Examiners should mark the examples and compare their marks with those of the Principal Examiner.

When marking, examiners can use these examples to decide whether a learner's response is of a superior, inferior or comparable standard to the example. Examiners are reminded of the need to revisit the answer as they apply the mark scheme in order to confirm that the band and the mark allocated is appropriate to the response provided.

Indicative content is also provided for banded mark schemes. **Indicative content is not exhaustive**, and any other valid points must be credited. In order to reach the highest bands of the mark scheme a learner need not cover all of the points mentioned in the indicative content but must meet the requirements of the highest mark band. Where a response is not creditworthy, that is contains nothing of any significance to the mark scheme, or where no response has been provided, no marks should be awarded.

Part A: Investigating flows in fieldwork

1. (a) Study Map 1.1 below. It shows survey points where students collected data on traffic flows in Taunton, a town in Devon. The students collected data on the number and types of traffic on a Monday morning. (i) Suggest two ways the students could improve their data collection of traffic flows.		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
Credit up to two correct statements Reference must be made to the *resource*	More survey points/ *More points than 5* (1) More evenly distributed (1) Spread out more regularly/systematic sampling (1) Located to cover all the *A roads* (1) Collected data on *other days of the week/not just Monday* (1) Collected data at *other times of the day / not just in the morning* (1)				2		**2**

Some results for one traffic survey point are shown in Table 1.2 1. (a) (ii) Calculate the percentage increase in the number of **cars** between the 7.30am count and the 8.30am count. Show your working.		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
Credit clear working/process for one mark. One mark for correct answer.	Working example: (1) % increase equals **(15/10) x 100** = Answer: 150% (1)					2	**2**

1. (b) One student presented their traffic count results on the flow line Map 1.3 below. (i) Study Map 1.3. What is the vehicle count for survey point B?		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
Credit one correct statement	11-20 vehicles per minute					1	**1**

1. (b) (ii) The vehicle count at survey point F was 37 vehicles per minute. How wide should the flow line be for survey point F?		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
Credit one correct statement	8mm					1	**1**

1. (b) (iii) Suggest two ways that Map 1.3 could be improved.		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
Credit two simple statements Credit data improvement if linked to improvement of map	Locational information e.g. names of roads (1) Larger scale (1) Other roads (1) Show types of transport (1) Overlay on top of OS Map/GIS (1) Direction of flow (1) Small range for the flow lines(1)					2	**2**

1. (c) Students in another school investigated commuter flows into the city of Birmingham. They used secondary data about bus routes. What are the limitations of this secondary data in understanding commuter flows into Birmingham?		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
Credit each separate valid limitation with one mark. Credit each valid development of limitation with additional mark(s) Max 3 with no reference to the *resource* Different limitations may be referred to in the development	Examples: *Data shows numbers of buses* and not all people on the bus will be commuters (1) *Data doesn't show the scale / how far away the places are* (1) so can't tell if people are commuting or travelling in for holidays etc. (1) Some people commute by train/car and *major roads and/or train lines are not shown*, (1) so total amounts of commuters can't be measured (1) / or numbers of commuters travelling in different ways can't be measured. Some people may work flexitime or shifts and the data o*nly shows bus routes into Birmingham before 9.30am / morning are shown* (1) so total numbers of commuters through-out the day can't be measured.(1) *As the data is secondary data it* may not be accurate / is out of date (1)				4		**4**

1. (d) This question is about your **own** fieldwork experience of collecting data about **geographical flows.** Evaluate the strengths and weaknesses of **one** method you used to present your data on flows.	AO1	AO2.1	AO2.2	AO3	AO4	**Total**
				6		**6**

Use the descriptors below, working upwards from the lowest band.

Band	Marks	Descriptor
3	5-6	The candidate writes a comprehensive response that : • Has detailed and **specific** evaluation which address strength(s) and weakness(es) in a **balanced** way of a data presentation method. • Links the strength(s) **and** weakness(es) to presenting data about **geographical flows** in the context of the candidates own fieldwork
2	3-4	The candidate writes a detailed response that: • Uses **detailed** statements which address strength(s) **and / or** weakness(es) of a data presentation method. • Links strength(s) and/or weakness(es) to presenting data about **geographical flows** in the context of the candidates own fieldwork
1	1-2	The candidate writes a basic response that: • Uses simple statement(s) based on **general** strength(s) and/or weakness(es) of a data presentation method. • is in the context of the candidates own fieldwork
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Appropriate methods may include:

Flow line maps: (Line on a map showing volume of movement along a route) Effective way of representing flow patterns over space because it shows magnitude and direction. Difficult to construct and read the scale for proportional arrows/flow lines especially where the range of values is large.

Desire lines: (lines on a map showing volume of movement from the point of origin to the destination. Take no account of route. Easy to construct, visually simple to interpret.

Line graph: Showing how a variable change over time. Good for trends and patterns in data, as well as comparing different data sets. Simple to construct and read.

Located proportional symbols/circles/arrows

Part B: Investigating risk mitigation in fieldwork

2. (a) A group of students decided to investigate risk mitigation along part of the River Severn. Study Photograph 2.1 below. (i) Tick two enquiry questions that could be chosen in an investigation of mitigating risk in this location.		AO1	AO2.1	AO2.2	AO3	AO4	Total
One mark for each correct answer	<table><tr><th>Enquiry question</th><th>Tick two</th></tr><tr><td>How effective are the flood defences at protecting the houses?</td><td>✓</td></tr><tr><td>To what extent did people feel prepared to deal with the flood event?</td><td>✓</td></tr><tr><td>To what extent does the geology contribute to a flood event?</td><td></td></tr><tr><td>Is hard engineering more effective than soft engineering in coastal locations?</td><td></td></tr></table>				2		**2**

2. (a) (ii) The students used a website to get data of the house prices in Bewdley. The information is shown on Map 2.2 below. Suggest two reasons why the river can affect house prices.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Max 3 if only one reason given Credit each valid reason with one mark - max 2 marks. Credit each valid development with one mark (2+2) or (3+1)	House prices might be lower near the river as • the risk of flooding (1) so not being able to get insurance (1) or the inconvenience /cost of having to add flood defences to the house (1) • the river may flood (1) therefore you have to reduce the price to sell it (1) House prices might be higher near the river as • it is aesthetically pleasing (1) • close to waterfront businesses and shops (1) so is convenient for people to access services (1)				4		**4**

2. (b) Secondary data was used to find out the height of flood water in the last 11 flood events. The data is shown in Table 2.3 and Graph 2.4 2. (b) (i) Complete Graph 2.4 by plotting the results for 2007		AO1	AO2.1	AO2.2	AO3	AO4	Total
Accurately plotted 1 mark Accept any accurately located symbol.	4.5m					1	**1**

2. (b) (ii) Tick a box below for the one student who has the correct values for the range and median. [2] AO4		AO1	AO2.1	AO2.2	AO3	AO4	Total
2 marks or 0.	<table><tr><th></th><th>Range</th><th>Median</th><th>Tick (✓)</th></tr><tr><td>Student A</td><td>3.3</td><td>5</td><td></td></tr><tr><td>Student B</td><td>3.3</td><td>4</td><td>✓</td></tr><tr><td>Student C</td><td>4.3</td><td>4</td><td></td></tr><tr><td>Student D</td><td>4.3</td><td>5</td><td></td></tr></table>					2	**2**

2. (b) (iii) Calculate the inter-quartile range		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
Credit the working/process for one mark. Credit answer for one mark.	Worked example: Inter-quartile range = 4.8-3 (1) Answer: 1.8 (1)					2	**2**

2. (b) (iv) Give one reason why you might use the inter-quartile range rather than the range in assessing flood risk.		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
1 mark for valid reason	Not affected by outliers (1) Not affected by very large / small values (1) Range is affected by extreme values (1) Uses middle of data set (1)					1	**1**

2. (c) This question is about your own experience of investigating risk mitigation in fieldwork. Aim of your investigation: Evaluate the reliability of your conclusions. You should support your answer by referring to actual examples from your own fieldwork.	AO1	AO2.1	AO2.2	AO3	AO4	**Total**
				6		**6**

Use the descriptors below, working upwards from the lowest band.

Band	Marks	Descriptor
3	5-6	The candidate writes a comprehensive response that : • Has detailed and **specific** evaluation which address positives(s) and negatives(s) of the reliability in a **balanced** way • Links the positives(s) **and** negative(s) to reliability of **conclusions in the context of the candidates own fieldwork**
2	3-4	The candidate writes a detailed response that: • Uses **detailed** statements which address positives(s) **and / or** negative(s) of the reliability. • Links positive (s) and/or negative(s) to reliability of **conclusions in the context of the candidates own fieldwork**
1	1-2	The candidate writes a basic response that: 1. Uses simple statements based on **general** positive(s) or negative(s) of the reliability. 2. Is in the context of own fieldwork
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

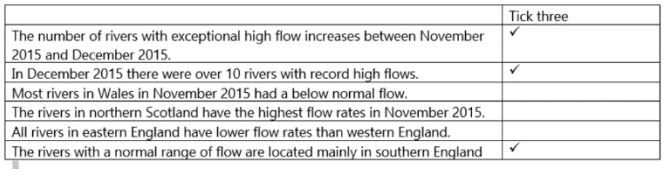
Reliability: For data to be reliable it needs to be collected in a way that if the fieldwork is repeated the data would be consistent.

Reliability of conclusions is affected by sampling, measurements and data collection & methods of fieldwork.

Negatives relating to reliability might include: lack of volume/numbers of samples to determine the population. Bias in asking questions & equipment errors. Limitations of timing of data collection. Wrong data collected to answer the question / draw conclusions. Different teams collecting group data in different ways.

Positives relating to reliability might be: the use of secondary data of a reputable source. A pilot study might have been carried out so the student could practise with the equipment reducing errors & making more accurate readings. Sticking to a sampling strategy, so that you did ask a range of people in the questionnaire etc. Repeating the data collection on a range of days to avoid the 'snapshot' of the area.

Part C: The wider UK dimension

3. The UK experienced many floods in 2015. Study Map 3.1 on page 1 of the Resource Folder. The map shows river flow rates in the UK in November and December of 2015. 3. (a) (i) Tick three correct statements about Map 3.1 in the box below.		AO1	AO2.1	AO2.2	AO3	AO4	Total
One mark for each correct answer. If more than 3 ticked then award 0.						3	**3**

	Tick three
The number of rivers with exceptional high flow increases between November 2015 and December 2015.	✓
In December 2015 there were over 10 rivers with record high flows.	✓
Most rivers in Wales in November 2015 had a below normal flow.	
The rivers in northern Scotland have the highest flow rates in November 2015.	
All rivers in eastern England have lower flow rates than western England.	
The rivers with a normal range of flow are located mainly in southern England	✓

3. (a) (ii) The UK experiences frequent flooding. Give one reason why parts of the UK are at risk of river flooding.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit one valid reason for one mark. Credit development of reason for one further mark.	Parts of the UK suffer from heavy rainfall (1) increase runoff (1) Urbanisation (1) less infiltration (1) Deforestation (1) less interception (1) Low lying land (1) Geology is impermeable (1) less infiltration (1) Climate change may lead to extreme weather (1)			2			**2**

3. (b) Land in the UK can be categorised into different uses as shown in Table 2 (i) Complete Table 3.2 by calculating the area (thousand hectares) of urban land use in the UK. Show your working.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Credit one correct statement	Worked example: 2%=500 therefore 1% = 250. So, 22%=250x22. (Or any other suitable way of working) 5,500 thousand hectares = Answer (1)					2	**2**

Study Diagram 3.3 below. The amount of urban land in the UK is increasing. This creates pressure to use floodplains. 3. (b) (ii) Give two reasons why land use zoning on floodplains is used to reduce flood risk.		AO1	AO2.1	AO2.2	AO3	AO4	Total
Max 3 if only one reason given Credit each valid reason with one mark - max 2 marks. Credit each valid development with one mark (2+2) or (3+1)	Reasons may make reference to likelihood and/or impacts Reasons might include: • Fewer people live/work close to the river (1) • Reducing danger to life (1) • Only allows building in certain areas (1) reduces damage (1) which reduces the costs to insure (1) •		4				**4**

3. (c) Keswick in the north of England is an area at high risk of flooding. (i) Explain why the choice of different flood management strategies, like the one in Keswick, could cause conflicting views between groups of people?	AO1	AO2.1	AO2.2	AO3	AO4	**Total**
			6			**6**

Use the descriptors below, working upwards from the lowest band.

Band	Marks	Descriptor
3	5-6	Thorough and elaborated response where the candidate shows a clear understanding through a chain of reasoning. Must include reference to views for and against
2	3-4	• Elaboration in the response shows a clear understanding. Should refer to views both for and against but may not be detailed or balanced.
1	1-2	• Valid but basic points are made with no elaboration
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Reasons might include:
Different usage of land e.g. farmers land being used for water storage, or flood defences placed in places with lovely views.

Effect on the stakeholders e.g. flood defences which are costly protecting others but increasing flooding in a different area.

Differing views on the strategy to manage the flooding e.g. differing perceptions of risk, or previous experience of flooding.

Costs / levels of protection / Aesthetics / Biodiversity loss

3. (c) (ii) Keswick experienced flooding in November of 2017. Complete the sentences below by adding the correct information from the box.		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
1 mark per point correct point.	Tuesday 21st 1.5 2.4 0.6					4	**4**

3. (d) (i) Use the data in the table to complete the remaining parts of the pie chart.		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
1-mark correct line 1 mark for correct shading of both sectors	Line at 80% or 85% (1) Shading mark as per key (1)					2	**2**

3. (d) (ii) What is the total percentage of people that agree that the area that they live is at risk of flooding?		AO1	AO2.1	AO2.2	AO3	AO4	**Total**
I mark for correct answer	55					1	**1**

3. (e) Explain which strategy you think is the most sustainable way to manage the future flood risk in the UK. Justify your decision. Use the information in the Resource Folder and your wider geographical understanding to support your answer.	AO1	AO2.1	AO2.2	AO3	AO4	SPaG	**Total**
Use the descriptors in the banded mark scheme below. Work upwards from the lowest to the highest band.				12		**4**	**16**

Band	Mark	Descriptor
4	10-12	The candidate writes a comprehensive response that: • reaches a decision that **fully justifies** why the chosen strategy meets **most** aspects of sustainability • provides **comprehensive** analysis throughout that is substantiated by a **range of evidence** in the Resource Folder and/or exam paper • Has detailed and **specific** evaluation which address positive(s)and negative(s) in a **balanced** way. • applies wider geographical knowledge and understanding to effectively **substantiate the chain of reasoning.**
3	7-9	The candidate writes a detailed response that: • reaches a decision that **justifies in detail** why the chosen strategy meets **some** aspects of sustainability • provides **detailed analysis** that is supported by evidence in the Resource Folder and/or exam paper • Uses **detailed evaluation** statements which address positive(s) **and/or** negative(s) • applies wider geographical knowledge and understanding to **support reasoning.**
2	4-6	The candidate writes a response that: • provides a decision that **simply justifies** why the chosen strategy meets **some** aspects of sustainability • provides **some analysis** that is supported by evidence in the Resource Folder and/or exam paper. • Uses valid evaluative statements based on **general** positive(s) or negative(s) • Applies some limited geographical knowledge/understanding.
1	1-3	The candidate writes a basic response that: • provides a **simple** but unsubstantiated decision • briefly explores some reasons why the chosen strategy might be the most sustainable
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Accept response that refer to a combination of strategies.

Candidates are required to build on all four elements of AO3. Candidates are likely to make use of effective signposts such as:

- Argument and counter-argument
- Aspects of sustainability such as cultural, economic, environmental and social
- Short- and long-term effects of the strategy
- Impacts on different groups of stakeholders.

Connective words such as however, because, therefore etc.

Band	Marks	Performance descriptions
High	4	• Learners spell and punctuate with consistent accuracy • Learners use rules of grammar with effective control of meaning overall • Learners use a wide range of specialist terms as appropriate
Intermediate	2 - 3	• Learners spell and punctuate with considerable accuracy • Learners use rules of grammar with general control of meaning overall • Learners use a good range of specialist terms as appropriate
Threshold	1	• Learners spell and punctuate with reasonable accuracy • Learners use rules of grammar with some control of meaning and any errors do not significantly hinder meaning overall • Learners use a limited range of specialist terms as appropriate
	0	• The learner writes nothing • The learner's response does not relate to the question • The learner's achievement in SPaG does not reach the threshold performance level, for example errors in spelling, punctuation and grammar severely hinder meaning