

GCE AS MARKING SCHEME

SUMMER 2022

AS GEOGRAPHY – UNIT 2 2110U20-1

INTRODUCTION

This marking scheme was used by WJEC for the 2022 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.

GCE GEOGRAPHY

UNIT 2: CHANGING PLACES

SUMMER 2022 MARK SCHEME

Positive marking

It should be remembered that learners are writing under examination conditions and credit should be given for what the learner writes, as opposed to adopting an 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 should not be deducted for a less than perfect answer if it satisfies the criteria of the mark scheme.

The mark scheme for this unit includes both point-based mark schemes and banded mark schemes.

Point-based mark schemes

For questions that are objective or points-based the mark scheme should be applied precisely. Marks should be awarded as indicated and no further subdivision should be made. Each creditworthy response should be ticked. Do not use crosses to indicate answers that are incorrect. The targeted assessment objective (AO) is also indicated.

Banded mark schemes

For questions with mark bands the mark scheme is in two parts.

The first part is advice on the indicative content that suggests the range of concepts, processes, scales and environments that may be included in the learner's answers. These can be used to assess the quality of the learner's response.

The second part is an assessment grid advising on bands and the associated marks that should be given in responses that demonstrate the qualities needed in the three AOs, AO1, AO2 and AO3, relevant to this unit. The targeted AO(s) are also indicated, for example AO2.1c.

Assessment Objective	Strands	Elements
AO1 Demonstrate knowledge and understanding of places, environments, concepts, processes, interactions and change, at a variety of scales.	N/A	This AO is a single element.
AO2 Apply knowledge and understanding in different contexts to interpret, analyse and evaluate	N/A	1a - Apply knowledge and understanding in different contexts to analyse geographical information and issues.
geographical information and issues.		1b - Apply knowledge and understanding in different contexts to interpret geographical information and issues.
		1c - Apply knowledge and understanding in different contexts to evaluate geographical information and issues
AO3 Use a variety of relevant quantitative, qualitative and fieldwork skills to:	1 - investigate geographical questions and issues	N/A
 investigate geographical questions and issues interpret, analyse and 	2 - interpret, analyse and evaluate data and evidence	
evaluate data and evidence construct arguments and draw conclusions.	3 - construct arguments and draw conclusions	

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 marks. Examiners should first read and annotate a learner's answer to pick out the evidence that is being assessed in that question. Once the annotation is complete, the mark scheme can be applied. This is done as a two-stage process.

Banded mark schemes 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.

Banded mark schemes 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.

The specialised concepts from the specification that apply in the indicative content are underlined.

The mark scheme reflects the layout of the examination paper. Mark all questions in Section A, and Section B. Possible rubric infringements will be discussed at the marking conference.

Be prepared to reward answers that give **valid and creditworthy** responses, especially if these do not fully reflect the 'indicative content' of the mark scheme.

Section A: Changing Places

(a) (i) Use Figures 1a and 1b to compare the two representations of Aberystwyth. Content: 2.1.2 Skills. 8.2	A01	A02.1a	AO2.1b	AO2.1c	AO3	Total
In each case, award 1 mark for any of the following up to a maximum of 5 marks. Max 2 if there is no comparison.					5	5

Indicative content

A representation refers to any means of communication by which people tell each other about places, which can be formal (based on facts such as census or geospatial data) or informal (through art, TV, film, music, photography, literature and advertising).

- Figure 1a is an OS (Ordnance Survey) map which provides a formal representation of Aberystwyth compared to Figure 1b which provides an informal, selective and stylized representation
- Figure 1a covers a large area of the town of Aberystwyth whereas Figure 1b covers the seafront, a small section of the town
- Figure 1a provides a more up-to-date representation of Aberystwyth whereas Figure 1b is dated
- Figure 1a is not seasonal-dependent whereas Figure 1b represents the summer only
- Figure 1a provides an objective representation of Aberystwyth whereas Figure 1b, providing a very
 positive image, may be regarded as highly subjective
- Figure 1a provides a representation of a wider range of land uses including residential, transport, educational and administrative whereas Figure 1b provides a narrower representation of mostly recreational and residential land uses.

To achieve max 5 points, candidates must show an understanding of the term 'representation' and make a direct comparison of Figures 1a and 1b.

Accept other creditworthy points not contained in the indicative content.

(a) (ii) Suggest two reasons for differences in people's attachment to a place such as Aberystwyth. Content: 2.1.2	A01	A02.1a	AO2.1b	A02.1c	AO3	Total
Award 1 mark each for two of the following reasons and 1 mark for development or exemplification of each one; that is a maximum of 4 marks.			4			4

People's attachment to a place such as Aberystwyth may differ due to:

- Age: older people may feel more attachment to a place than younger people, especially if combined with length of residence in a place
- Length of residence: new migrants and students may have less strong attachments than longstanding locals
- Gender: women's and men's attachment to a place may differ; women or men may be more active in their local community if home with children
- Ethnicity: non-white British may differ in their views and feel less attachment to a place because of local antipathy or lack of acceptance
- Levels of deprivation: higher levels of deprivation may be associated with more attachment: people may be drawn together for mutual support in adverse circumstances
- Place identity: places with a strong identity due to the popularity of their university, for example, may encourage more engagement and a greater attachment to a place
- Social group: more affluent people may show less attachment to a place as they are often more mobile and have wider social networks.

Credit any other valid points.

(b) Examine the view that the positive social changes associated with gentrification outweigh the negative social changes. Content: 2.1.5	A01	A02.1a	A02.1b	A02.1c	AO3	Total
	5			3		8

The question is asking candidates to put forward and develop plausible and informed ideas as to the changes associated with gentrification. For the examination to take place there should be an analysis of whether the positive social changes outweigh the negative ones. Better candidates will also make it clear that they have a sound understanding of the process of gentrification.

A01

Gentrification is a process of housing improvement associated with a change in neighbourhood composition when lower income groups are displaced by more affluent people, usually in professional or managerial occupations. This is one of the processes that can regenerate inner cities. It essentially involves the rehabilitation of old houses and streets, often in areas developed in the late nineteenth or early part of the twentieth centuries.

Positive social changes include:

- Affluent residents are attracted back to the central city reversing decades of out-migration
- Declining services are revived with an increase in users for schools and clinics
- Urban areas become renovated, refurbished and improved at little cost to the local authorities
- There is increased custom for inner-city businesses and retailers reviving communities
- The area becomes a more attractive, pleasant environment in which to live

Negative social changes include:

- Increasing social division as existing communities feel powerless to influence changes
- Parking issues create stresses for residents as gentrified, usually terraced housing streets have insufficient multiple parking spaces for new, affluent households. Gentrified inner city streets may entice city workers to park for free and walk into the city centre
- House prices increase rapidly, pricing out less affluent local people
- Rents are increased by private landlords to drive out low-cost tenants and attract higher-income tenants
- Loss of traditional community as those born in the area can no longer afford to live there.

Credit other valid points.

AO2

Examination of the view may focus on:

- Variations in positive and negative social impacts by location
- Variations in positive and negative social impacts between different groups of people such as residents, retailers, community groups
- Variations in positive and negative impacts between permanent residents and those who choose to relocate
- Variations in positive and negative social impacts over time as in the later stages of gentrification the negative social impacts may outweigh the positive as close-knit, traditional communities are forced out.

Marking guidance

Near the upper end examination will be clear and will make a link between gentrification and associated positive and negative social changes. Towards the lower end of AO2, little application of knowledge and understanding is evident, and answers are short and characterised by a list-like outline of changes.

Award the ma	arks as follows:	
	AO1 (5 marks)	AO2.1c (3 marks)
Band	Demonstrates knowledge and understanding of the positive and negative social changes associated with gentrification.	Applies (AO2.1c) to examine the view that the positive social changes associated with gentrification outweigh the negative ones.
3	4-5 marks Accurate knowledge and understanding of the positive and negative social changes associated with gentrification. Developed example(s).	3 marks Well-developed examination of the view that the positive social changes associated with gentrification outweigh the negative ones. Contextual example(s) are well applied to the question.
2	2-3 marks Sound knowledge and understanding of the positive and negative social changes associated with gentrification.	2 marks Partial or unbalanced examination with some attempt to evaluate the view that the positive social changes associated with gentrification outweigh the negative ones. Contextual example(s) are well applied in part.
1	1 mark Limited knowledge and understanding of the positive and negative social changes associated with gentrification.	1 mark Basic examination with a brief attempt to evaluate the view that the positive social changes associated with gentrification outweigh the negative ones. The example does not support the context.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.

2. (a) (i) Use Figure 2 to compare levels of deprivation in the selected LSOA with Wales. Content: 2.1.4 Skills: 2.5	A01	A02.1a	AO2.1b	A02.1c	AO3	Total
In each case, award 1 mark for any of the following up to a maximum of 5 marks. Max 2 if there is no comparison.					5	5

- On every indicator of deprivation except one, the LSOA is more deprived than Wales (1)
- Many indicators of deprivation are more than twice as high in the LSOA compared to Wales (1) e.g. Police recorded criminal damage (rate per 100) is 2.9 per 100 in the LSOA compared to 1.1 per 100 for Wales (1)
- Some indicators show pronounced levels of deprivation compared to the Wales average (1) e.g. over one third of adults aged 25-64 have no qualifications (36.9%) compared to under one fifth of adults (19.4%) for Wales as a whole (1)
- In terms of the selected indicator for Access to Services, unavailability of broadband at 30Mb/s (%), the LSOA is less deprived than Wales (1) with no unavailability of broadband (1).

To achieve max 5 points, candidates must show an understanding of the term 'deprivation' and make a direct comparison of the two columns of data in Figure 2.

Accept other creditworthy points not contained in the indicative content.

2. (a) (ii) Suggest one limitation of the information shown in Figure 2 in a study of deprivation.	_	2.1a	2.1b	2.1c	က	al
Skills: 2.5	ĄÓ	AO2	A02	AO2	AOS	Tota
Award 1 mark for one of the following reasons and 1 mark for development or exemplification; that is a maximum of 2 marks.			2			2

Indicative content

Limitations may include:

- For each category of deprivation only one indicator is shown e.g. in the 'Access to Services' category the indicator 'Unavailability of broadband at 30 mb/s' is used, when others important indicators such as access to shops and services (GP, schools) are available
- For each category, the data would benefit from additional information e.g. an understanding of the term 'chronic' in the 'Health' category
- The data is for one year only (2019) and is subject to changes over time
- The data for the LSOA is limited in terms of spatial scale as it relates to only one small geographical area
- There are other categories of deprivation including 'Physical Environment'.

Credit any other valid points.

The question clearly states that one reason should be given therefore avoid credit of multiple reasons.

(b) Examine the locational factors that encourage the growth of clusters of quaternary industry. Content: 2.1.6	AO1	AO2.1a	AO2.1b	AO2.1c	AO3	Total
	5			3		8

The question is asking candidates to put forward and develop plausible and informed ideas about the locational factors that encourage the growth of quaternary industry clusters. For the examination to take place there should be an analysis of locational factors. Better candidates will also make it clear that they have a sound understanding of the growth of quaternary industry clusters.

A01

The quaternary industry includes biotechnology, ICT, research and development activities and new knowledge creation. It comprises services that require high levels of skill, expertise and specialisation. Locational factors that encourage quaternary industry clusters such as near Cambridge (Silicon Fen), Silicon Roundabout, Shoreditch (Tech City), St Asaph, North Wales and Newport, South Wales (Cwm Silicon) may include.

- Proximity to universities and research areas the worldwide reputation of universities for excellence in science and technology; links with universities for use of technology and the latest ideas; access to a highly skilled and quality workforce; agglomeration of ideas with other companies located very close to each other
- Government support competition between local authorities creates attractive business environments for investors and workers who are highly skilled/paid and who can choose where to work more easily. They develop local plans which designate specific areas for development. The establishment of Government research departments such as at Farnborough (aircraft) attracts linked industries
- Planning regulations create attractive and well landscaped sites to create a good image, impress clients and attract a workforce
- Infrastructure purpose-built buildings e.g. Cambridge Science Park and excellent national and international transport links (motorways including M4, M5, M11, M25 and airports including Heathrow and Stanstead).

Credit other valid points.

AO2

Examination of factors may include:

- The interdependence of locational factors (interdependence)
- Variations in locational factors spatially (place)
- Variations in locational factors over time leading to agglomeration/ cumulative causation (<u>causality</u>)
 (<u>time scales</u>)
- Variations by quaternary industry sector e.g. the growth of creative industries in Cardiff.

Marking guidance

Near the upper end examination will be clear and will develop links between the locational factor and the growth of quaternary industry clusters. Towards the lower end of **AO2**, little application of knowledge and understanding is evident, and answers are short and characterised by a list-like outline of locational factors.

Award the ma	arks as follows:	
	AO1 (5 marks)	AO2.1c (3 marks)
Band	Demonstrates knowledge and understanding of the locational factors that encourage the growth of quaternary industry clusters.	Applies (AO2.1c) to examine the locational factors that encourage the growth of quaternary industry clusters.
3	4-5 marks Good knowledge and understanding of the locational factors that encourage the growth of quaternary industry clusters. Developed example(s).	3 marks Well-developed examination. Contextual example(s) are well applied to the question.
2	2-3 marks Partial knowledge and understanding of the locational factors that encourage the growth of quaternary industry clusters. Developed example(s).	2 marks Partial or unbalanced examination. Contextual example(s) are well applied in part.
1	1 mark Limited knowledge and understanding of the locational factors that encourage the growth of quaternary industry clusters. Developed example(s).	1 mark Basic examination. The example does not support the context.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.

Section B: Fieldwork Investigation in Physical and Human Geography

3. (a) (i) Identify two potential risks facing the students during this fieldwork investigation. Skills: 5.3	A01	A02.1a	AO2.1b	A02.1c	AO3	Total
					2	2

Indicative content

One mark for each relevant risk identified. Risks inferred from table may include:

- Slipping/ tripping
- Rashes/stings from vegetation
- Insect bites/stings (summer).

Credit risks that could be identified from contextual material provided:

- Sunburn (summer)
- Hypothermia (winter)
- Getting lost.

Credit other valid points.

3. (a) (ii) For one of the risks identified in 3 (a) (i) above, state how it could be reduced. Skills: 5.3	A01	A02.1a	AO2.1b	A02.1c	A03	Total
					1	1

Indicative content

One mark for each relevant risk reduction approach identified which may include:

- Wearing suitable footwear to avoid slipping/ tripping
- Wearing suitable clothing to avoid rashes/stings from vegetation
- Taking first aid kit to address insect bites/stings (summer)
- Putting on sunscreen/bloc to avoid sunburn (summer)
- Wearing warm clothing to avoid hypothermia (winter)
- Informing parents of whereabouts, never working alone, use of map and mobile phone to avoid getting lost.

Accept other valid ways of minimising risk – but ensure that a link is made to a relevant risk.

3. (a) (ii) Describe one suitable graphical technique that could be used to present the data on distance across the footpath and the depth of the path in Figure 3. Skills: 3.9	AO1	AO2.1as a	AO2.1b	A02.1c	AO3	Total
					3	3

AO3

Award 1 mark for identification of cross-sectional diagram as the appropriate graphical technique.

Description - the technique shows the shape of the footpath from side to side by plotting the width of the footpath on the x axis (1 mark) and the depth of the footpath on the y axis (1 mark).

Accept the term line graph if reference is made to both width and depth of footpath. Maximum 2 marks if the term cross-section is not used.

3. (b) Evaluate one other source of primary data and one source of secondary data that the students could use to investigate the impact of human activity on landforms in this environment.	AO1	A02.1a	AO2.1b	A02.1c	AO3	Total
				4	4	8

AO₃

Alternative primary sources may include:

- Field sketches of footpath erosion within the landscape
- Photographs of footpath erosion, trampled vegetation, characteristics of footpath
- Pedestrian counts taken at different times/different days/different seasons
- Traffic counts taken at different times/different days/different seasons
- Questionnaire survey of walkers to establish frequency of visits/reason for visits/routes taken
- Compaction of soil using soil augur to measure variations in amount of trampling.

Secondary sources may include:

- 1:25 000 O.S map for information on relief, landforms, incidence of footpaths, access roads and car parks, service provision (also accepted as primary data as not modified or interpreted in any way)
- Aerial photographs/ Google Earth showing relief, landforms, incidence of footpaths, access roads and car parks, service provision (also accepted as primary data as not modified or interpreted in any way)
- Research undertaken by other students/organisations
- Newspaper articles of visitor pressures, damage to environment, visitor education
- Websites/blogs of National Park authorities, conservation groups, community groups and other interest groups with responsibilities for management/conservation.

AO2

Candidates demonstrate application of knowledge and understanding to evaluate the choice of one additional primary source and one secondary source of data. Relevant responses may include:

- Reasons for choice of each source
- The strengths of the chosen source in aiding research into the impact of human activity on landforms
- The limitations of the chosen resource in aiding research into the impact of human activity on landforms.

Marking guidance

Towards the top end of AO2 there will be a clear and developed evaluation of the sources selected.

Award the ma	ward the marks as follows:						
	AO2.1c (4 marks)	AO3 (4 marks)					
Band	Applies (AO2.1c) to evaluate the sources of data.	Demonstrates knowledge and understanding of the use of one other source of primary data and one source of secondary data.					
3	4 marks A developed discussion of one other source of primary data and one source of secondary data.	4 marks Developed knowledge and understanding of the use of one other source of primary data and one source of secondary data.					
2	2-3 marks A partial discussion of one other source of primary data and/or one source of secondary data or unbalanced coverage.	2-3 marks Partial knowledge and understanding of the use of one other source of primary data and/or one source of secondary data or unbalanced coverage.					
1	1 mark An undeveloped discussion of one other source of primary data or one source of secondary data.	1 mark Limited understanding of use of data sources.					
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.					

Discuss how the findings of your selected geography fieldwork investigation provides opportunities for further research. Enquiry Question: 4	AO1	A02.1a	AO2.1b	AO2.1c	AO3	Total
	6			3		9

The focus of this question is the findings of the student's selected fieldwork investigation and the opportunities these provide for further research.

A01

Credit knowledge and understanding of the findings of the student's selected fieldwork investigation that are directly related to the investigation title and well supported by evidence.

AO₂

A clear discussion of opportunities for further research is required where candidates can reflect on further research which could be made. The question is likely to provide a variety of approaches in response. In discussing opportunities for further research, responses are likely to focus on:

- Improvements to methods and/or sampling
- New study sites in a future study, perhaps involving different time frames
- Repeating the study to reinforce findings and conclusions reached
- A new line of enquiry arising out of the study which may point to an entirely new study based on the findings of the original enquiry.

Marking guidance

Answers that score well at AO1 will give a clear account of the findings. Those that score well at AO2.1c will give clear and well supported discussion of opportunities the findings provide for further research.

Award the ma	ks as follows:	
	AO1 (6 marks)	AO2.1c (3 marks)
Band	Demonstrates knowledge and understanding of findings within the context of their own fieldwork investigation.	Applies (AO2.1c) to discuss the opportunities the findings provide for further research within the context of their own fieldwork investigation.
3	5-6 marks Reasoned knowledge of their findings, linked to the candidate's enquiry.	3 marks A clear discussion of the opportunities the findings provide for further research.
2	3-4 marks Partial knowledge of their findings, linked to the candidate's enquiry.	2 marks A partial discussion of the opportunities the findings provide for further research.
1	1-2 marks Limited knowledge of their findings.	1 mark Basic discussion of the opportunities the findings provide for further research.
	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.

5. Evaluate the effectiveness of two data collection methods used in your selected geography fieldwork investigation. Enquiry Question: 2	A01	AO2.1a	AO2.1b	AO2.1c	AO3	Total
	6			3		9

The focus of this question is data collection methods.

AO1

Credit knowledge and understanding of two data collection methods used. There are numerous possible methods and these are clearly dependent on the candidate's choice of study area and context (in either physical geography or human geography). Likely data collection methods are field measurements, sketch maps, photographs, questionnaire surveys, traffic surveys, building quality surveys, land use mapping and interviews, including relevant sampling strategies. The data collected and discussed could be either primary or secondary. At least two different methods will need to be discussed in detail and these should be placed in the context of their own enquiry.

AO2

A clear evaluation of the strengths and weaknesses of two data collection methods is required. This is a 'judgement about the overall quality or value of the feature(s)/issue(s) in terms of strengths and limitations.' These strengths and limitations could be considered in terms of:

- Whether the technique was a good analytical tool and allowed valid conclusions to be drawn from the data collected
- Whether the technique was practicable
- Representative nature of sample in terms of size and absence of bias
- The extent to which the spatial and temporal characteristics of the sample collected by the technique impacted on its reliability
- Quantity of data collected
- Quality of data collected
- Well-designed/appropriate
- Relevance of data to topic and linked to research question(s)
- The extent to which people were willing to participate in data collection using the chosen technique, where appropriate

Award marks for evaluation only.

Marking guidance

Answers that score well at AO1 will give a clear account of two data collection methods set clearly in the context of their own fieldwork. Those that score well at AO2.1c will give clear and well supported evaluation of the effectiveness of the data collection methods selected. Towards the bottom end, evaluative comments will either be vague or absent.

Award the ma	Award the marks as follows:						
	AO1 (6 marks)	AO2.1c (3 marks)					
Band	Demonstrates knowledge and understanding of two data collection methods within the context of their own fieldwork investigation.	Applies (AO2.1c) to evaluate the effectiveness of two data collection methods within the context of their own fieldwork investigation.					
3	5-6 marks Reasoned knowledge of two data collection methods, well linked to the candidate's enquiry.	3 marks A clear evaluation of two data collection methods.					
2	3-4 marks Partial knowledge of two data collection methods, not always effectively linked to the candidate's enquiry or unbalanced coverage.	2 marks A partial evaluation of two data collection methods or unbalanced coverage.					
1	1-2 marks Limited knowledge of data collection method(s), weakly linked to the candidate's enquiry.	1 mark Basic evaluation of data collection method(s).					
0	0 marks Response not creditworthy or not attempted.	0 marks Response not creditworthy or not attempted.					