

# **GCSE MARKING SCHEME**

**SUMMER 2023** 

**GEOGRAPHY - UNIT 1** 3110U10-1

#### INTRODUCTION

This marking scheme was used by WJEC for the 2023 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.

### **WJEC GCSE GEOGRAPHY - UNIT 1**

#### **SUMMER 2023 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 should 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: The columns to the right indicate the assessment objective(s) targeted by This box contains the subthe question and mark tariff. question. 3 (a) (i) Describe the location of the island of Lefkada. Accuracy A01.1 Total A01. **A**02 A03 2 2 In western Greece (1) In Ionian Credit up to **two** valid statements based on map Sea (1) north of Cephalonia (1) 275km (+/-10) from Athens (1) evidence. Credit accurate use of 280km (+/-10) from Thesaloniki (1) compass points max 1. Credit accurate use of scale line max 1. 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

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

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

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 in red pen. 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.

### 4. Assessing Writing

The quality of writing is assessed through two separate strands:

- (i) Communicating and organising
- (ii) Writing accurately
- (i) Communicating and organising is assessed in items that have a tariff of 6, 8 or 10. These responses should be viewed holistically when deciding on a mark band (see stage 1 above). The definitions below clarify what is meant by the terminology in these descriptors.

**Meaning**: to have clarity the text must be legible. The meaning of statements should be clear and not require re-reading to make sense.

**Purpose**: the response should take into account what is required by the question. For example, evaluation requires consideration of pros/cons or the justification of a decision may be assisted by arguments. A suitable tone is adopted for reporting on scientific investigation in Unit 3.

**Structure**: well-planned responses have an overall structure with use of paragraphs to indicate portions of the response such as introduction, main arguments and conclusion. Chains of reasoning provide a logical structure within paragraphs. Signposting links sections together and is used to assist the reader.

(ii) Writing accurately takes into account the candidate's use of specialist language. It also takes into account the accuracy of the candidate's spelling, punctuation and grammar. This assessment is restricted to specific items (one item in each unit). The descriptors for writing accurately are printed in the mark scheme for each relevant item. In applying these descriptors learners may only receive marks for responses that are in the context of the demands of the question; that is, where learners have made a genuine attempt to answer the question.

### 5. Marking Core and Options questions

Core Themes Mark both questions

Options Themes Learners are instructed to answer one question. If the

candidate has responded to both questions then the examiner must mark both questions. Award the higher mark that has

been attained.

# **SECTION A (Core Themes)**

# Core Theme 1, Question 1

(a) (i) Complete the following sentences using the words below.			AO1.2	AO2	AO3	Accuracy	Total
		2					2
Award one mark for each correct answer. No marks if more than two answers given.	Rocks Bay						
1. (a) (ii) Give the rock type at Castlemartin in the south of Pembrokeshire.		AO1.1	AO1.2	A02	AO3	Accuracy	Total
					1		1
Credit this response only, however indicated. No marks if more than one answer given.	Limestone						
1. (a) (iii) Describe the pattern of igneous rocks along this stretch of the Pembrokeshire Coast. Use map evidence only.			AO1.2	A02	AO3	Accura	Total
					3		3
Award one mark for each valid point.	More in north (1) less in south (1) named place e.g., St. David's Head (1) headlands (1) islands (1) Perpendicular to coastline (1) Discontinuous/patchy (1)						

(a) (iv) Suggest how geology has made the Pembrokeshire Coast landscape distinctive. Use map evidence.	AO1.1	AO1.2	AO2	AO3	Accuracy	Total
			3			3

Band	Marks	Descriptor
2	2-3	Detailed statements demonstrate the application of knowledge and understanding in order to draw accurate inferences from the map. The description is enhanced by the effective use of map evidence.
1	1	Simple statements show only a limited ability to interpret the map. The use of map evidence, within the response, is weak.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Candidates are asked to apply their knowledge and understanding of coastal landforms to the pattern of rocks shown by the map. The coastline is distinctive due to its headlands and bays with bays generally found in the less resistant sedimentary rocks and the headlands in the more resistant igneous rocks. The islands correspond to the headlands, also in more resistant geology. The large bay, the largest inlet is almost entirely in the weaker less resistant sedimentary rocks. The inlet at Milford Haven is associated with a single rock type.

Some candidates may refer to the discordant nature of the coastline also to the rock lay-out and those who do should lead you towards the top band. Evidence from the map in the form of named rock types, places or directions must be used for band 2 or full marks once in band 2.

The MS is not looking for all of these points for full marks, just an ability to apply their knowledge of coastal landforms to the geology of this area.

1. (b) (i) Identify landforms <b>A</b> , <b>B</b> and <b>C</b> by putting the correct letter in the list below.			AO1.1	AO1.2	AO2	AO3	Accuracy	Total
			3					3
Award one mark for each correct answer. 0 for any letter used more than once. Award marks for other letters used	Landform	Let	ter					
	Stack		С					
correctly once only.	Arch		В					
	Spit							
	Cave							
	Wave-cut platform		Α					

1. (b) (ii) Explain why stacks form when coastal processes and geology interact. You may use a diagram to help your answer.	AO1.1	AO1.2	AO2	AO3	Accuracy	Total
		6				6

Band	Marks	Descriptor
3	5-6	Good understanding of relationship between coastal processes and geology. Explanation is detailed and connections clearly elaborated with chains of reasoning.
		Meaning is clear. The response has purpose, is organised and well structured.
2	3-4	Some understanding of relationship between process and geology. Response contains some elaboration but lacking detailed or is partial/imbalanced.
		Meaning is generally clear. The response is structured.
1	1-2	Simple statements show limited or basic understanding.
		Meaning may lack clarity in parts. Statements are linked by a basic structure.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Candidates should demonstrate their understanding of the relationship between coastal processes and geology to create a stack. Although they are invited to include a diagram, this is not a requirement and they should be able to achieve full marks with good explanation whether in the form of prose, diagram, or a combination of the two. You must be guided by the level of understanding and quality of explanation, not description.

An arch may start from a fault, joint or line of weakness in the side of a headland, often in a more resistant rock type such limestone. Weaker rocks will tend to be less steep and less consolidated which means they collapse more easily before the landform has a chance to develop. The line of weakness is attacked by destructive waves directed to the sides of the headland by refraction over a time through processes of hydraulic pressure and abrasion to create a cave. The cave will deepen or meet another on the opposite side of the headland and break through to leave the arch. Weathering and further destructive wave action will attack the side and roof of the arch leading to its eventual collapse leaving a stack.

Look for good explanation of the relationship between geology and the erosion and, possibly weathering processes which should be described in some detail at the top band. Credit the use of chains of reasoning at the top band.

Many candidates are likely to use a diagram as this is the traditional way in which this is taught but do not award or deduct marks for the quality of the diagram.

(c) (i) Describe one method you could use to represent the data from the graph onto the regional map of England.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
					2		2
Award one mark for valid method. Description will relate to the method chosen. Do not award marks for two different methods.	Choropleth (1) colours rela (1) other development (1) Located bars (1) development Proportional circles (1) development Topological map (1) development	nent velop	omer	nt (1)	. , •	rade	d

1. (c) (ii) Give <b>one</b> advantage and <b>one</b> disadvantage of the method you have chosen.	AO1.1	AO1.2	A02	AO3	Accuracy	Total	
				2		2	

Award one mark for each valid point as long as it relates to the method chosen in (i).

Do not credit 'clearer' or 'easier' unless elaborated or contextualised.

### For choropleth:

<u>advantages</u> – visually effective (1) shows spatial distribution (1) shading represents a range of values (1) groupings can be flexible to accommodate spread of values (1)

<u>disadvantage</u> – false impression of abrupt changes around boundaries (1) don't highlight variations within an area (1) may not be suitable for colour blind (1)

### For proportional circles or located bars:

<u>Advantages</u> – enables visual comparison (1) can be combined with other graphical methods, e.g pie charts/divided bar charts (1)

<u>Disadvantages</u> – time consuming to calculate (1) Not possible to determine absolute values (1) confusing with large amounts of data (1) difficult to represent extreme variations in data (1)

### For topological maps:

Advantages – visually effective (1)

<u>Disadvantages</u> – lose map resolution (1) difficult to calculate/draw (1)

1. (c) (iii) Evaluate hard engineering as a method of preventing river floods. You may use the resource and/or refer to other examples you have studied.	AO1.1	A01.2	AO2	AO3	Accuracy	Total
			6			6

Band	Marks	Descriptor
3	5-6	Good evaluation of strategies showing clear ability to evaluate and present evidence to justify points made. Answer acknowledges advantages and disadvantages of specific strategy(ies) or can give reasoned evaluation of hard engineering in general as opposed to alternatives including soft engineering or doing nothing.  Meaning is clear. Response has purpose, is organised and well
		structured.
2	3-4	Some evaluation of one or more strategies but may lack evidence and/or detail. Imbalanced between advantages and disadvantages of one strategy or of hard engineering in general.
		Meaning is generally clear. The response is structured.
1	1-2	Valid statements lack depth/breadth and with only limited evaluation.  Meaning may lack clarity in parts. Statements are linked by a basic structure.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Candidates should apply their knowledge and understanding of hard engineering strategies designed to protect people in flood-prone areas.

They could solely consider the strategy outlined in the resource, but this is not necessary and they may consider other strategies that go beyond the resources such as channelisation or revetments.

They must consider potential advantages and disadvantages of the strategies. Alternatively, they could focus on the overall concept of hard engineering and use a range of different examples to illustrate points being made without going into detail on any strategy.

There are alternative arguments presented in the resource such as the quantifiable effectiveness in actually preventing floods and protecting people balanced against the high cost of such schemes. Some may consider the environmental implications of schemes, but this is countered in the example used. Good candidates may question the sustainability of hard engineering in the face of continued climate change and the potential unintended consequences of shifting the problem elsewhere.

Ensure that credit is given for the quality of evaluation rather than knowledge and understanding of the strategies themselves although this will provide context.

### **End of Question 1**

5	6	9	8	28

# **Core Theme 2, Question 2**

<ol> <li>(a) (i) Salford Quays is a modern developed and leisure activities.</li> <li>Identify the location on the map where Salfor since 1980. Tick (✓) the correct answer in the salfor since 1980.</li> </ol>	rd Quays has been built	AO1.1	A01.2	AO2	A03	Accuracy	Total
					1		1
Credit this answer only.	В						

2. (a) (ii) Give <b>two</b> other ways the photo sho Docks has changed since 1980.	ows that Manchester	AO1.1	AO1.2	AO2	AO3	Accuracy	Total
					2		2
Award one mark for each valid response. Do not credit Salford Quays. Do not credit 'more houses' or 'more transport links'	docks buildings/warehouse more buildings (1) greater green area/parkland in non blocks of flats/offices (1)	varie	ety o	f bui	lding	js (1)	

2. (a) (iii) Salford Quays was developed on a brownfield site.  Describe how the map shows that this was a brownfield site.				A02	AO3	Accuracy	Total
			2			2	
Award one mark for each valid point. Must refer to the map. Reserve mark for 'built on previously'	Built on previously (1) doc (1)	ks (1	) inc	lustri	al (1	) wo	rks

2. (a) (iv) Suggest how the development of Salford Quays may have brought benefits and challenges for this part of Manchester. Use evidence from the map and photograph.	AO1.1	AO1.2	AO2	AO3	Accuracy	Total	
			6			6	

	1	T
Band	Marks	Descriptor
3	5-6	Good application of knowledge and understanding which relates to the area in the map and photo and uses clear map/photo evidence to make inferences. Answer has balance between benefits and challenges.
		Meaning is clear. Response has purpose, is organised and well structured.
2	3-4	Shows some ability to apply knowledge and understanding of regeneration issues which broadly refers to the area of the map and photo. Some imbalance in focus between challenges and benefits. Some but limited use made of map/photo information to support points.  Meaning is generally clear. The response is structured.
1	1-2	Simple statements with only cursory reference to the map area.  Meaning may lack clarity in parts. Statements are linked by a basic structure.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Candidates are required to analyse the map and photograph and draw inferences from them to which they should apply their knowledge and understanding of urban renewal/regeneration.

They must relate it to evidence from the resources, but they could draw on learning they may have from other case studies such as Cardiff Docks and this should receive credit if it emphasises or adds context to points made from the resource.

The area has developed from a former dockland/industrial landscape which may have gone into decline and been replaced with modern, attractive buildings and a range of residential, commercial and leisure activities.

Look for comment on the shape and design of the modern buildings in the photo. It may have created employment opportunities for local people and led to in-migration to make communities more vibrant and economically viable. Tourism may have also been attracted to the area. Old housing and industrial/docks/ warehouses have been replaced by more modern designs.

Transport links have been improved with development of roads and bridges which were not there in 1980. Some candidates may relate the area to Egan's Wheel and the creation of sustainable urban communities.

Challenges may relate to disturbance during construction, gentrification and the alienation or exclusion of traditional industrial communities who are unable to afford the new housing or cannot find work in the new economy.

2. (b) (i) Give the meaning of the following terms by choosing from the definitions in the box below. Write the correct letter in each box.					AO3	Accuracy	Total
							2
Award one mark for each correct answer.	International migration		[	)			
Award no mark if more than one answer given for either.				4			
given ior dialor.	iven for either.						

2. (b) (ii) Explain why the line showing <b>net</b> inter changes over time. Use the information from the	AO1.1	AO1.2	AO2	AO3	Accuracy	Total	
				3		3	
Award one mark for each valid point.  Max two marks for reference to one point in time.  Quantification mark must be from Y axis	Low when inward and outvincrease when gap widens steady when gap is constanarrows (1) quantification (Responds to other two lines	outv nt (1 (1)	ward ) ded	decr	ease	s (1)	

2. (b) (iii) Describe <b>one social</b> consequence and <b>one economic</b> consequence of international migration into the UK.	AO1.1	AO1.2	AO2	AO3	Accuracy	Total	
	4					4	ı

Credit one statement for each consequence with up to 2 marks for either awarded for elaboration.

2 + 2 or 3+1.

Consequences can be either positive or negative. Credit can be given to consequences for the country of origin or the UK.

Social: Cultural enrichment (1) new skills (1) racial tension (1) housing pressure (1) pressure on public services (1) eg education (1) development of any point (max 2)

Economic: Knowledge economy (1) tax revenue (1) fill less desirable/low paid jobs (1) housing pressure (1) pressure on public services (1) eg education (1) development of any point (max 2)

2. (c) (i) Give <b>one</b> reason why some cities become global cities.					Accuracy	Total	
	2 2				2		
Award one mark for reason with second mark for relevant elaboration.  Do not award mark for example of city  Do not credit reasons that could relate to general urban growth eg migration for jobs	Transport hub (1) due to m Cultural/tourism centre (1) Industrial concentration (1) Commercial/financial centre Political centre (1) develop Connections with wider wo development from above (	deve deve e (1) men orld/o	elopn elop dev t (1)	nent ment elopi	(1) : (1) ment	(1)	

2. (c) (ii) The growth of global cities can have positive and negative impacts on the way of life of people who live in them. Explain why. The accuracy of your writing will be assessed in your answer to this question.	AO1.1	AO1.2	AO2	AO3	Accuracy	Total
		6			3	11

Band	Marks	Descriptor			
3	5-6	Good understanding of a range of relationships between people and cities becoming global. Connections or chains of reasoning give clear explanation. Balance between positive and negative impacts.  Meaning is clear. The response has purpose, is organised and well structured.			
2	3-4	Some understanding of impact of urban growth on people but lacking in depth and/or detail and/or balance between positive and negative. Some but limited connections made between factors and descriptive points may not be fully backed with evidence or explanation. Meaning is generally clear. The response is structured.			
1	Simple statements show basic understanding of human impact of glok city growth. Tendency to description w limited explanation.  Meaning may lack clarity in parts. Statements are linked by a basic structure.				
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.			

Candidates should demonstrate their understanding of the impact of global city growth on the lives of their residents.

The focus should be on explanation of the reasons for impacts rather than description of the impacts themselves and good explanation and the development of chains of reasoning should give access to the higher bands.

There also needs to be balanced treatment of positive and negative impacts. For example, candidates might refer to the concentration of business and commerce providing jobs, wealth and greater opportunities to residents and inmigrants due to the greater connections with other global cities and the regions they support but that these opportunities are likely to be greater in MEDC global cities. A negative impact of this in LEDCs could be the lack of capacity to absorb the number of migrants in search of this wealth which in turn leads to development of an informal economy as well as greater unemployment, poverty, and lack of access to services such as housing.

There is a wide range of approaches that candidates could take and as such there are numerous ways in which they could access higher marks and you should be guided by the quality of explanation and extent of balance in the answer. Remember that full marks does not require a perfect response.

After awarding a level and mark for the geographical response, apply the performance descriptors for writing accurately that follow. Having decided on a band, award a second mark (out of 3).

In applying these indicators, learners may only receive marks for responses that are in the context of the demands of the question; that is, where learners have made a genuine attempt to answer the question.

Band	Marks	Performance descriptions
High	3	<ul> <li>Learners spell and punctuate with consistent accuracy</li> <li>Learners use rules of grammar with effective control of meaning overall</li> <li>Learners use a wide range of specialist terms as appropriate</li> </ul>
Intermediate	2	<ul> <li>Learners spell and punctuate with considerable accuracy</li> <li>Learners use rules of grammar with general control of meaning overall</li> <li>Learners use a good range of specialist terms as appropriate</li> </ul>
Threshold	1	<ul> <li>Learners spell and punctuate with reasonable accuracy</li> <li>Learners use rules of grammar with some control of meaning and any errors do not significantly hinder meaning overall</li> <li>Learners use a limited range of specialist terms as appropriate</li> </ul>
	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

# **End of Question 2**

# **Options Theme 3, Question 3**

3. (a) (i) Describe the pattern of active volcanoes in Iceland.			AO1.2	AO2	AO3	Accuracy	Total
					3		3
Award one mark for each valid point.	Broadly linear/in a band (following the divergence aboundary (1) with some ecoast/ice caps/east (1) tw (1) merging into one in cess/SW or fewer in north (1)	zone excer o co entra	rift votion	valle: s (1) ntrati	y/pla e.g. ons	te wes in S\	N

3. (a) (ii) Geysers are features of volcanic landscapes. Describe the processes that cause geysers to become active.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total	
							3	
Award one mark for each valid point in the staged process. Reserve one mark for forces steam / boiling water back to the surface	it meets hot rocks (1) it expands (1) pressure							

3. (a) (iii) Explain why rift valleys can form at divergent plate boundaries. You may use a diagram to help your answer.	AO1.1	AO1.2	AO2	AO3	Accuracy	Total	
		4				4	

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

Band	Marks	Descriptor
2	3-4	More sophisticated understanding with explanation clear and communicated well.
1	1-2	Simple statements communicated in a basic way with limited understanding between points.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Candidates need to show that they understand the effect of diverging plates in the rifting and pulling apart of crustal rocks to create a rift valley. The tension created as plates pull the crust apart leads to vertical faults developing and between which the rocks can collapse/drop downwards to form a valley.

For band 2, look for understanding of collapse/sinking of middle section between rifting plates.

Although invited to use a diagram, this is not a requirement and candidates should be able to access band 2 with prose, diagram, or combination of both.

3. (b) (i) Give <b>one</b> use for a hazard risk map.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
		1					1
Award one mark for any valid response.	Identification of high/low risk areas (1) planning buildings/other development (1) inform government/planners (1)						

3. (b) (ii) Describe the location of the 2011 Tohoku earthquake.			AO1.2	AO2	AO3	Accuracy	Total
					3		3
Award one mark for each valid response.  Max 2 for direction or distance from named places/features on map	Off east / north-east coast Okhotsk Plate (1) 150-200 Plate margin (1) away from Japan (1) 50-150km from use of scale (1) South of Hokkaido (1)	)kḿ f n hig	rom hest	Okh risk	otsk zon	/Pac es of	f

3. (b) (iii) Explain why planners should be cautious about using hazard risk maps in earthquake zones.		AO1.1	AO1.2	A02	AO3	Accuracy	Total
			2				2
Award one mark for each valid point Do not credit 'map not reliable'	Earthquakes unpredictable (1) can occur in seemingly low risk areas (1) lead to complacency (1 development (1)					y (1)	

3. (b) (iv) People who live in wealthier countries like Japan are less vulnerable to earthquakes than other communities who live in tectonic zones.  To what extent do you agree with this statement? Use evidence from the Resource Box and the Earthquake Hazard Risk Map to help your answer. You may also use other examples you have studied.	AO1.1	A01.2	AO2	AO3	Accuracy	Total
			8			8

Band	Marks	Descriptor
4	7-8	Balanced analysis and sophisticated judgement using chains of reasoning. A range of detailed and elaborated points are made both for and against the statement. Information in the resources and any implications are interpreted and analysed thoroughly and perceptively. Conclusion is justified.  Meaning is unambiguous. The response has clear purpose, is fluent and logically structured.
3	5-6	Elaborated analysis and reasoned judgement using chains of reasoning.  Some imbalance in the discussion.  Information in the resources is interpreted carefully and used to good effect to support the argument. A reasoned and valid conclusion.  Meaning is clear. The response has purpose, is organised and well structured.
2	3-4	Valid but limited analysis and simple judgement. Valid points are made on one or both sides of the argument but are superficial. A few points are elaborated but lacking in sophistication. There is valid but limited interpretation of information in the resource. Conclusion is made but is simplistic and with limited justification. Meaning is generally clear. The response is structured.
1	1-2	Basic analysis. Valid but basic and simplistic points made with little or no elaboration. Basic conclusion is made but no justification.  Meaning may lack clarity in parts.  Statements are linked by a basic structure.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Candidates are asked to consider the relative vulnerability of communities in different tectonic zones including, but not limited to, countries at different levels of economic development. More wealthy countries are likely to have a higher level of mitigation and protection measures in place and most candidates should be able to argue this point with reference to the technology available in countries like Japan and the problems faced in poorer communities where there may be a lower standard of building construction and less availability or affordability of technology. The resources also point to a potential discussion of the impact of human losses v financial losses between rich and poor countries. However, they may also allude to the incidence of major disasters which have occurred even in the wealthiest countries and where the magnitude of individual events can exceed to capacity of measures designed to protect people. They may also consider the differing nature of plate boundaries and suggest that divergent zones can be less prone to major earthquakes than convergent zones.

At the top bands there should be some attempt to conclude the answer although a conclusion that increased vulnerability results from no single factor but a combination of factors which operate together is valid if well justified. Although there is a requirement to use the resource, credit candidates who go beyond the resource and add depth to their answer by using their own knowledge and understanding to develop their points.

#### **End of Question 3**

4	6	8	6	24

# **Options Theme 4, Question 4**

4. (a) (i) Describe how the pattern of coastal erosion changes along the Holderness coast.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total	
					3		3	
Award one mark for each valid point.	fluctuates (1) general increase north to south (1) zero in some places (1) named (1) any quantification (1) accurate use of scale (1) exceptions/anomalies (1) Highest at Withernsea (1)							

4. (a) (ii) Describe <b>one</b> impact of coastal erosion on communities living along coastlines.		AO1.1	AO1.2	AO2	AO3	Accuracy	Total
		3					3
Award one mark for impact with up to two development marks for elaboration. Do not award two separate impacts (unless the second is an elaboration of the first).	homes collapse onto beach homelessness (1) inability insurance (1) loss of posse impact (1) increased risk contine settlements (1) breach psychological impact (1) dinvestment (1) become rui	to session of floor of the contract to see the	ell (1 ons ( odino com ilt to	) or ( 1) ed g (1) nmur attra	get cono Loss nities act	mic s of s (1)	,

4. (a) (iii) Explain why some people believe that managed retreat should be used along rapidly eroding coastlines.	AO1.1	AO1.2	AO2	AO3	Accuracy	Total	
		4				4	Ī

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

Band	Marks	Descriptor
2	3-4	More sophisticated understanding with detailed explanation, clear and communicated well.
1	1-2	Simple statements communicated in a basic way with limited understanding between points or lacking detailed explanation.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Candidates need to demonstrate their understanding of why managed retreat might be used. As erosion continues and is likely to become worse as climate change takes place it could be decided to give the coastline up to the rising sea levels rather than wasting resources on unsustainable technologies to hold the line. Some candidates may pick up on the 'some people' and identify that these are likely to be planners/councils whose views may be at odds with residents.

(1) social problems (1) other development (max 2)

As a guide, look for understanding of costbenefit of holding the line as rationale for managed retreat for band 2.

4. (b) (i) What are environmental refugees?				AO2	AO3	Accuracy	Total	
							1	
Award one mark for a valid definition  People displaced from the home sea levels / climate change / desenvironmental issue (1)								
4. (b)(ii) Give <b>one</b> reason why climate change increases the vulnerability of many coastal communities.				AO2	AO3	Accuracy	Total	
							2	
Award one mark for reason and second mark for elaboration.  Do not award two separate reasons (unless the second is an elaboration of the first).  Rising sea levels (1) increased flooding of low-lying coastal areas (1) increased frequency of storms (1) and intensity (1) threaten homes/settlements (1) development (1)								

4. (b) (iii) Describe the location of the islands of Tuvalu shown on the map.			AO1.2	AO2	AO3	Accuracy	Total
					3		3
Award one mark for each valid point.  Max 2 marks for direction or distance from named places.  SW of (1) Pacific Ocean (1) NE of Australia (1) accurate quantification of distance from named place (1) North of NZ (1)							

4. (b) (iv) SIDS like Tuvalu are more vulnerable than other coastal communities to the effect of rising sea levels.  To what extent do you agree with this statement? Use evidence from the Resource Box and the Map of Environmental Refugees above to help your answer. You may use other examples you have studied.	AO1.1	AO1.2	A02	A03	Accuracy	Total	
			8			8	Ī

Band	Marks	Descriptor
4	7-8	Balanced analysis and sophisticated judgement using chains of reasoning. A range of detailed and elaborated points are made both for and against the statement. Information in the resources and any implications are interpreted and analysed thoroughly and perceptively. Conclusion is justified.  Meaning is unambiguous. The response has clear purpose, is fluent and logically structured.
3	5-6	Elaborated analysis and reasoned judgement using chains of reasoning. Some imbalance in the discussion. Information in the resources is interpreted carefully and used to good effect to support the argument. A reasoned and valid conclusion. Meaning is clear. The response has purpose, is organised and well structured.
2	3-4	Valid but limited analysis and simple judgement. Valid points are made on one or both sides of the argument but are superficial. A few points are elaborated but lacking in sophistication. There is valid but limited interpretation of information in the resource. Conclusion is made but is simplistic and with limited justification. Meaning is generally clear. The response is structured.
1	1-2	Basic analysis. Valid but basic and simplistic points made with little or no elaboration. Basic conclusion is made but no justification. Meaning may lack clarity in parts. Statements are linked by a basic structure.
	0	Award 0 marks if the answer is incorrect or wholly irrelevant.

Candidates are asked to consider the relative vulnerability of communities in different coastal areas including, but not limited to countries at different levels of economic development. SIDS like Tuvalu are often LICs with reliance on the sea for their livelihoods. They are also disadvantaged by geography in that they are small and low lying which makes them vulnerable. They are less likely to be able to implement protection or mitigation measures than more wealthy coastal countries/ communities which may be more able to hold the line. However, this could be countered by the fact that populations are relatively low and that people living in some more densely populated coastal areas are more vulnerable. A further argument could be that all coastal environments are under threat as sea levels rise due to climate change.

At the top bands there should be some attempt to conclude the answer although a conclusion that increased vulnerability results from no single factor but a combination of factors which operate together is valid if well justified. Although there is a requirement to consider the resource, credit candidates who go beyond the resource and add depth to their answer by using their own knowledge and understanding to develop their points.

### **End of Question 4**

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