

Mark Scheme (Results)

Summer 2013

GCSE Geography (5GB1H) Paper 01  
Dynamic Planet- Higher

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## General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

### Placing a mark within a level mark band

- The instructions below tell you how to reward responses within a level. Follow these unless there is an instruction given within a level. However, where a level has specific guidance about how to place an answer within a level, **always** follow that guidance.
- **2 mark bands**  
Start with the presumption that the mark will be the higher of the two.  
An answer which is poorly supported gets the lower mark.
- **3 mark bands**  
Start with a presumption that the mark will be the middle of the three.  
An answer which is poorly supported gets the lower mark.  
An answer which is well supported gets the higher mark.
- **4 mark bands**  
Start with a presumption that the mark will be the upper middle mark of the four.  
An answer which is poorly supported gets a lower mark.  
An answer which is well supported and shows depth or breadth of coverage gets the higher mark.

- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:

*i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear*

*ii) select and use a form and style of writing appropriate to purpose and to complex subject matter*

*iii) organise information clearly and coherently, using specialist vocabulary when appropriate.*

## Spelling, Punctuation and Grammar Marking Guidance

- The spelling, punctuation and grammar assessment criteria are common to GCSE English Literature, GCSE History, GCSE Geography and GCSE Religious Studies.
- All candidates, whichever subject they are being assessed on, must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Spelling, punctuation and grammar marking criteria should be applied positively. Candidates must be rewarded for what they have demonstrated rather than penalised for errors.
- Examiners should mark according to the marking criteria. All marks on the marking criteria should be used appropriately.
- All the marks on the marking criteria are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the marking criteria.
- Examiners should be prepared to award zero marks if the candidate's response is not worthy of credit according to the marking criteria.
- When examiners are in doubt regarding the application of the marking criteria to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked unless the candidate has replaced it with an alternative response.
- Handwriting may make it difficult to see if spelling, punctuation and grammar are correct. Examiners must make every effort to assess spelling, punctuation and grammar fairly and if they genuinely cannot make an assessment, the team leader must be consulted.
- Specialist terms do not always require the use of complex terminology but the vocabulary used should be appropriate to the subject and the question.
- Work by candidates with an amanuensis, scribe or typed script should be assessed for spelling, punctuation and grammar.
- Examiners are advised to consider the marking criteria in the following way:
  - How well does the response communicate the meaning?
  - What range of specialist terms is used?
  - How accurate is the spelling, punctuation and grammar?

Question Number	Answer	Mark
1(a)	<p>1 mark for each valid reason.</p> <p>Common answers likely to include:</p> <p>From the resource:</p> <ul style="list-style-type: none"> <li>• Damaged Roads and bridges may be impassable</li> <li>• Large fires restrict access</li> <li>• Large number of injuries can overwhelm rescue services.</li> <li>• Power shortages</li> <li>• Potential nuclear health risk</li> <li>• Widespread flooding from tsunami.</li> <li>• Threat of tsunamis.</li> <li>• High magnitude earthquake</li> </ul> <p>Alternative responses:</p> <ul style="list-style-type: none"> <li>• Fear of aftershocks</li> <li>• Debris blocks roads</li> <li>• Damaged buildings could collapse further</li> <li>• Communication links may not be working</li> <li>• Rescue services may be short staffed - their own members could be 'lost' in the quake.</li> <li>• Earthquake wasn't predicted</li> </ul> <p>NB: As the question specifically refers to Figure 1, at least one of the two responses must come from the Figure for full marks; i.e. Only award one mark for two generic statements.</p> <p style="text-align: right;">(2x1)</p>	(2)

Question Number	Answer	Mark
1 (b)	<p>1 mark for identifying an appropriate preparation. Additional mark awarded for providing an extending statement.</p> <p>e.g. authorities can produce action plans (1). These tell the emergency services what to do in the event of an eruption (1).</p> <p>e.g. diversion channels can be built (1) to channel lava / lahars away from settlements (1).</p> <p>e.g. Practice drills can be regularly completed (1) so local residents know what to do (1).</p> <p>Preparations are likely to include:</p> <ul style="list-style-type: none"> <li>• Improving monitoring / prediction</li> <li>• Carrying out eruption drills</li> <li>• Stock piling food, tents and medical supplies</li> <li>• Building diversion tunnels</li> <li>• Introducing safety zones</li> <li>• Constructing protective shelters</li> <li>• Producing action plans</li> <li>• Evacuating population from danger zone</li> </ul> <p>Extra mark can also be awarded for providing a relevant example. E.g. Prior to the eruption of Mt St Helen's a safety zone was introduced. (2 marks)</p> <p style="text-align: right;">(2 x 1)</p>	(2)

Question Number	Answer	Mark
1(c)	<p>1 mark for each difference identified. Additional mark(s) awarded for extending statements.</p> <p>e.g. The continental crust is thicker (1 mark), with depths of up to 50km (1 mark).</p> <p>e.g. Continental crust is mainly composed of granite (1 mark) while oceanic crust is formed from basalt (1 mark).</p> <p>Common responses likely to include:</p> <ul style="list-style-type: none"> <li>• Continental crust forms the land, whilst Oceanic is found beneath the sea.</li> <li>• Continental crust is mainly made from granite (andesite), whilst Oceanic crust is made from basalt.</li> <li>• Continental crust is thicker at 30 to 50km, whilst Oceanic is only 6 to 10km.</li> <li>• Continental crust has a lower density (lighter) than Oceanic.</li> <li>• Granite contains large crystals whilst Basalt is fine grains with no visible crystallisation.</li> <li>• Continental crust is usually older</li> <li>• Oceanic crust is more rigid.</li> </ul> <p>NB: Do not double credit reverse statements.</p> <p>NB: Responses which include valid characteristics but hasn't included how these features differ between plate types, max mark 3.</p>	(4)

Question Number	Answer	Mark
2(a)	<p>1 mark for each valid statement. At least one accurate graph reading from the Y-Axis must be included for the candidate to achieve full marks.</p> <p>Common responses likely to include:</p> <ul style="list-style-type: none"> <li>• Overall solar output has increased (+0.1).</li> <li>• Solar Output has fluctuated.</li> <li>• Solar output increased between 1930 (1365.5) and 1959/60 (1365.9). (+0.2)</li> <li>• Solar output reached a peak in 1959/60.</li> <li>• There was a fall in solar output during the 1960s (-0.1).</li> </ul> <p style="text-align: right;">(3x1)</p>	(3)

Question Number	Answer	Mark
2(b)	<p>1 mark for identifying an appropriate economic impact. Additional mark awarded for extending statements.</p> <p>e.g. Drier summer could lead to droughts in part of India (1) affecting farm output (1).</p> <p>e.g. Higher monsoon rains (1) could increase the need for expensive flood defences(1).</p> <p>Likely answers:</p> <ul style="list-style-type: none"> <li>• More extreme climates could deter tourists.</li> <li>• More droughts affecting the farming industry</li> <li>• More storms leading to increased flooding and higher defence and insurance costs.</li> <li>• Farmers could be forced to changing crops to reflect changing climate, possibly providing farmers with new markets.</li> <li>• Higher temperatures could increase the speed at which diseases spread leading to higher health care costs and increase absence from work.</li> <li>• Flooding of agricultural land, destroys crops and raises food prices.</li> </ul> <p>NB: If the candidate has failed to identify a developing country or if the response doesn't relate to the named country, maximum mark 1.</p>	(2)

Question Number	Answer	Mark
2(c)	<p>1 mark for each effect of climate change identified. Additional mark(s) awarded for extending statements.</p> <p>e.g. During the little ice age low temperatures affected the growth of some plants (1) resulting in a shortage of food for some animal species (1).</p> <p>e.g. Higher temperatures during the Medieval warm period lead to the spread of diseases (1) and parasites (1).</p> <p>Likely answers include:</p> <ul style="list-style-type: none"> <li>• Some plants and animals are unable to survive changes in temperature.</li> <li>• Shorter growing season would have reduced the amount of food available for other animals in the ecosystem.</li> <li>• Longer growing season may have lead to plentiful food attracting new predators.</li> <li>• Changing temperatures may have made animal migrations impossible.</li> <li>• Climate change will have destroyed some habitats, e.g. warmer temperatures will have lead to lowland flooding.</li> <li>• Diseases/fungi/parasites spread quickly amongst weakened animal and plant populations. Some bacteria may have flourished in warmer climates.</li> </ul> <p>NB: Although most candidates are likely to refer to a specific past period of climate change, this is not a question requirement and therefore full marks can be awarded even when the response is generic.</p> <p>NB: Do not credit students who refer to extinctions associated with current climate change e.g. polar bears.</p>	(3)

Question Number	Answer	Mark
3(a)(i)	C - Between 2001 and 2002	(1)

Question Number	Answer	Mark
3(a)(ii)	Any of the following three year periods: <ul style="list-style-type: none"> <li>• 2004 to 2006</li> <li>• 2005 to 2007</li> </ul>	(1)

Question Number	Answer	Mark
3(b)	<p>1 mark awarded for identifying a valid management method. Additional mark can be awarded for providing an extending statement.</p> <p>e.g. Establish national parks (1) to ban economic activities that harm the ecosystem (1).</p> <p>e.g. Limited deforestation (1) to ensure habitats are protected (1).</p> <p>e.g. CITES (1) international agreement to stop the trade in endangered species (1)</p> <p>Common conservation methods include:</p> <ul style="list-style-type: none"> <li>• National Parks - legal status given to designated regions to protect habitats and wildlife.</li> <li>• Trade Agreements - CITES (Convention on International trade in endangered species) signed by 166 countries. Purposed to prevent trade of items made from endangered species, e.g. ivory products or crocodile skin footwear.</li> <li>• Biodiversity Action Plans - Designed to protect native / natural vegetation in areas where habitats and wildlife are under threat.</li> <li>• Promotion of eco-tourism - Tourism based activities which are designed to be sustainable. Minimising damage to the environment.</li> <li>• Sustainable resource use e.g. logging industries replant deforested regions.</li> <li>• Fishing quotas to prevent overfishing.</li> </ul>	(2)

Question Number	Answer	Mark
3(c)	<p>1 mark for each role identified. Additional mark(s) awarded for extending statements.</p> <p>e.g. The biosphere recycles nutrients (1). Nutrients are returned to the soil when plants and leaves decompose (1).</p> <p>e.g. Vegetation cover shelters the soil from heavy rainfall (1) and thus reduces soil erosion (1).</p> <p>e.g. Green plants help to regulate the atmosphere through photosynthesis (1), where plants take in carbon dioxide (1) and release oxygen (1).</p> <p>Common answers likely to include:</p> <p><b>Maintaining soil health:</b></p> <ul style="list-style-type: none"> <li>• Living matter provide humus for soil formation.</li> <li>• Vegetation cover provides protection against soil erosion.</li> <li>• Plant roots hold the soil together.</li> <li>• Organic matter slows the movement of water through the soil preventing leaching.</li> <li>• Decomposing organic matter adds nutrients to the soil.</li> <li>• Insects and animals burrow into the soil, helping the circulation of water of air.</li> <li>• Nitrogen fixing plants, e.g. turnips.</li> </ul> <p><b>Atmospheric Regulation:</b></p> <ul style="list-style-type: none"> <li>• Green plants act as a carbon store.</li> <li>• Photosynthesis - plants convert carbon dioxide into oxygen.</li> <li>• Decomposing organic matter leads to the release of methane.</li> </ul> <p>NB: As the command word is describe, at least one of the roles identified needs to have been described in some detail for full marks.</p> <p>NB: Answer must refer to both maintaining soil health and atmosphere regulation for full marks.</p> <p style="text-align: right;">(3+1) or (2+2)</p>	(4)

Question Number	Answer	Mark
4(a)(i)	C - 1000 km <sup>2</sup>	(1)

Question Number	Answer	Mark
4(a)(ii)	<p>1 mark for an appropriate suggestion.</p> <p>Common answers likely to include:</p> <ul style="list-style-type: none"> <li>• Reduced water supply</li> <li>• Impact on fishing industry</li> <li>• Transport problems</li> <li>• Shortages of water for irrigation</li> <li>• Tensions between neighbouring countries</li> <li>• Changes in local microclimate</li> <li>• Reduced/less reliable rainfall</li> </ul>	(1)

Question Number	Answer	Mark
4(b)	<p>One mark awarded for identifying an appropriate benefit. Additional mark can be awarded for providing an extending statement.</p> <p>e.g. large dams can be used to provide HEP (1), a energy source that doesn't create carbon emissions (1).</p> <p>e.g. The Three Gorges project has reduced the flood risk downstream (1) by controlling the amount of water released during periods of heavy rain (1).</p> <p>Common benefits are likely to include:</p> <ul style="list-style-type: none"> <li>• Flood control</li> <li>• Generation of HEP</li> <li>• More reliable water supply</li> <li>• Reservoir for fishing</li> <li>• Dam / reservoir tourist attraction</li> <li>• Regulated flow benefits river transport</li> <li>• Water supply promotes irrigation</li> <li>• Employment - construction / maintenance</li> </ul> <p>NB: Failure to name a specific large-scale water management programme - max mark 1.</p> <p>NB: Answers focused on small-scale management programmes are not to be credited.</p>	(2)

Question Number	Answer	Mark
4(c)	<p>1 mark for clearly identifying a specific human activity. Development mark for stating how the identified activity leads to a reduction in water quality.</p> <p>E.g. Waste from the chemical industry (1) can make river water poisonous (1).</p> <p>E.g. Farmers use fertilisers (1) which can enter the river and cause eutrophication (1), deoxygenating the water (1).</p> <p>E.g. Sewage (1) can contaminate rivers (1) leading to the spread of diseases, such as cholera (1).</p> <p>Chosen answers are likely to refer to:</p> <ul style="list-style-type: none"> <li>• The disposal of hazardous waste from heavy industry can poison wildlife.</li> <li>• Excessive fertiliser use can result in eutrophication. Algae blooms block out sunlight and starve the water of oxygen.</li> <li>• Deforestation can result in water course siltation, blocking channels and affecting flow and oxygen levels.</li> <li>• Sewage waste disposed in river courses can create algae blooms and poison river life.</li> <li>• Chemical sprays from gardens, farms and parks can change the river's PH and make the water toxic.</li> <li>• Hot water released from power stations can reduce the water's oxygen content, reducing the river's ability to sustain life.</li> <li>• Over-extraction can lead to changes in river flow, creating stagnant zones.</li> <li>• Acid rain resulting from industrial pollution can change the PH of a river, killing wildlife.</li> <li>• Reservoir construction can hold back sediment.</li> </ul> <p>NB: Question refers to water 'quality' not 'supply'. Answers referring to how human actions can lead to water shortages should not be credited.</p> <p style="text-align: right;">(3+1) or (2+2)</p>	(4)

Question Number	Answer	Mark
5(a)	<p>1 mark for identifying at least one of the strategies used to protect the coast. Additional mark(s) for extending statements.</p> <p>Sea Wall:</p> <ul style="list-style-type: none"> <li>• acts like a barrier (1).</li> <li>• absorbs the power of the waves (1).</li> <li>• reflects the wave's energy back to sea (1).</li> </ul> <p>Rock Armour (rip-rap):</p> <ul style="list-style-type: none"> <li>• absorbs the wave's energy (1)</li> <li>• slows the speed of the waves (1)</li> <li>• causes the wave's energy to dissipate (1)</li> <li>• Protects the seawall (1)</li> </ul> <p>NB: Only 1 mark awarded for naming systems of defence - i.e. A candidates who identifies both the sea wall and rock armour but provides no extension should only receive 1 mark.</p> <p style="text-align: right;">(2+1)</p>	(3)

Question Number	Indicative content	
<p><b>*5(b)</b> <b>QWC</b> <b>i-ii-iii</b></p>	<p>Longshore drift can lead to the formation of a number of landforms including - beaches, spits, tombolos and bars.</p> <p>Beaches can be viewed as rivers of sand and shingle moving along the coast because of longshore drift.</p> <p>At river estuaries longshore drift carries material out into the river's mouth. This deposited material forms a sandbank. In the sheltered waters behind the sandbank alluvium build up forming salt marshes. The sandbank and marsh are together known as a <b>spit</b>.</p> <p>In small bays sand can be pushed by longshore drift across the 'mouth' forming a <b>bar</b>.</p> <p>In some locations longshore drift can form a bank of sand which joins the coastline to an offshore island, a landform known as a <b>tombolo</b>. Tombolos are usually produced when two longshore drifts from different directions meet.</p> <p><b>NB: Response can written, diagrammatic or a combination of both.</b></p> <p><b>NB: Do not credit repetitive points made on both diagram and in the text.</b></p>	
Level	Mark	Descriptor
<b>Level 0</b>	0	No acceptable response.
<b>Level 1</b>	1-2	<p>Answer refers to the process of longshore drift or a valid landform. Generic / simple statement(s). No attempt at explanation or explanation is unclear. Basic geographical terminology, spelling, punctuation and grammar.</p> <p>e.g. Longshore drift moves material in a zig-zag motion (1)</p>
<b>Level 2</b>	3-4	<p>The candidate has briefly explained longshore drift and linked the process to landform formation. Clearly communicated, but with limited use of geographical terminology.</p> <p>e.g. longshore drift carries sand and pebbles in a zig-zag motion in the direction of the prevailing wind. When the sand reaches a river estuary it is deposited forming a sandbank known as a spit (3 marks).</p>

Question Number	Answer	Mark
6(a)	<p>1 mark for each valid suggestion. Additional marks can be awarded for extending statements.</p> <p>Common responses likely to include:</p> <ul style="list-style-type: none"> <li>• The discharge increases after 4am as the rainwater starts to reach the river (overland flow).</li> <li>• Discharge increases for 10 hours as the rainwater travels to the river at different speeds depending on whether it is channelled by drains, flowing as surface runoff or moving through the soil (through flow).</li> <li>• The discharge starts to decrease from 2pm as the rainfall was lower during the second half of the storm.</li> <li>• The discharge only decreases slowly as groundwater from the storm is still arriving at the river.</li> <li>• The river's discharge is close to normal by midday on day 2 as all the rainwater from the storm has now passed through the river.</li> </ul> <p>NB: Key term is <b>WHY</b> - No marks are to be awarded for statements that simply describe the change.</p>	(3)

Question Number	Indicative content	
<p><b>*6(b)</b> <b>QWC</b> <b>i-ii-iii</b></p>	<p>Erosional processes can lead to the formation of a number of landforms including - v-shaped valleys, waterfalls and meanders (river cliff).</p> <p><b>V-Shaped valleys:</b> Vertical erosion (mainly corrasion) in the upland river can dig deep valleys into the landscape. The exposed sides of these valleys are changed by weathering and mass movement creating a <b>interlocking spurs</b> and a distinctive V-shape valley.</p> <p><b>Waterfalls:</b> In areas where hard and soft rock overlay, the river is able to erode the softer rock more rapidly creating a waterfall and its associated features: <b>plunge pools</b> and <b>gorges</b>. The soft rock is eroded through a combination of corrasion and hydraulic action.</p> <p><b>Meander:</b> Lateral erosion in the middle and lower river can lead to the formation of meanders. The river flows fastest on the outside of the bend, enabling it erode the bank into a <b>river cliff</b>.</p> <p><b>NB: Response can be written, diagrammatic or a combination of both.</b> <b>NB: Do not credit repetitive points made on both diagram and in the text.</b></p>	
Level	Mark	Descriptor
<b>Level 0</b>	0	No acceptable response.
<b>Level 1</b>	1-2	<p>Answer refers to an erosional process or a valid landform. Simple statement(s). Basic geographical terminology, spelling, punctuation and grammar.</p> <p>e.g. Waterfalls are made by rivers smashing pebbles into the soft rock (2 mark)</p>
<b>Level 2</b>	3-4	<p>The candidate has briefly explained how erosion contributes to the formation of a landform. Response is likely to include the naming of specific types of erosion. Clearly communicated, but with limited use of geographical terminology.</p> <p>e.g. Abrasion and hydraulic action erode the soft rock away causing the hard rock overhang to collapse. This creates a sudden drop in the river known as a waterfall (3 marks).</p>
<b>Level 3</b>	5-6	<p>Clear explanation of landform formation. Explanation is complete and correctly ordered. At this level, the typical response is likely to include accurate explanations of specific erosional processes. A range of geographical terms have been effectively applied. Well communicated response.</p> <p>e.g. On the outside of a meander the water is flowing fast leading to corrasion (where stones in the current are smashed into the river's channel), and hydraulic action (where the shear force of water, loosens material). These processes wear away the side of a river, created a steep bank know as a meander cliff. Continuous erosion may cause the cliff to become unstable and to slump into the river (6 marks)</p>

Question Number	Answer	Mark
7(a)	<p>1 mark awarded for each correct statement.</p> <p>Common responses likely to include:</p> <ul style="list-style-type: none"> <li>• There are few/no oil spills in the Atlantic</li> <li>• The UK is hardly affected by oil spills</li> <li>• Spills are greatest along the coast of Belgium and the Netherlands.</li> <li>• There is a 'line' of spills running along the English Channel</li> <li>• There are 'patches' of heavy spills density in the central region of the North Sea</li> <li>• Most spills are along coastal areas.</li> <li>• Spill density is greatest along major shipping routes.</li> <li>• Spills are common in areas of the North Sea where oil is extracted.</li> </ul> <p>NB: Also credit accurate grid / scale references.</p> <p style="text-align: right;">(3x1)</p>	(3)

Question Number	Indicative content	
<p><b>* 7 (b)</b> <b>QWC</b> <b>i-ii-iii</b></p>	<ul style="list-style-type: none"> <li>• St Lucia introduced a community-based coastline management programme in 1986. 19 areas (including reefs and mangroves) were declared Marine Reserve Areas. These areas have been developed as ecotourism resorts to provide local communities with new employment opportunities which enhance rather than destroy the coastline.</li> <li>• The EU has introduced a fisheries policy for all its member states in an attempt to revive fish stocks. Each year a limit is placed on the number of fish from each species that can be caught, this quota is based on an annual 'state of stock' survey. The EU has also designated some regions as no-take zones for species particularly under threat e.g. North Sea Cod.</li> <li>• The UN ratified the 'Law of the Sea' in 1994 to prevent individual nations from taking an unfair share of the ocean's resources. The Law of Sea covers fisheries, shipping, resources extraction and marine pollution. The treaty led to the creation of the international Seabed Authority, which has the task of sustainably managing the 60% of the world's oceans that declared 'open', i.e. under the control of no individual nation.</li> </ul>	
Level	Mark	Descriptor
Level 0	0	No acceptable response.
Level 1	1-2	<p>A list of marine management measures. Explanation is either not attempted or unclear. Use of geographical terminology tends to be basic.</p> <p>E.g. Reserves can be used to manage marine ecosystems (1).</p>
Level 2	3-4	<p>An attempt to explain one local or global action. Reference to at least one named example. Clearly communicated but with limited use of geographical terminology.</p> <p>E.g. In St Lucia zones were set up to protect important ecosystems such as coral reefs. Local people were employed to manage the reserve, giving them a job so they could give up fishing which was harming the ecosystem. (4)</p>
Level 3	5-6	<p>Response includes explanation of at least one global and one local action. Response is specific and focused. Answer is well communicated. Effective use of geographical terms.</p> <p>E.g. In St Lucia reserves were established to protect endangered ecosystems, including reefs and mangroves. These reserves restricted fishing and banned the use of mosquito insecticides as these were poisoning marine life. The UN's law of the sea was agreed in 1994. It outlined who owned the rights to exploit different parts of the sea. The open ocean was designated for 'the common good of mankind' and is protected by law to prevent harmful</p>

		activities. (6 marks)
SPaG Level 0	0	Errors severely hinder the meaning of the response or candidate does not spell, punctuate or use the rules of grammar within the context of the demands of the question.
SPaG Level 1	1	<i>Threshold performance</i> Candidate spells, punctuates and uses the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.
SPaG Level 2	2	<i>Intermediate performance</i> Candidate spells, punctuates and uses the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.
SPaG Level 3	3	<i>High performance</i> Candidate spells, punctuates and uses the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.

Question Number	Answer	Mark
8(a)	<p>1 mark awarded for each correct statement.</p> <p>Common responses likely to include:</p> <p>Differences:</p> <ul style="list-style-type: none"> <li>• Arctic Ocean sea ice has disintegrated</li> <li>• Ice shelf collapse has been fastest in the west.</li> <li>• Approx. 50km of open water in 2008</li> <li>• Increased number of icebergs</li> <li>• Valley glaciers have retreated along the coast.</li> <li>• Arctic Ocean ice sheet appears thinner.</li> </ul> <p>Similarities</p> <ul style="list-style-type: none"> <li>• The Petersen/Milne Ice shelves are still in intact.</li> <li>• The majority of Ellesmere Island remains covered in ice.</li> <li>• The extreme north of the image remains ice covered.</li> </ul> <p style="text-align: right;">(1+1+1)</p>	(3)

Question Number	Indicative content	
<p><b>*8(b)</b> <b>QWC</b> <b>i-ii-iii</b></p>	<p>The traditional cultures of indigenous populations in polar and hot arid regions are under threat due to a number of factors:</p> <ul style="list-style-type: none"> <li>• Overpopulation threatened communities as traditional practices become strained due to limited resources.</li> <li>• Improved transport links have introduced new ideas and enabled local populations to migrant.</li> <li>• Tourism has lead to traditional cultures being over-whelmed, and in some cases being exploited as an attraction.</li> <li>• Increasing levels of economic development has lead to pollution and habitat destruction.</li> <li>• New developments in some regions had lead to the destruction of culturally important sites.</li> <li>• Climate Change has meant that some traditional activities are no longer possible e.g. in some regions Inuit people are no longer able to hunt on the ice, as the ice its too unstable.</li> <li>• War, civil conflict, uprising and terrorism have brought instability to some hot-arid regions, forcing changes.</li> </ul>	
Level	Mark	Descriptor
Level 0	0	No acceptable response.
Level 1	1-2	<p>Answer identifies at least one threat to traditional culture. Use of geographical terminology tends to be basic.</p> <p>e.g. the culture of some indigenous people has been threatened due to increased contact with tourists. (1 mark)</p>
Level 2	3-4	<p>Basic explanation of at least one cultural threat. Reference to a named location. Clearly communicated but with limited use of geographical terminology.</p> <p>e.g. The Sami culture of Northern Sweden is under threat from growing tourism. Tourists have introduced new products leading to the disappearance of traditional skills. Transport has also made it easier for locals to leave (4 marks)</p> <p><b>NB: Candidates who fail to name a specific location are limited to level 2.</b></p>
Level 3	5-6	<p>Two or more threats are well explained. A named region is used to illustrate one or more of the explanations. Well communicated with good use of geographical terminology.</p> <p>E.g. The aboriginal people of central Australia have experienced many changes over the past two years. In some ways their culture has been threatened by growing tourism which some believe has exploited their cultural, turning it into a 'disney' attraction. Tourism has also lead to improvements in transport and communication networks which have brought remote aboriginal societies closer to 'western' civilization. These links have lead to western lifestyles being increasingly adopted by the aboriginals at the expense of their own culture. (6 marks)</p>

SPaG Level 0	0	Errors severely hinder the meaning of the response or candidate does not spell, punctuate or use the rules of grammar within the context of the demands of the question.
SPaG Level 1	1	<i>Threshold performance</i> Candidate spells, punctuates and uses the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.
SPaG Level 2	2	<i>Intermediate performance</i> Candidate spells, punctuates and uses the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.
SPaG Level 3	3	<i>High performance</i> Candidate spells, punctuates and uses the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.

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