

Examiners' Report  
January 2012

GCSE Geography 5GB1H 01

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# Introduction

This report covers responses from the Higher tier paper of GCSE Geography Specification B. The unit one paper was one hour long. The paper comprised of four compulsory sections and two optional sections. Each section started with a resource based activity, followed by one or two extending questions.

The question paper was designed to be progressively more difficult. The aim of the unit/paper was to provide candidates with a broad and varied understanding of the natural environment. Question paper completion required candidates to apply a range of skills. Candidates needed to be able to interpret and read maps, diagrams and charts.

## Question 1 (a)

The majority of candidates produced accurate answers to this question. The most common response linked the distribution of volcanic activity to plate boundaries. A small number of candidates lost marks by including overly simplistic statements, such as 'they are all in the sea' or they are 'only found on the coast'.

**SECTION A – INTRODUCTION TO THE DYNAMIC PLANET**

**Answer ALL questions.**

**Topic 1: Restless Earth**

1 Study Figure 1.



**Figure 1 – The distribution of volcanoes**

(a) State **two** facts about the distribution of volcanoes. (2)

They are located on the edge of plate boundaries.

They are situated around the ring of fire



**ResultsPlus**  
Examiner Comments

The candidate achieved full marks by making two clear statements.

## Question 1 (b)

The response to this question was very strong. A wide range of actions were identified and most responses included clear and relevant extension. As the question simply asks for 'an action', credit was given to both preparations and responses (short and long term). Some candidates identified a valid action (such as building stronger houses) but provided weak extension, eg simplistic statements such as "this will decrease deaths" or "reduce damage". These developments were not sufficient for the additional mark available.

(b) Describe **one** action that can be taken to reduce the impact of earthquakes. (2)

Re-designing buildings so they ~~can~~ can withstand earthquakes. An example would be putting metal bars inside ~~concrete~~ <sup>concrete</sup> walls (for existing building) for added strength.



**ResultsPlus**

**Examiner Comments**

A clear response. The candidate began by suggesting that building design could be improved and then developed their answer by providing the example of adding metal bars.



**ResultsPlus**

**Examiner Tip**

Whenever the candidate sees the 'describe' command word, their response must include extending statements.

(b) Describe **one** action that can be taken to reduce the impact of earthquakes. (2)

Better structures in buildings to make them safer.



**ResultsPlus**

**Examiner Comments**

This example illustrates a common mistake. Like the previous candidate, this candidate identified the need for stronger buildings. But unlike the example above, there was no real development. Simply stating that this would make the building safer is far too vague for the additional point.



**ResultsPlus**

**Examiner Tip**

The number of lines available should indicate the level of detail expected. It is unlikely that a single line statement will ever reach the level of detail necessary to gain both marks on a 'describe' question.

## Question 1 (c)

The focus of this question was 'economic' impacts; however a large number of candidates went off focus and gave social or environmental consequences. Candidates needed to make a clear reference to jobs, businesses, trade, expenses and taxes in order to score on this question. The command word on this item was again 'describe', so for full marks a candidate needed to develop at least one of their identified impacts.

(c) For a named earthquake or volcanic eruption, describe its economic impacts. (4)

Named earthquake or volcanic eruption Sichuan, China

The Sichuan earthquake in China had a few economical impacts, such as a lot of buildings destroyed by the magnitude and scale of the earthquake. 68,000 people died and people that were trapped had to be rescued by soldiers and the cost to fly them in would have had a huge economical impact.

(Total for Question 1 = 8 marks)



### ResultsPlus Examiner Comments

The candidate identified the cost of transporting large numbers of soldiers to Sichuan, but this is the only economic impact stated and there is no development.



### ResultsPlus Examiner Tip

Economic impacts relate to money. The most common responses on this type of question refer to business closures and related job losses or the cost of rebuilding.

(c) For a named earthquake or volcanic eruption, describe its economic impacts.

(4)

Named earthquake or volcanic eruption ... Iceland volcano  
in 2010, the Icelandic volcano at Reykjykanic  
erupted and caused many disruptions to the  
economy of many countries. This is because  
the massive ash clouds made it hard for pilots  
to see when flying aircraft. As a result all  
flights were grounded for approximately 1 week.  
This meant that the airline companies were losing  
out on making money and also received customer

(Total for Question 1 = 8 marks)

complaints. Flights from as far as the U.S.A were  
forced to be grounded so many <sup>Airline</sup> Company  
lost out on profit/customers.



### ResultsPlus Examiner Comments

This candidate gave an excellent account of the economic impact of the Icelandic volcano on the aviation industry. Although the candidate included a good level of detail in their response, they only referred to one impact and therefore were limited to a maximum of 3 marks.

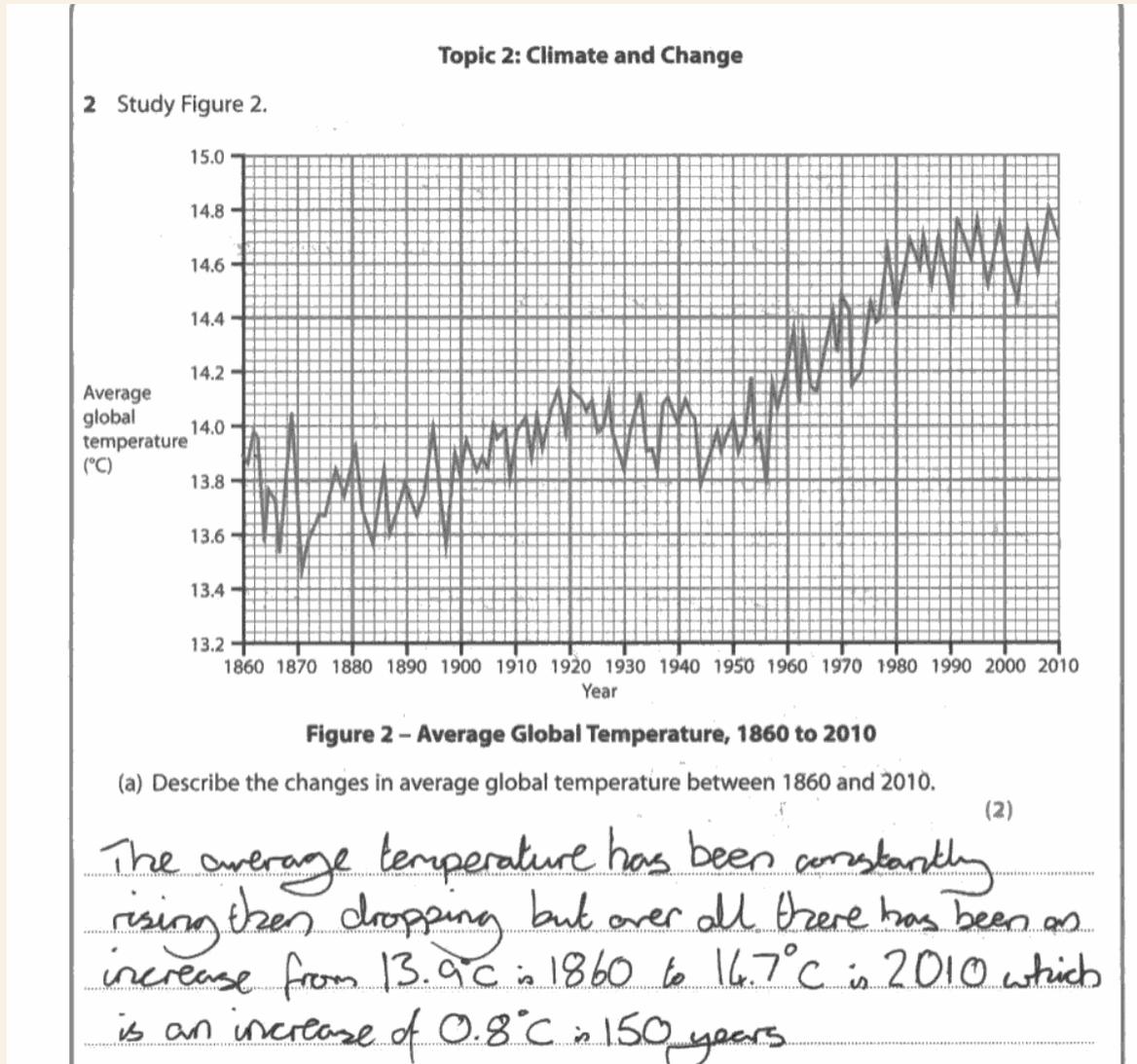


### ResultsPlus Examiner Tip

Watch out for multiplies, such as impacts or actions.  
These questions require 2 or more.

## Question 2 (a)

Although this question was answered well by most candidates, some lost marks by including inaccurate graph readings.



**ResultsPlus**

**Examiner Comments**

A strong response. The candidate identified the main trend and supported the statement with an accurate graph reading.



**ResultsPlus**

**Examiner Tip**

To guarantee full marks on a graph description question, candidates should (a) identify the main trend, (b) support with evidence - accurate graph readings and (c) identify any exceptions.

## Topic 2: Climate and Change

2 Study Figure 2.

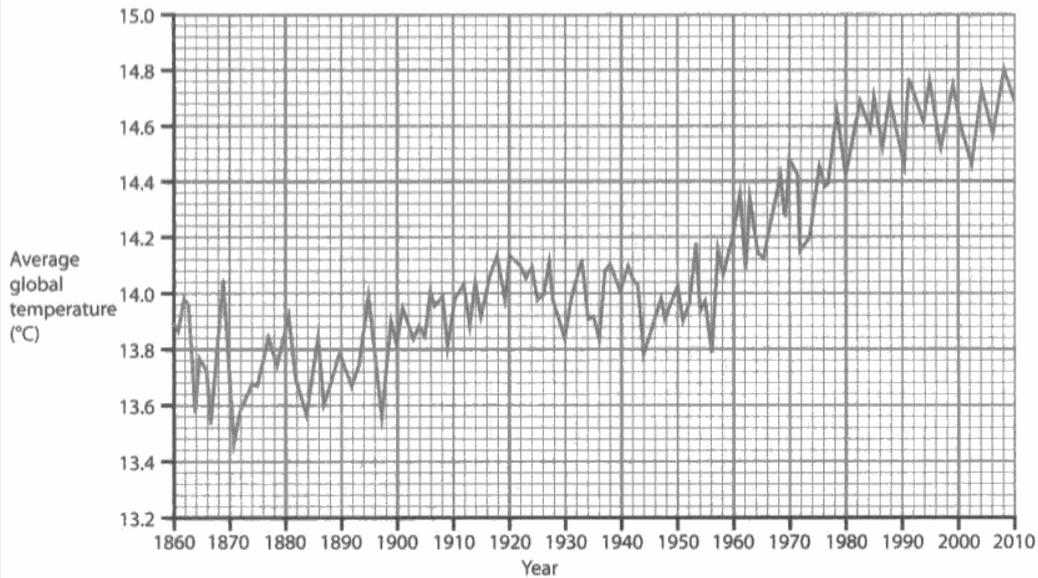


Figure 2 – Average Global Temperature, 1860 to 2010

(a) Describe the changes in average global temperature between 1860 and 2010.

From 1860 to 2010, the global temperature (2)  
has increased. It has increased by 9.8°C.



**ResultsPlus**

**Examiner Comments**

The candidate drops a mark by including an incorrect calculation.



**ResultsPlus**

**Examiner Tip**

Before taking a graph reading, always work out the axis scale to ensure accurate calculations.

## Question 2 (b)

This was another question with an economic focus and again candidates lost marks by identifying cultural and environmental impacts. Some candidates lost careless marks by failing to focus their response on the UK, instead referring to the loss of farmland in Bangladesh or a decline in tourism in Spain. A considerable number of candidates lost marks by listing several rather than describing one.

(b) Describe **one** possible economic impact of future climate change in the UK. (2)

In the future the impact of climate change could cost the UK 20% of its GDP which will affect our growth and sustainability.



**ResultsPlus**

**Examiner Comments**

The candidate only scored 1 mark as the two statements were repetitive.



**ResultsPlus**

**Examiner Tip**

It is a good idea to take the time to underline key and command words before tackling an exam question.

(b) Describe **one** possible economic impact of future climate change in the UK. (2)

Tourism could increase as a result of a warmer climate and this would mean that businesses would get more money in the summer months as more British people would stay here for summer and therefore have more money to spend as they won't be paying for overseas travel.



**ResultsPlus**

**Examiner Comments**

A clear and focused response. A growth in tourism was identified and the candidate linked this increase in customers to better British weather and greater spending power.

## Question 2 (c)

A significant minority of candidates appeared to have no understanding of the process of climate change. A lot of candidates attained low scores by confusing climate change with ozone depletion. A common incorrect response referred to greenhouse gases making a hole in the atmosphere which allowed more of the sun's energy to reach the earth. Many candidates lengthened their response by identifying why greenhouse gases are on the increase or by stating the likely future impacts of climate change – these statements did not answer the question set and were not credited.

(c) Explain how an increase in greenhouse gases can result in climate change.

(4)

An increase in greenhouse gases would mean there would be a thicker layer of greenhouse gases in the atmosphere. ~~And also~~ Such as carbon dioxide and methane. ~~When~~ <sup>As</sup> the sun's rays then reflect off the ~~earth's~~ <sup>Earth's</sup> surface fewer will be able to escape the thick layer of greenhouse gases. And more and more sun rays will ~~be~~ <sup>some/reflect</sup> back and stay in our atmosphere on Earth. This would mean that ~~more~~ the Earth would slowly become hotter and this would result in climate change - the Earth becoming hotter.



### ResultsPlus Examiner Comments

This is a clear accurate explanation of global warming.



### ResultsPlus Examiner Tip

Sometimes questions can be answered better with a diagram. It was possible to score full marks on this item by producing an accurately labelled diagram.

(c) Explain how an increase in greenhouse gases can result in climate change.

(4)

When fossil fuels are burnt they release  $\text{CO}_2$ , a greenhouse gas, the  $\text{CO}_2$  gets trapped in the ozone layer and magnifies the sun's heat. This can increase the global temperature leading to droughts in places. The air may also become more humid and water supplies reduced, because green house gases alter the climate of the earth.



**ResultsPlus**

**Examiner Comments**

The candidate received 1 mark for identifying  $\text{CO}_2$  as a greenhouse gas. The rest of the response was confused and incorrect.



**ResultsPlus**

**Examiner Tip**

The hole in the Ozone layer has significantly shrunk since the 1980s due to the banning of CFCs in sprays and new recycling rules for refrigerators. The Ozone hole is no longer considered a major environment concern (in fact many feel it's recovery is a human success!). There is no requirement to learn about the Ozone layer at any point in this GCSE course. If a candidate includes the word 'ozone' in their answer, they are going off focus.

### Question 3 (a)

Many candidates produced strong responses to this question. Extracting relevant information from the resource were rewarded, as were answers based on the candidate's own knowledge. As the command word was 'outline', candidates needed to include some development in their response for both marks. Some candidates lost marks by listing several rather than extending one.

**Topic 3: Battle for the Biosphere**

**3** Study Figure 3.

**RAINFOREST'S SUSTAINABLE FUTURE**

The future of the Amazon rainforest could be helped thanks to woody-vines similar to ivy, known as lianas. When dried, they are tough but easy to twist, making them perfect to use for the production of baskets and furniture.

Using simple techniques, lianas can be harvested by local people without damaging the environment. There is no need to clear the forest and the tough vines have a resistance to local pests, reducing the need for pesticides.

**Figure 3 – A newspaper article on the future of the Amazon rainforest**

(a) Outline **one** reason why an industry using lianas is sustainable. (2)

They are a natural resource which can be grown again and again. This will reduce the demand for wood from the rainforest so less ~~less~~ deforestation will occur



**ResultsPlus**  
Examiner Comments

A good answer. The candidate identified a sustainable factor of the liana industry and outlined how the use of lianas would reduce deforestation.

### Question 3 (b)

Another well answered question. The most common correct answers related to the balancing of the earth's atmosphere through photosynthesis or the provision of goods such as food and medicine.

(b) The biosphere acts as a **life support system** for the planet.  
Describe **one** way in which it does this. (2)

It does this through services. One service is ~~that~~ the nutrient cycle. This gives us vegetation and that gives us oxygen.



**ResultsPlus**

**Examiner Comments**

The candidate highlighted a number of life-support elements (nutrient cycling, vegetation cover and oxygen provision), but didn't offer any extension.



**ResultsPlus**

**Examiner Tip**

Read command terms carefully. A 'describe' question will always require extending statements. If you attempt to answer this type of question with a 'list', you will not score higher than half marks.

(b) The biosphere acts as a **life support system** for the planet.  
Describe **one** way in which it does this. (2)

Trees are considered as the lungs of the Earth - they take in CO<sub>2</sub> and let out oxygen, which humans and animals use to breathe, therefore keeping us alive.



**ResultsPlus**

**Examiner Comments**

The candidate highlighted the gas exchange role of vegetation and identified the specific gases involved.

### Question 3 (c)

Most candidates' focused their answers on human activities. The most common themes were deforestation and pollution. Development of at least one factor was needed for full marks. Candidates were credited for supporting their answer with named locations, eg in the Sahel over-grazing has caused the biome to change from savannah to desert.

No marks were awarded for statements that identified/described *why* a local action had taken place, eg forests have been cleared for roads and farming, as the question focus was *how* these actions have affected biomes. Statements referring to climate change were not credited as this is a global, not a local, factor.

(c) Describe how **local** factors can affect biomes. (4)

local factors such as deforestation to make areas for cattle ranches affect biomes such as the amazon rainforest in many ways. One way is by cutting down the trees, homes and habitats are destroyed for the animals living there. ~~these animals~~ may become extinct



#### ResultsPlus Examiner Comments

Candidate only identified 1 factor, so was limited to maximum of 3 marks. The candidate also confused the question, originally saying 'why' rather than 'how' deforestation can affect a biome.



#### ResultsPlus Examiner Tip

Watch out for plurals, these questions will always require more than one example, action, preparation etc.

(c) Describe how **local** factors can affect biomes.

(4)  
One local factor that could affect a biome is Altitude where if altitude increase temperature decreases, As this is not suitable for rain forest to be made, n. Another local factor is <sup>condition</sup> continentality where the further inland you are the less rainfall you would receive and rain forests require heavy rainfalls. The last local factor that could affect a biome is Geology where the type of rock and soil could determine suitable growing conditions for trees and other plants, limestone bedrock is unsuitable as it percolates water and therefore ~~no~~ plants cannot receive enough water.  
(Total for Question 3 = 8 marks)



## ResultsPlus

Examiner Comments

A wonderful answer that could have scored many more than 4 marks! This was one of the rare examples of a candidate choosing to answer the question by referring to the physical factors highlighted in the specification. Candidates who took this route tended to score maximum marks.



## ResultsPlus

Examiner Tip

One of the strengths of this response is its excellent grammar and spelling. Literacy will be playing a greater role in future examinations with specific marks being awarded for candidates who are able to write in a clear and coherent manner, with accurate spelling and punctuation.

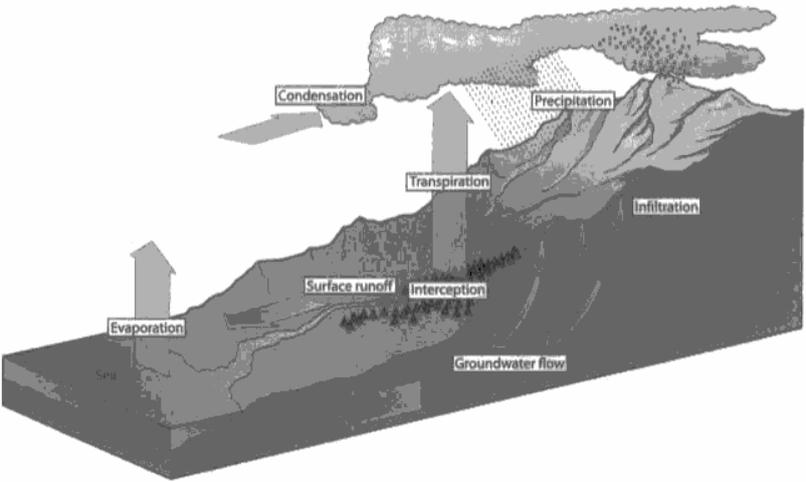
## Question 4 (a)

Only precipitation related statements were credited and scored. Many candidates produced a full description of the hydrological cycle, even explaining evaporation and condensation but only scored a single point for making a passing reference to rainfall.

Some candidates went off focus on this question, giving an account of the entire water cycle rather than just the process of precipitation.

**Topic 4: Water World**

4 Study Figure 4.



**Figure 4 – The Hydrological Cycle**

(a) Outline the process of precipitation. (2)

This happens when the water in lakes or rivers are heated by the sun's rays and start to evaporate. They then condense into forming clouds. When clouds cannot hold enough water vapour inside them, precipitation takes place in the form of many ways i.e. rain, sleet, hail, snow etc.



**ResultsPlus**  
Examiner Comments

Although the candidate began their response with an off focus statement about evaporation, the second half of the answer clearly described the process of rainfall and included some good terminology.

## Question 4 (b)

A significant minority misinterpreted this question, confusing an insufficient/unreliable water supply with poor water quality. Candidates frequently referred to polluted waters leading to the spread of disease. This common response relates to water quality and as such was not awarded. Where candidates had stated that locals were forced to use polluted waters because alternative supplies were unreliable, credit was given.

A number of candidates were unable to name a suitable location. Africa was frequently named by candidates as their focus region. As Africa is a very large continent with a wide variety of regions, it was not specific enough to be acceptable as a named location. If an area of water vulnerability was not identified the candidate could only score one mark.

(b) For a named vulnerable area, describe **one** problem caused by an **unreliable** or **insufficient** water supply. (2)

Named vulnerable area The Sahel

As the climate is getting hotter the Sahel is getting more dry and hot causing a lack in water. This means local people have to travel a huge distance in order to get water from a ~~be~~ hand dug well or waterpump.



### ResultsPlus Examiner Comments

Although the candidate identified the need 'to walk long distances' there was no related extension. The original statement was a brief account of why the region is facing water shortages, whereas the final statement explained how water can be collected; neither of these points related to the question.

(b) For a named vulnerable area, describe **one** problem caused by an **unreliable** or **insufficient** water supply.

(2)

Named vulnerable area The Sahel .

In the Sahel, water supplies are low or insufficient. One problem caused by these would be farmers not being able to find enough water for their crops. Lack of crops could lead to food shortages and lower incomes.



### ResultsPlus Examiner Comments

The candidate highlighted crop failure due to a lack of water and extended the answer by describing how this would impact on local people, eg shortages and local incomes.



### ResultsPlus Examiner Tip

In order to score full marks on this question candidates were required to name a vulnerable area. This candidate correctly identified the Sahel. Many candidates lost marks for being too vague (Africa was a common response) or by choosing an unsuitable location.

## Question 4 (c)

For full marks, candidates were required to identify at least two human activities that can disrupt water supply. Candidates were required to extend at least one of their identified actions with some description in order to gain maximum marks. Although most candidates scored at least half marks on this question, repetitive statements about pollution and inappropriate marine examples prevented many from attaining the maximum mark.

(c) Using examples, describe how human interference can **disrupt** water supply. (4)

Human Interference can disrupt water supply by pollution, causing the water to become contaminated. Sewage is a main problem for contamination of water supplies.

In the Philippines they use cyanide in the work to temporarily paralyse fish and that pollutes the water and can also contaminate their water supply.



### ResultsPlus Examiner Comments

The candidate identified pollution and linked it to sewage and contamination, just enough for two marks. The second statement referred to a marine environment and therefore had no relation to water supply.



### ResultsPlus Examiner Tip

This account lost marks by mixing up the different topics. Be extra careful when attempting to use case studies from a different part of the course.

(c) Using examples, describe how human interference can disrupt water supply.

(4)

For ~~spaces~~ <sup>places</sup> like 3 gorges dam in China, it means that lots of water is held up ~~be~~ behind the dam for use by the city. This however means ~~areas~~ down-stream are effected with lack of water which may cause desertification to occur also the areas with farms have crops dying due to lack of irrigation. Also the colorado river in the USA has been diverted with man-made channels to supply cities. This again means plant and animals ~~don't~~ <sup>dam</sup> stream don't receive enough water.

(Total for Question 4 = 8 marks)



### ResultsPlus

Examiner Comments

A clear and detailed response referring to two appropriate locations. The candidate demonstrated a solid understanding of the content being tested.



### ResultsPlus

Examiner Tip

When a question asks for examples, the best way to score maximum marks is by including location specific information in your answer.

## Question 5 (a)

This question was answered well by the majority of candidates. A small number of candidates lost marks by stating *why* rather than *how* the cliff collapsed, eg the cliff collapsed because there were no defences to protect it.

5 Study Figure 5.



Figure 5 – Cliff collapse on the east coast of England

(a) Describe how cliffs such as this have collapsed.

(3)

The sea waves have consistently been eroding away at the bottom of this cliff through abrasion, hydraulic action, and attrition. This causes a wave-cut notch, which further erodes into a wave cut platform. Once the bottom of the cliff has been eroded far enough, the weight at the top has no support and gravity causes it to collapse.



### ResultsPlus Examiner Comments

A clear response. The candidate referred to several processes, used subject specific vocabulary and linked the statements into a logical and correctly sequenced response.



### ResultsPlus Examiner Tip

Be careful when using geographical terms. Attrition was not a suitable process for this answer. Attrition is the process whereby stones within the waves collide and breakdown. It is abrasion which weakens and changes the cliff face.

5 Study Figure 5.

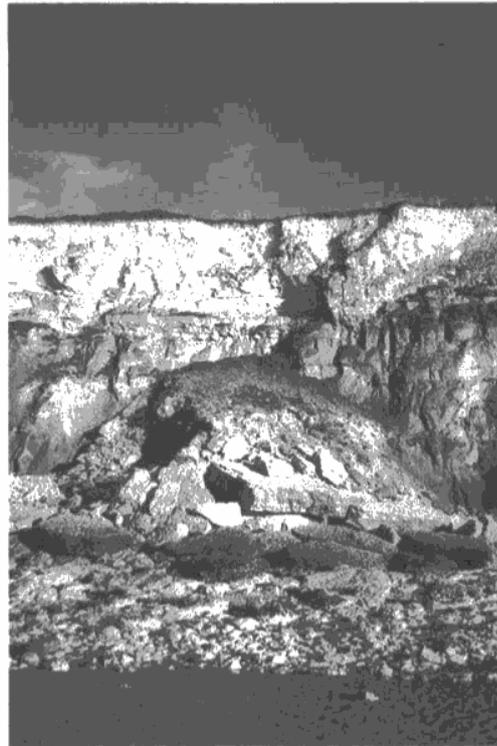


Figure 5 – Cliff collapse on the east coast of England

(a) Describe how cliffs such as this have collapsed.

(3)

Cliffs like this have ~~er~~ collapsed due to the ever ongoing erosion taking place when the waves hit the cliffs they slowly begin to erode. And form arches, caves and then they finally collapse.



**ResultsPlus**  
Examiner Comments

The candidate briefly explained how waves can cause erosion but the rest of the answer was repetitive or off-focus. To have obtained a higher score, the candidate needed to identify the different types of erosion involved and include some description of at least one of the processes.

## Question 5 (b)

The level of response to this question was generally higher than on similar items on previous examinations. The key factor for moving between levels on this question was the amount of explanation provided. Level 1 responses had little, or no, explanation; level 2 responses included some explanation, although this may have been rather vague; whereas level 3 responses had to include some detailed explanation.

To attain full marks candidates were also required to include case study specific knowledge.

\*(b) For a named area of coast, explain how coastal retreat is being managed.

(6)

Named area of coast Holderness

Part of the Holderness coast was protected by groynes and rip rap whilst the other part had been left to erode. This was managed by moving back the defences and people. This way is very expensive as people lived and worked on the place that was going to be retreated, and needed to be relocated.



**ResultsPlus**  
Examiner Comments

The candidate identified the concept of 'managed retreat' and provided a brief explanation. The final comment described the impact of the approach rather than how it worked. The candidate identified groynes but offered no extension.

\*(b) For a named area of coast, explain how coastal retreat is being managed.

(6)

Named area of coast Minehead

In minehead, hard engineering techniques are being used in an attempt to stop coastal retreat. sea walls are being used to protect the vulnerable coastline from destructive waves, by preventing the waves from reaching the cliffs. Rock armour is also being used to take most of the energy out of the waves and preventing it from doing much damage. Groynes are being used to prevent wind from removing sand from the beach (and through the process of long shore drift). Although these methods are effective, they are extremely expensive and are an eyesore.

(Total for Question 5 = 9 marks)



**ResultsPlus**

**Examiner Comments**

A strong response achieving level 3. Several management techniques were highlighted and explained. For full marks the candidates needed to include more case study specific information. Apart from naming Minehead on the title line there were no further references.

## Question 6 (a)

This was a strong question for most candidates. The vast majority of candidates were able to identify two erosional processes and provide some clear explanation. Some candidates lost marks by identifying attrition or by referring to lateral erosion, the question specifically referred to erosion of the river's bed. Some candidates carelessly lost marks by mixing up different processes, ie highlighting hydraulic action but explaining corrosion.

6 Study Figure 6.



Figure 6 – Valley in the upper course of a river

(a) Describe how rivers such as this erode their bed.

(3)

Rivers such as this erode their bed through the process of deposition and abrasion. This is where sediment is washed along and rocks bash into each other, wearing away the river bed.



**ResultsPlus**  
Examiner Comments

A confused answer. The candidate mixed up erosion and deposition. They identified abrasion but described attrition. Attrition wasn't an appropriate process as it erodes the river's load, not its bed.

6 Study Figure 6.

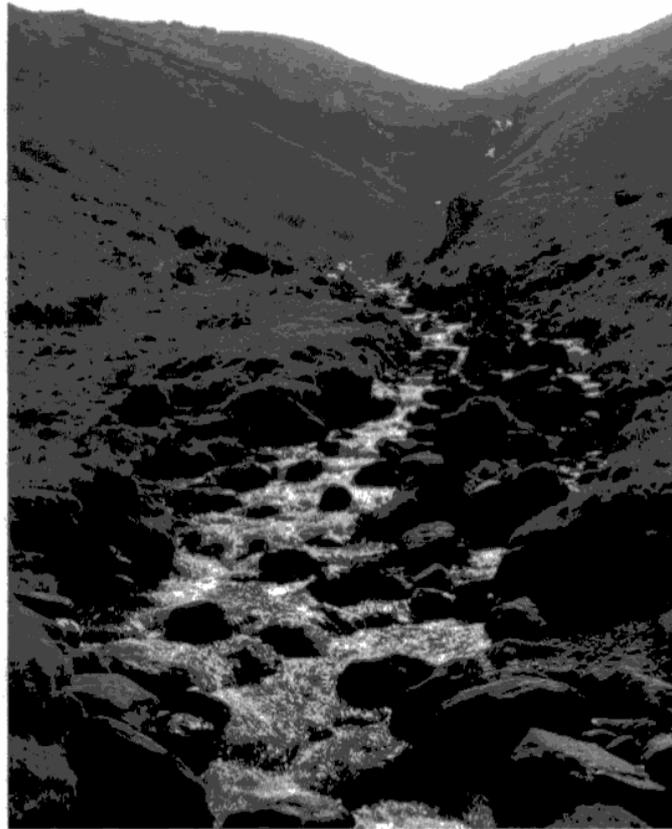


Figure 6 – Valley in the upper course of a river

(a) Describe how rivers such as this erode their bed.

(3)

Rivers erode their bed through abrasion and also hydraulic action. This means that rocks rub against the surface and causes it to erode forming a sand paper effect. Hydraulic action is when currents change. Attrition is when rocks bang together and help erode the banks too.



**ResultsPlus**  
Examiner Comments

The candidate identified abrasion and hydraulic action. They provided a brief explanation of abrasion. Although the final statement went off focus and the explanation of hydraulic action wasn't sufficiently clear, the candidate did include just enough for full marks.

## Question 6 (b)

As with 5(b) the main level 'elevator' on this item was the level of explanation. Top level responses had to include detailed explanation. Candidates who identified a wide range of management strategies but failed to include any real explanation were unable to progress beyond level 1. Again, for full marks candidates must have included clear case study specific knowledge. A large number of candidates focused their answer on the Three Gorges Dam in China. These answers tended to go off-focus and often ended up being a list of arguments for and against the project rather than an explanation of how the dams reduced flood risk. The best responses were often based on the management of the River Skerne in Darlington.

\*(b) For a named flood management scheme, explain how the risk of flooding has been managed.

(6)

Flood management scheme Three Gorges Dam, China.

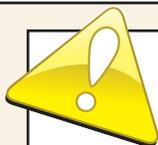
The Three Gorges Dam in China was created to manage the flooding of the Yangtze River. They created a dam and increased the height of the concrete river banks to prevent local, low-lying areas from floods. The dam meant that areas further down the river were less likely to become flooded, as there was a build up of water upstream at the dam. A benefit was that hydroelectric power was created at the same time. The scheme was very expensive and created local jobs in the construction stages. The river has more sophisticated and technologically advanced management now therefore flooding could be prevented in the future.

(Total for Question 6 = 9 marks)



**ResultsPlus**  
Examiner Comments

The candidate identified concrete banks and the construction of a dam. A very brief explanation of how the dam reduced flood risk pushed this response to level 2. The final half of the question is off-focus and gained no additional marks.



**ResultsPlus**  
Examiner Tip

Take care when selecting case studies. Make sure the candidates chosen example includes sufficient detail to achieve full marks. The candidate will often need different case studies for different variations of question. The Three Gorges Dam would have worked well on a question asking for the benefits and drawbacks of hard engineering, but didn't seem to offer the depth of explanation needed to attain full marks on this question.

\*(b) For a named flood management scheme, explain how the risk of flooding has been managed.

(6)

Flood management scheme River Skerne; Darlington

The local authorities in Darlington have used measures of integrated river management in order to manage the flood risk. Integrated management refers to management techniques which take into consideration - physical and human geography. Measures of afforestation allows for vegetation to be grown - which increased the amount of interception. In addition to this, measures of land zoning use - allowed the authorities to allocated building to lands depending on the flood risk - which reduced the impacts of flooding. Finally the use of

(Total for Question 6 = 9 marks)

**TOTAL FOR SECTION B = 9 MARKS**

flood plains - allowed the authorities to choose areas of which were allowed to natural flood - this not affecting surrounding areas.



**ResultsPlus**  
Examiner Comments

A detailed and focused response. The answer included case study specific knowledge and made effective use of a range of geographical terms.

## Question 7 (a)

Although many candidates achieved high scores on this question, some failed to read the question carefully enough, leading to descriptions of the graph, rather than suggesting reasons for the growth in dead zones. No marks were awarded for describing the data or extracting figures. As the question referred to reasons, at least two suggestions were needed for full marks. The reasons most commonly suggested were climate change and over-fishing. Candidates who provide extending statements were credited.

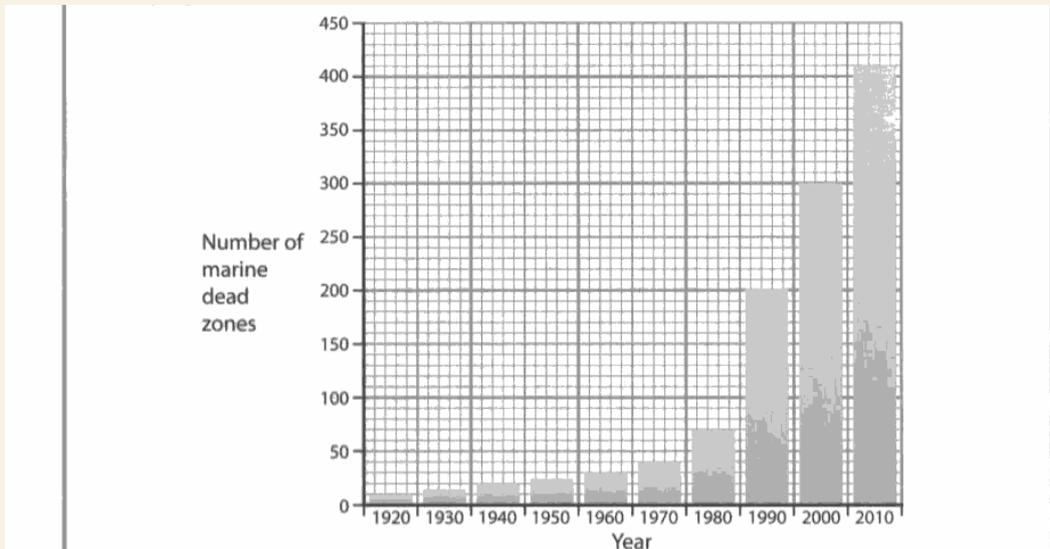


Figure 7 – A graph showing the number of degraded marine zones with little life (dead zones)

(a) Suggest reasons for the changes in the number of marine dead zones.

(3)

one reason for the increase in marine dead zones is because of overfishing, overfishing is when fisherman catch fish at an unsustainable rate using boats such as trawlers and these boats have large nets where they break off bits of coral while also destroying habitats. Another reason is because of new technology where it is able to figure out where the best place to fish is resulting in an increase in dead zones like in 2010 the number of dead zones was 410



**ResultsPlus**

**Examiner Comments**

A good answer. Although the focus of the response was fishing, the candidate gave several different suggestions (destructive techniques, over fishing and the use of new technology to improve catch size) and therefore achieved full marks.



**ResultsPlus**

**Examiner Tip**

On a 'suggest' question candidates are not expected to have specific knowledge. The examiner will be looking to see if they can apply their general understanding of the topic to the question. They get a mark for every reasonable suggestion.

## Question 7 (b)

The question focus was conflict. Although most candidates were able to broadly identify a point of conflict, answers were often vague with candidates not always identifying the opposing groups. To progress to level 3, candidates were required to clearly explain the contrasting views of each group involved. Candidates were expected to refer to specific examples from around the world, but many lost marks by making generalised/non-location specific statements.

\*(b) Using one or more examples, explain why local groups often have conflicting views about the management of marine ecosystems.

(6)

The local management scheme in St. Lucia left groups conflicting on the management of their marine ecosystem. The environmentalist panel (made up of ordinary local people) campaigned and put in place zoning. The zones included 'no-go' zones, ~~and~~ and zones that only certain activities could take place, e.g. fishing. They got the money for this through taxing the fishermen and this caused conflict. The fishermen ~~was~~ disagreed and wanted to fish all they wanted, where they wanted to earn their money. The panel's view was to conserve their marine ecosystem, but the fishermen's was to earn a living from using it.

(Total for Question 7 = 9 marks)



**ResultsPlus**  
Examiner Comments

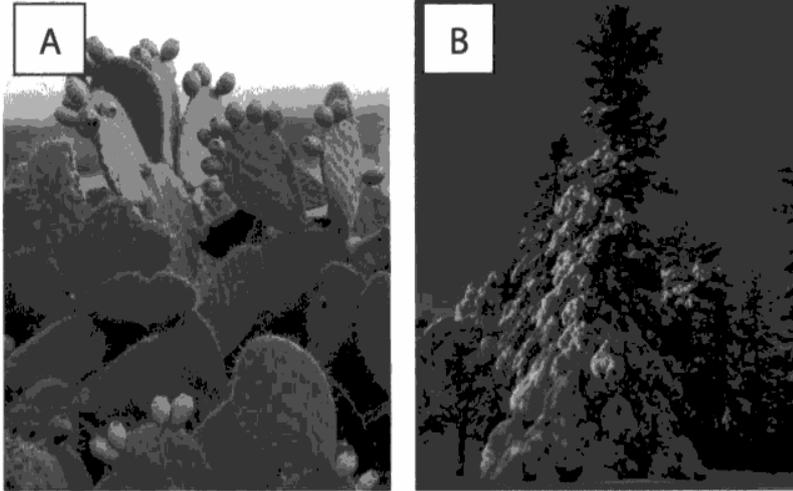
Location specific answer. Point of conflict was identified and both sides of the argument briefly explained. A little more depth needed for full marks.

## Question 8 (a)

The vast majority of candidates scored well on this item.

Almost all candidates focused their response on the cactus with the most common themes being water storage capabilities and the plants prickly skin. A small number of candidates lost marks by originally referring to the coniferous tree but then discussing adaptations associated with the cactus.

8 Study Figure 8.



(Source: © Kalle Pahajoki/Alamy)

**Figure 8 – Plants that live in extreme climates**

(a) For **either A or B**, describe how the vegetation has adapted to its extreme climate.

(3)

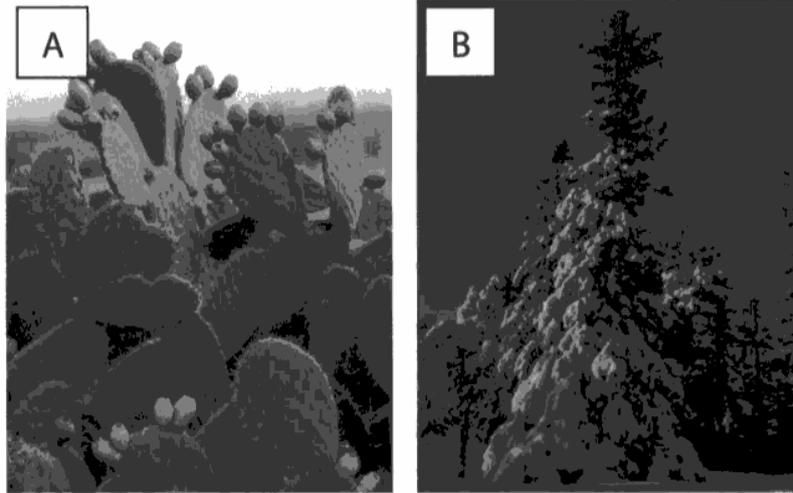
In B the trees leaves are very small so less heat is lost. The leaves grow facing downwards which means they are less likely to be damaged by heavy snowfall. Vegetation is also adapted to grow on rocks without the use of soil.



**ResultsPlus**  
Examiner Comments

The candidate's response was mixed up and confused. Conifers have small leaves to reduce moisture loss not heat (plants don't generate heat), the branches (not the leaves) face down to allow snow to slip off and the final statement refers to small alpine type plants rather than coniferous trees.

8 Study Figure 8.



(Source: © Kalle Pahajoki/Alamy)

**Figure 8 – Plants that live in extreme climates**

(a) For **either A or B**, describe how the vegetation has adapted to its extreme climate.

(3)

A) has adapted to its environment by having deep roots to get to water supply's deep in the ground and has spikes to stop predators getting to the water. It also puts toxins into the water so only it can drink it.



**ResultsPlus**  
Examiner Comments

A clear and developed response.

## Question 8 (b)

As with the previous levelled items, the key to progressions on this question was development, however, on this question the command word was 'describe'. As such, level 1 answers were basically lists of unique characteristics (eg nomadic lifestyle); whereas level 2 responses had to include extending statements, although these may have been rather basic/vague. Level 3 candidates needed to include detailed description in their answer and for full marks there needed to be clear case study specific information.

\*(b) Describe how the culture and values (way of life) of people living in extreme climates can be considered unique.

(6)

The Fulani people measure wealth in cattle and can navigate their way around the Sahel using only sand dunes. The Aborigines believe that they are caretakers for the land rather than owners and therefore respect it and only take what they need, therefore leading a very sustainable life. They have a lot of unique arts and crafts such as boomerangs which relate to hunting and didgeridoos. Alaskan tribes such as the Yuki'ki can have rare languages with very few speakers. Skills such as the production of seal skin boots is unique and traditional to their culture.



**ResultsPlus**  
Examiner Comments

A super answer. Good case study knowledge and detailed description.

## Paper Summary

Candidates were given the choice of answering either sections 5 or 6, 7 or 8. Similar to the June paper, the most popular topics were 'Coastal Change and Conflict' and 'Extreme Climates'. The breakdown in both cases was approximately one third, two thirds. Candidates completing the 'Extreme Climate' topic are given the choice of focusing on either a hot arid or arctic region. Hot arid locations proved most popular but didn't necessarily provide the best answers.

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