

Examiners' Report January 2013

GCSE Geography 5GB1F 01

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Introduction

This report covers responses from the Foundation Tier paper of GCSE Geography Specification B. This one-hour paper comprised of four compulsory sections and two optional topics. Each section started with a resource-based activity followed by 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. The paper required candidates to apply a range of skills. Candidates needed to be able to interpret and read maps, diagrams and charts. The final questions in parts 7 and 8 included a SPaG (spelling, punctuation and grammar) element, totalling three marks.

Question 1(b)(1)

The vast majority of candidates correctly selected 'mantle'. Incorrect candidates tended to opt for 'magma'.

Question 1(b)(2)

A large number of students selected incorrectly; 'electrical', 'ocean' and 'magma' were all frequently chosen.

Question 1(c)

There were some good responses to this question. For full marks, candidates were required to identify and develop two actions that could be completed in advance of any earthquake. A common incorrect response suggested that the Richter Scale or seismographs can be used to predict future seismic activity, allowing pre-earthquake evacuations. Responses that focused on a single action (such as building design) were limited to a maximum score of three marks, regardless of how many examples they provided. As with previous series, statements such as, 'this will stop the building from falling over' or 'this will reduce injuries/deaths' were too simplistic to be awarded the development points available.

(c) Describe **two** actions that can be taken to reduce the impact of future earthquakes.

- (4)
1. ~~Building~~ Building earthquake proof buildings to prevent damage.
 2. Practise earthquake drills so people know how to react safely.



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This response identifies two actions but includes little development. 'To prevent damage' is far too simplistic. The candidate needed to explain how the damage could be prevented by using cross-bracing or reinforced foundations.

(c) Describe **two** actions that can be taken to reduce the impact of future earthquakes.

(4)

- 1 You can train people on what to do if there is an earthquake. For example, ~~you~~ having earthquake drills during school. Teach them to go under tables.
- 2 Having earthquake proof buildings. For example, you can put electronic shutters over windows to prevent the glasses from breaking and harming anyone.



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Here two actions are identified and developed. A strong response.

Question 2(b)

This question required students to outline one reason. Some candidates failed to score full marks by listing several factors rather than developing one. A considerable number of candidates identified a valid reason but failed to provide sufficient development. Many candidates attempted to extend their response by restating information given in the question, such as 'this would increase CO₂'. Some candidates failed to score due to overly simplistic responses such as 'CO₂ is higher due to increased pollution'. The most common correct response referred to either higher levels of development or increased car ownership/travel leading to greater fossil fuel use.

(b) Outline **one** reason why the amount of CO₂ in the atmosphere has changed.

(2)

modern technologies and factories require the use of fossil fuels, mainly to burn them, in doing this it releases a lot of CO₂



ResultsPlus
examiner comment

The response above identifies factories and links these to the burning of fossil fuels.

(b) Outline **one** reason why the amount of CO₂ in the atmosphere has changed.

(2)

Because more and more greenhouse gases are let out into the atmosphere as there is more vehicles nowadays



ResultsPlus
examiner comment

This response identifies increased car ownership as a reason for recent CO₂ change but fails to provide a valid extending statement.

Question 2(c)

The majority of students were able to score at least two marks on this question, with a pleasing number attaining full marks. Candidates were required to identify two challenges and provide development. Those who scored full marks tended to opt for two very different challenges preventing overlap extension statements. Rising sea levels leading to flooding and comments relating to droughts and crop failure were the most common correct response. Some candidates lost marks by giving overly simplistic development statements that basically repeated the first point made, such as 'there could be no rainfall, causing droughts'. Some candidates lost marks or failed to score by referring to positive impacts rather than challenges, eg 'warmer summers could lead to a boom in tourism'.

(c) Describe **two** challenges the UK is likely to face as a result of climate change.

(4)

1 The sea levels rising, due to the change in temperate polar regions are melting causing an increase in sea water, therefore floods will become more frequent in coastal areas.

2 A change in temperature, therefore causing plants not to grow at specific times of the year, due to either being too cold or hot for them. This will cause food shortages and a higher food demand from people in the UK and other countries they supply to.



ResultsPlus
examiner comment

Two challenges are clearly identified with appropriate extending statements.

(c) Describe **two** challenges the UK is likely to face as a result of climate change.

(4)

1 If the climate change keeps on going up then they are going to be more greenhouse gases in the air which means that people might die or might get ill for breathing too many gases in.

2 Also the more people that drive cars the more fossil fuels that go into the air and they are going to be more CO₂ parts per million ppm.



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The first statement is confused and incorrect. The second statement goes off focus, describing how cars are causing climate change rather than being a challenge resulting from it.

Question 3(a)(1)

Almost all candidates correctly identified 'savanna' as the largest biome. 'Desert' was the most common incorrect suggestion.

Question 3(a)(2)

Although the majority of candidates correctly selected 'Mediterranean scrub', a significant minority incorrectly opted for 'deciduous forest', the smallest biome south of the Equator.

Question 3(b)

Although most candidates were able to identify a reason why the tropical rainforests are located along the Equator (more sunlight, reliable rain, etc.), few were able to offer sufficient extension to attain full marks. Candidates tended to either list several reasons or provided over simplistic development statements, such as 'making plants grow better / faster'. When full marks were awarded the successful candidate had usually linked greater sunlight concentrations to increased photosynthesis or low-pressure systems to higher/more reliable rainfall.

(b) Outline **one** reason why tropical rainforests are found on or close to the equator.

(2)

Tropical rainforests are found on or close to the equator as near the equator is a hot area therefore the rainforest is able to grow and produce trees and crops.



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This is a typical response. Like the vast majority, this example successfully identifies 'heat' as a reason explaining the distribution of tropical rainforest, but fails to outline its role (ie it promotes the germination of seeds and the ripening of fruit).

Question 3(c)

Responses to this question varied widely. Some candidates misread the question, writing answers that explain why the biosphere needs protecting rather than how it can be managed. There were a surprising number of blank and totally off focus responses. The strongest answers tended to refer to legal protection (laws), international agreement (such as CITES and RAMSAR) or national parks. Statements relating to forestry management were often insufficiently developed. Comments relating to tree-planting schemes, without being placed in the context of sustainable management, were only awarded one mark. A considerable number of candidates lost marks by identifying actions related to climate change rather than biosphere conservation (eg recycling, the use of renewable energy, encouragement of public transport).

(c) Describe **two** management measures used to conserve the biosphere.

- (4)
- 1 National parks - to preserve the area of its natural beauty & protect the homes & habitats of the wildlife & wild animals.
 - 2 Sustainable management - by having & creating re-plant programmes, any trees or areas that have been affected can just ^{be} grown again.



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This response identifies two appropriate management measures with suitable development.

Question 4(a)

The vast majority of candidates appear to have performed well on this item, scoring both marks. The most common correct responses referred to price, maintenance and the local availability of resources.

4 Look at Figure 4.

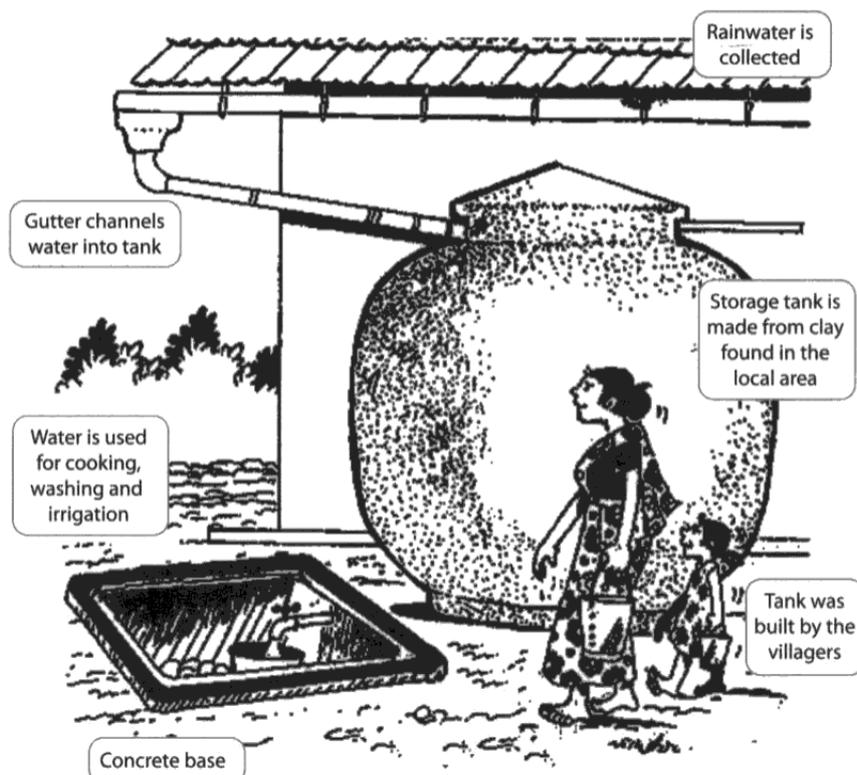


Figure 4 – A Pumpkin Water Tank, an example of intermediate technology

(a) Give **two** reasons why this is a suitable system for many villages in the developing world.

(2)

1 cheap and local materials.

2 can be repaired by village's if needed.



ResultsPlus
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This response correctly identifies three reasons.

(a) Give **two** reasons why this is a suitable system for many villages in the developing world.

(2)

1. If any damages happen the villagers will be able to fix it as it's simple to fix.
2. The items are found in the village which means that people can afford it as it's cheap.



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This is a typical response. It includes a combination of resource-extracted information and personal knowledge.

Question 4(b)

Although most candidates scored on this item by identifying a valid reason for water shortages, few provided sufficient extension to gain the development point. Climate change and over-extraction were the most commonly identified reasons.

(b) Outline **one** reason why some villages in the developing world have experienced water shortages.

(2)

Because the village could have lived near the equator so while climate change is happening the hotter weather and could lead to no rain coming in.



ResultsPlus
examiner comment

This response identifies climate change as a reason for increased aridity and links this process to a reduction in rainfall.

(b) Outline **one** reason why some villages in the developing world have experienced water shortages.

(2)

Most of the developing world is hot, such as Egypt meaning there's droughts and people haven't been able to store their water.



ResultsPlus
examiner comment

Candidates were asked to outline one potential reason. This response fails to score full marks because it suggests several reasons (high temperatures, low rainfall and poor water management) rather than developing one.

Question 4(c)

A surprisingly high number of candidates lost marks or didn't score on this question due to a failure to identify an appropriate large-scale water management project. Candidates who named generic schemes (eg dams) rather than specific projects were limited to a maximum of two marks, while statements relating to small-scale initiatives received no marks. The best answers tended to focus on either the Three Gorges Dam complex in China or the Colorado's Hoover Dam.

Some candidates lost potential development marks by including wildly incorrect facts (the Three Gorges Dam cost between \$25 and \$50 billion, depending on the criteria used; 1200 villages and 1.4 million people had to be relocated) or by giving extensions that didn't relate to their chosen case study (eg the Hoover Dam is

located in a dry arid region, so the creation of Lake Mead did not force large-scale relocations of the local population or destroy sways of premium farmland).

A sizeable number of candidates failed to score by referring to flood management schemes rather than water supply initiatives.

(c) Describe **two** problems caused by a named large-scale water management project.

(4)

Named large-scale project Dam

1 Dams are big and very expensive to build; which causes problems for wild life.

2 Dams prevent water from flowing naturally and store alot of water that could lead to an overflow.



ResultsPlus
examiner comment

Here the candidate fails to name a specific large-scale project, limiting the response to half marks. The statements are also vague/confused and lacked the clarity needed to be awarded extension points.

(c) Describe **two** problems caused by a named large-scale water management project.

(4)

Named large-scale project A pumpkin water tank.

1 there may not be large amounts of water collected when it rains, because of the fact the rain is spread out and there is only a little hole as to where the rain enters the gutter channel.

2 The rain can only be collected when it rains, when it doesn't rain there is no water, so they cannot get any water if it doesn't rain.



ResultsPlus
examiner comment

This response fails to score as it is focuses on a small-scale project.

(c) Describe **two** problems caused by a named large-scale water management project.

(4)

Named large-scale project Three Gorges Dam

- 1 1.4 million people had to be relocated causing problems for the locals; ~~is a huge problem~~, also that may cause financial problems due to them needing to leave their homes and look for new houses.
- 2 The amount of electricity and energy used to build the Dam is huge, this leads to pollution. If it broke it would cause a huge flood leading to death.



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This is a strong response: two problems identified with clear description.

Question 5(a)(i)

The majority of candidates were able to identify the defence as a groyne, although spellings varied considerably. Some candidates moved into the grey area of acceptability due to wildly inaccurate spellings. 'Sea wall' was the most common incorrect response.

Question 5(a)(ii)

Responses to this question varied in quality. Most candidates scored at least one mark by identifying the impact groynes have on longshore drift or beach formation. Statements referring to groynes 'breaking up' or 'slowing down' the waves were not credited as they begin to explain how groynes work, rather than outlining why the technique is often used.

(ii) Give **two** reasons why the technique shown in Figure 5 is often used.

- 1 prevents longshore drift, preventing coastal erosion.
- 2 tourists and locals won't love the beach



ResultsPlus
examiner comment

This is a typical correct response.

Question 5(b)

Candidates could describe natural features (eg cliffs and headlands) and/or human features (eg coastal defences). Some candidates carelessly lost marks by explaining rather than describing. This was particularly the case when answers focused on coastal defences. For Level 3, candidates were required to link the identified features to the geology of their chosen coastline. Candidates who failed to focus their response on a specific coast were restricted to Level 1.

*(b) For a named coast (either hard or soft rock), describe its main features.

(6)

Named coast Scarborough.

IN ~~all~~ ^{all} Cliftes along the sea they experience hydraulic action, abrasion and attrition. Hydraulic action is when cracks in the Cliffe get filled up with pressure from the water and little rocks come out and cracks get bigger. The little rocks slam against the Cliffe and turn into smaller rocks. This is abrasion. The rocks swirl around with the force from the sea breaking up even more. That is attrition. However, at the top of the ~~Cliffe~~ ^{Cliffe} rain and precipitation takes place. This gets into the little cracks at the top and freezes. This then expands and the water gets too heavy and the Cliffe goes into a slump. Eventually the Cliffe collapses. This happens to ~~Holbeck Hall, Scarborough.~~

(Total for Question 5 = 9 marks)



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Level 1: Rather than describing the features of Scarborough's coastline, the candidate explains the various processes that cause cliff collapse.

*(b) For a named coast (**either** hard **or** soft rock), describe its main features.

(6)

Named coast white cliffs of Dover - hard rock

It has a lot of hydraulic action taking place here which can result in parts of the cliff collapsing. Also, the cliffs are white as it is made from chalk which is a hard rock. Sometimes the sea can erode part of the cliff away resulting in caves, and gullies being created. Since the sea is conservative, this means that the waves which are created aren't very powerful which means that the cliff will erode but very slowly.



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The candidate identifies a number of landforms associated with hard rock coastlines and gives an appropriate example, but the response goes off focus. At least half of the answer focuses on processes rather than features.

Question 6(a)

A disappointingly small number of candidates were able to identify the labelled feature correctly.

Question 6(b)

The majority of candidates were able to identify at least one change to the channel. As the focus of the question was channel changes from the upper to lower course, statements listing landforms were not credited. To be awarded a mark the candidate needed to identify a change rather than a factor; eg 'discharge' by itself was insufficient, the candidate needed to state that 'the discharge increases downstream'.

(b) State **two** changes in a river's channel between its upper and lower course.

(2)

- 1 In the upper course there is v-shaped valleys because water erode downward creating them.
- 2 In the lower course the formation of a meander forms. It occurs when there is a bend in the river.



ResultsPlus
examiner comment

This answer refers to landforms rather than channel changes.

(b) State **two** changes in a river's channel between its upper and lower course.

(2)

- 1 The width of the river increases.
- 2 The depth of the river increases.



ResultsPlus
examiner comment

This is a typical correct response.

(b) State **two** changes in a river's channel between its upper and lower course.

(2)

- 1 The depth of the river
- 2 The velocity of the river



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examiner comment

This response fails to score as the candidate identifies two channel features but does not state how they change downstream.

Question 6(c)

The level of success on this item greatly depended on the case study chosen. Some candidates went off focused on locations where only limited actions have been taken (e.g. Sheffield), making high scoring responses difficult. As the focus is flood defences, candidates who have described the effects or causes of a flood received no marks. Equally, no marks were awarded for references to forecasting, warning systems or immediate responses.

* (c) For a named location, describe how flood defences have been used to reduce the impact of river flooding.

(6)

Named location ~~sheffield~~ sheffield

drain have been put to reduce how much water is on the surface, ~~or~~ storing the water, reducing the ^{likelihood} of flooding. creating diverted rivers so that ~~when~~ ^{water} the ~~is~~ ^{is} diverted outside the city which controls the amount of water allowed into the city, reducing the risk of flood. The building of a dam so that water can be control, stored, and used this will make sure ~~me~~ that a flood will not occur.



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This response identifies an appropriate location. The candidate has described how storm drains, diversion channels and dams can be used to reduce flood risk. The response fails to reach Level 3 as the answer is too generic. Apart from the naming of Sheffield on the prompt line, there is no other information that suggests a Sheffield focus.

Question 7(a)(i)

This was correctly answered by most candidates. Specific examples (eg 'it shows that sharks eat tuna, squid and ocean sunfish') and more generic comments (eg 'who eats who') were credited.

Question 7(a)(ii)

The majority of candidates scored on this question, with a large percentage gaining full marks. Some candidates lost marks by making overly simplistic statements, such as 'sharks will become extinct'. Other candidates failed to score by reading the question incorrectly, leading to responses that listed potential causes of a reduction in Ocean Sunfish rather than the effects of such a change.

(ii) State **two** impacts of a reduction in the population of Ocean Sunfish.

- (2)
- 1 the population of Copepods would increase due to the fact they aren't being eaten as much
 - 2 the shark population may decrease a little because it has less food to eat.



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This is an accurate response. Both statements relate to different trophic levels.

Question 7(b)

Candidates generally performed well on this question, with most scoring at least three marks. However, full mark responses were rare as candidates often provided insufficient extension or failed to tie comments to their chosen case study. A named location was needed for Level 2. Named locations could be local (eg the Forth or Firth), national (eg St Lucia) or international (eg North Sea). Most candidates chose to focus on local or regional examples with descriptions of coastal zoning and fishing bans/quotas being most common. St Lucia and the Great Barrier Reef were the most common case study regions and were often the focus of the strongest responses.

Responses to this item were also awarded SPaG marks. Most candidates attained one or two marks. A lack of subject specific terminology and careless grammar errors often prevented a high score. Common themes were exceptionally long sentences and incorrect use of capital letters.

*(b) For a named location, describe the management measures that have been taken to prevent marine ecosystem damage.

(6)

Named location St Lucia

Laws have been set in place to protect the coral reefs in St Lucia. Tourists who part-take in activities such as scuba-diving are not allowed to break off coral from the reefs, as this damages ~~the~~ ^{the} habitat; they have to buy it from gift shops. Furthermore, at certain times of ^{the} year, people are not allowed to fish in certain areas, as overfishing could cause the extinction of fish species, which will disrupt the food chain. Also, during the ~~the~~ ^{turtle} breeding seasons, turtles ^{eggs} are not to be disturbed by tourists/locals, as this will disrupt and ~~upset~~ ^{upset} the mother.

(Total for spelling, punctuation and grammar = 3 marks)

(Total for Question 7 = 12 marks)



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Level 3: This response is location focused, identifies a range of management measures and there is clear development.

SPaG: It includes accurate spelling and grammar, and effective use of geographical terms.

*(b) For a named location, describe the management measures that have been taken to prevent marine ecosystem damage.

(6)

Named location St Lucia

They have put restriction zones so they people can't take fish out of certain areas. They also have put a number on how many fish, are a lot to be taken out. They have banned some ships not to go in areas where it might get polluted easier.



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This response identifies location and briefly describes management measures. More location specific information is needed for Level 3.

SPaG: This response earned one mark because of several grammar, spelling and punctuation errors and limited use of geographical terms.

Question 8(a)(i)

There were lots of accurate responses to this question. Some candidates lost marks by going off focus and giving a plant adaptation rather than a factor relating to farming. References to building design, suitable clothing and hunting techniques were not credited as the question specifically focused on farming.

8 Look at Figure 8.



Figure 8 – Farming in extreme climates

(a) (i) Give **one** way farming has adapted to the extreme climate.

(1)

Put a cross in the box to indicate your chosen extreme climate:

polar hot arid

hot arid climates has plenty of natural sunlight in order for the crops to grow.



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This responses shows a common error: the candidate suggests a benefit of farming in hot arid regions rather than a way farming has adapted.

(a) (i) Give **one** way farming has adapted to the extreme climate.

(1)

Put a cross in the box to indicate your chosen extreme climate:

polar hot arid

By using methods such as disettes in the Sahel to soak up rainwater into the ground for better growing conditions.



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This is a common correct response.

Question 8(a)(ii)

The vast majority of candidates correctly identified at least one problem faced by farmers and many scored full marks.

Question 8(b)

Although there were a lot of good responses to this question, a considerably number of candidates lost marks due to focusing on current issues related to hot arid locations rather than future problems resulting in climate change. For Level 2, candidates could name a location or simply state whether the focus region was hot arid or polar; however for Level 3, a specific location needed to be identified and the answer specifically focused on the chosen region. As the question asks for threats to people, environmental impacts were not credited unless these were directly linked to the local population.

Responses to this item were also awarded SPaG marks. Most candidates attained one or two marks. A lack of subject specific terminology and careless grammatical errors often prevented a high score. Common themes were exceptionally long sentences and incorrect use of capital letters.

*(b) Describe how climate change could threaten the people of a named extreme environment.

(6)

Named extreme environment Egypt

Climate change can threaten these people in the
~~regions~~ increase of temperature. Egypt is ~~now~~ mostly desert
and if there is an increase in ~~temperatures~~ temperature it could really
affect the people because there is water shortages and that
could leave people dehydrated and they could possibly die after
a few days if they don't get water. ~~The~~ Also, small
crops won't grow and people will lose money which
could result in some people who have no money
and need water and food.



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The candidate describes how climate change could cause problems for farmers in Egypt. A number of issues are raised and the response includes development. For Level 3 the response needed to be more location focused. Statements could relate to any hot arid region.

SPaG: The response includes several spelling errors, mid-sentence capitals and some punctuation errors.

*(b) Describe how climate change could threaten the people of a named extreme environment.

(6)

Named extreme environment Africa

They would have to quickly adapt to the new climate and most animals and humans won't be able to which could lead to death.

More bushfires will occur and there will be more water demand because they'll need more water to survive.

~~Farm~~ crops will die, so therefore farmers won't be able to make a living.



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Although the candidate correctly identifies a number of threats associated with climate change (bush fires and water supply issues), the answer is limited to Level 1 as Africa is not a suitable named location.

SPaG: Basic vocabulary and limited subject specific terms earn one mark.

Summary

Common technique errors:

- Too many candidates are still just listing for questions that require extension.
- Key vocabulary is too often 'overlooked' or misunderstood, eg large-scale.
- A sizeable number of candidates are still explaining or describe questions.
- Poor use of vocabulary is often holding down responses.
- Candidates often fail to include adequate location-specific information when responding to questions that require focus on a named location.
- SPaG marks are carelessly lost through sloppy grammar (eg mid-sentence capitals, long responses without a single full stop) and incorrect spellings of key geographical terms.

Common content errors:

- Few candidates were able to identify a constructive plate boundary.
- Many candidates seemed to believe earthquakes can be predicted long in advance using seismographs or the Richter Scale.
- A relatively large number of candidates were unable to describe how national parks conserve the biosphere.
- Few candidates were able to recognise the labelled floodplain.

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