Examiners' Report

June 2016

GCSE Geography 5GB1F 01

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# Introduction

Looking ahead to September the most significant messages of these papers is how to move forward to give foundation level students a reasonable chance of making some impression in the new, more demanding papers of the 2016 specifications. The most significant lesson is not new but perhaps more pertinent now than ever before.

Foundation students do not, by and large, suffer too badly when measured against a case-study knowledge ruler. Sometimes they lack the detail of conventionally stronger performing candidates but not categorically so. However, the comparison is less positive when it comes to question interpretation and recognition of the keywords. These fall into two categories.

Firstly the specification language; if the words are in the specification they may very well be in the questions too so knowing the meaning of them is very important. There are several examples of that in this paper. Secondly the smaller, pesky little words such as 'pattern', 'rate', 'trend', 'characteristic' and many others are critical in determining the focus of questions and these can be practised. To end with an optimistic note, it has been impressive how much better performance has been in tackling evaluative questions such as the final question on 5GB3F and its predecessors, but also on the 'Explain...' questions that usually round off the more demanding questions 5-8 on this paper and its equivalent 5GB2F.

## Question 1 (b)

This was generally well answered although misconceptions abounded at the lower end of the mark range with rock type often confused and rather too much tautology about, as in 'oceanic crust is found in oceans'.

(b) State **two** differences between continental and oceanic crust.

(2)

1 Continental crust is land, for example the floor we walk on and it is made from granite

2 Oceanic crust is all the seas and water sources and it is made from basalt

**ResultsPlus**
**Examiner Comments**

This response gets to the point after the preamble so gets 1 mark for granite/basalt and land/sea gets the second mark.

**ResultsPlus**
**Examiner Tip**

Be careful to limit your answer to two differences as that is what you were asked for.

## Question 1 (c)

This too proved reasonably accessible with the majority of candidates managing to outline at least one way of predicting eruptions or being able to state two ways without any development. At the bottom end of the ability range there may have been difficulties with the meaning of 'predict' which obviously made the question challenging.

(c) Describe the techniques used to predict volcanic eruptions.

(4)

One technique is to measure the temputure of the Sea and sea if their is an rise in tempurture beau because ift See if there is an Volcanic activity. Another technique is to See any change in animal behavier because they can detect when Something bad gcring to happen

### ResultsPlus
**Examiner Comments**

This is an example of how candidates can manage to put something together despite apparently being rather underprepared and avoiding all the conventional answers. 1 mark was awarded for measuring temperature and 1 mark for rising sea temperature (could be a sub oceanic volcano). Animal observation was credited as was their behaviour.

### ResultsPlus
**Examiner Tip**

It is very good practice to flag up your separate points as in this example 'One technique...'

## Question 1 (d)

There were significant issues for candidates in turning their knowledge of the margin, which was often broadly accurate, into the formation of volcanoes which appeared rather mystically from the very act of subduction. So many got stuck on 1 or 2 marks because the idea of melting and rising plumes of magma/lava was unknown to them.

(d) Explain how volcanoes form on destructive plate boundaries.

You may use a diagram to help your answer.

(4)



volcano

contenetal plate

oceanic plate

molten lava and rocks

volcanos can form on destructive plate boundaries when an oceanic plate collides with a continental plate and the oceanic plate slides under the continental plate, this causes the volcano because there is a sudden build up of molten rocks as the oceanic plate begins to melt. This molten rock eventually breaks through the continental plate and causes the beginnings of a volcano.

(Total for Question 1 = 12 marks)

**ResultsPlus**
**Examiner Comments**

This is another example of a pretty 'entry level' 4 mark response: collision - one plate subducts - melting takes place - so rising magma/lava forms volcanoes.

**ResultsPlus**
**Examiner Tip**

If you use diagrams try to annotate them with explanatory comments, and not just descriptive labels.

## Question 2 (b)

There were a disappointing number of candidates who clearly had no idea of the meaning of natural and the modal mark was, as a result, zero for this question. For those that did understand - volcanoes came to mind, prompted no doubt by the previous question.

2 marks were awarded for this response.

(b) State **two** natural causes of climate change.

(2)

1 ~~████████~~ metorter

2 sun Spots on the sun.

### ResultsPlus
**Examiner Comments**

These were two of the less popular choices. Volcanoes dominated.

### ResultsPlus
**Examiner Tip**

Do not cross material out unless, as in this case, you are going to replace it. If not let the examiners decide if it is creditworthy.

## Question 2 (c)

Although the same candidates sometimes struggled with part (b) they were generally more secure on the human impact on climate although most ran out of steam after outlining one activity, often the generation of power or the growth of car ownership.

(c) Describe how human activities are increasing global temperatures.

(4)

As the more we are exporting and importing goods from around the world the more planes, cars, truckes and trains are letting of Co2 which is affecting the atmosphere allowing more sun light in increasing the global temprature. Also the more greenhouse gases we produce through over-use of cows and other products are Reflecting the sun light cursing the sun to be allowed in earth more and making it hotter.

### ResultsPlus
**Examiner Comments**

The basic cause identified here is an increase in trade (1 mark) therefore more cars, trains etc extends the point on trade (1 mark) therefore more CO2 (1 mark). More cows gets an additional mark but process is muddled beyond that (reflection etc.). The candidate has therefore extended the initial point for 3 marks and gained a further mark for an increase in cows.

### ResultsPlus
**Examiner Tip**

If you are asked for a specific number of reasons or descriptions then look at the marks available. Two would be good here but three is also fine.

## Question 2 (d)

As with other keywords, the discriminator here was not so much command of the idea of 'impact' but the focus on the environment which was frequently translated as 'the UK' or the 'land' or, indeed anything at all. A liberal mark scheme allowed impacts on farming but drew the line at economic impacts or changes in employment structure with 'more holidays' in the UK a common choice.

(d) Using examples, describe the impact of climate change on the environment of the UK.

(4)

If the temperature decreases or increases in the UK it could result in farmers crops not to grow, animals might die due to the change in weather, rivers might overflow and flood, etc.

**ResultsPlus**
**Examiner Comments**

This response is a bit of list (farmers crops do not grow, animals might die, rivers might overflow) but there must be an extension to get full marks. 3 marks were awarded.

**ResultsPlus**
**Examiner Tip**

Unless the command word is 'State...' or 'Name...' always try to extend a point by adding detail or, perhaps, an example.

## Question 3 (b)

As with other definitional questions this polarised candidates with equivalent numbers knowing it well or, sadly, not knowing the term at all. Very few scored 2 marks.

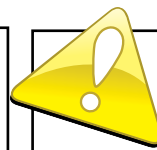This response scored both marks.

(b) Define the term **eco-system**.

(2)

> ~~Eco~~ Eco-system is the ~~large~~ ~~me~~ groupe of animals and plants the interact with each other in a local environment.

**ResultsPlus**
**Examiner Comments**

This is a sadly rare example of an answer that gets to the heart of the idea of ecosystems.

**ResultsPlus**
**Examiner Tip**

Definitions matter both because of questions such as this one but also in longer answers. Make a list of key definitions for each topic.

## Question 3 (c)

As with Question 2(c) most candidates fared much better with the links between human activities and rainforest destruction than they did with the previous question asking them to define ecosystems. The most obvious weakness was a tendency, well known with Foundation candidates, to resort to tautology when suggesting that the main reason for destroying rainforests is deforestation without adding a motive for that destruction/deforestation. It is also worth recording that of those who did offer a motive for deforestation the majority saw it as largely driven by a thirst for garden furniture and the tropical hardwoods from which it is constructed.

(c) Describe how human activities are destroying tropical rainforests.

(4)

> we are cutting down ~~tress~~ trees for furniter uses destroying enviroments and habits. efftivly were cutting down trees for money then and then useing the area for farmer ~~istill~~ untill it cant be used again leaving the ground unfertile.

**ResultsPlus**
**Examiner Comments**

There are two extended points here and although spelling, grammar and (a lack of) punctuation gets in the way a little of full comprehension the ideas do come across for full marks.

**ResultsPlus**
**Examiner Tip**

Remember that most environmental destruction has an economic motive.

## Question 3 (d)

This question alongside Question 4(d) produced some very weak answers from candidates who struggled to understand some of the terminology – biosphere was a surprising problem as was 'composition'. Most importantly 'regulates' also provided an obstacle for candidates. Once again it is worth reiterating that questions on this unit and others on this specification use terms used in the specification and it is important that candidates know them. The impact of this was too many 0/4 marks whilst the minority who were comfortable with the terms struggled to score very much more.

(d) Explain **two** ways in which the biosphere regulates the composition of the atmosphere.

(4)

1 Trees in the biosphere store and use co2 when photo synthesing and realess R2 oxygen which stirs the air up as co2 is being stored which keeps the earth at the correct tempet temparture.

2 Another way is the animals as they let co2 out into inthe atmoshpere thes two contrasts is why there are same number of animals as plants so the co2 and oxygen levels are balenced so that earth doesn't get to hot or cold.

**ResultsPlus**
**Examiner Comments**

In this answer the first part is worth 3 marks
- trees photosynthesise (1) absorbing CO2 (1) producing oxygen (1). However the second part is only worth 1 mark for animals producing CO2 but nothing for the GAIA-like balance stuff which is not accurate.

**ResultsPlus**
**Examiner Tip**

Remember that if you can extend a basic point twice it is often possible to pick up a third mark for that idea which may compensate for a rather limited second 'way' as in this example.

## Question 4 (b)

Most candidates found at least one way in which human activity reduced water supply, but too many involved statements without any development at all to support the simple idea, thus irrigation was stated without any embellishment.

(b) State **two** ways that human activity can reduce water supply.

(2)

1. pollution, making more water acidic
2. Building dams, stopping the natural flow of water

**ResultsPlus**
**Examiner Comments**

This was a typical full mark response. Both are feasible, of course.

**ResultsPlus**
**Examiner Tip**

It is always better to add a little to simple statements even if you are unsure. Not all pollution makes water more 'acidic' but some certainly does.

## Question 4 (c)

Case-study based questions often score reasonably well and this was the case here with a modal mark of 3. Sub-Saharan Africa featured most frequently albeit with variable levels of detail to support the descriptions of impact.

(c) For a named area with water shortages, describe the impact of these shortages on people.

(4)

Named area: Africa

Water shortages in Africa don't allow people to keep hydrated and don't allow them to keep clean which means more infections and diseases could be caught killing the population.

**ResultsPlus**
**Examiner Comments**

This is another example of a pretty basic 4 mark response - points that were rewarded were: can't keep hydrated, can't keep clean, disease and death.

**ResultsPlus**
**Examiner Tip**

If you can avoid stating 'Africa' by naming one country in Africa that will give a response much better focus on place. Africa has over 50 separate states!

## Question 4 (d)

In common with Question 3(d) this proved to something of a challenge for large numbers of foundation candidates, who averaged less than 2 marks on this question. Unlike Question 3(d) they were usually able to say something so there were few 0/4 responses but very few 4/4 either.

(d) Describe **two** processes of the hydrological cycle that return water to the oceans.

(4)

1 Surface run-off returns water to oceans. This happens because the water is not absorbed through the rock or soil and runs off the land until it reaches rivers.

2 Water being absorbed through rocks or through the soil runs underground until it reaches the oceans. This takes a long time for this to happen.

### ResultsPlus
**Examiner Comments**

There were two processes identified here and both were extended so 4 marks were awarded. It is worth noting that some extensions were explanatory as here and these were accepted; although strictly speaking they were not always simply descriptive.

### ResultsPlus
**Examiner Tip**

It is very good practice to use link words such as 'because' to show that you are describing a process.

## Question 5 (b)

This was well answered by most although there were inevitable confusions over complex ideas of wavelength and even wave height.

This response scored 2 marks.

(b) State **two** features of destructive waves.

(2)

1. ~~two~~ higher frequency
2. taller than constructive waves

**ResultsPlus**
**Examiner Comments**

Waves are something of a dark corner for many candidates and, in common with other dark corners need particular attention.

**ResultsPlus**
**Examiner Tip**

Understanding waves is vital in understanding coastal processes. Make it a key part of your revision.

## Question 5 (c)

many candidates this proved to be more of a challenge than was expected. Setting out with an idea of sea-level rise many sought to identify how exactly this would increase the rate of coastal erosion. Indeed, most simply ignored the idea of a change in rate altogether and simply suggested that sea-level rise, reasonably enough but hardly relevant, would flood more areas. It was a minority who, having started out with an increase in storminess managed to build on this by describing greater rates of erosion as a result.

This response gained both marks.

(c) Outline **one** way in which climate change may affect rates of coastal erosion.

(2)

~~the~~ rising sea levels caused by global warming means that tides will be higher and therefore water will crash against the ~~cliffs~~ rocks or cliffs etc. ~~this~~ ~~will~~ higher up meaning that they erode quicker.

**ResultsPlus**
**Examiner Comments**

It isn't easy to relate rising sea-level to increasing coastal erosion and not self-evident but this candidate does have a go in showing how waves will impact differently on cliffs.

**ResultsPlus**
**Examiner Tip**

Greater storminess is a frequent prediction associated with global warming and probably more productive in understanding changes to coastal processes.

## Question 5 (d)

This was a straightforward question and there were some good responses with at least two different types of coastal management addressed and described, sometimes with good located knowledge but sometimes not. Unsurprisingly Holderness was a popular choice. Rather too many candidates drifted off into general truths about coastal erosion rather than sticking to the question's focus on management.

*(d) For a named coastline, explain how coastal erosion has been managed.

(6)

Named coastline: Barton-on-Sea

At barton on sea they use all sorts of methods to manage coastal erosion. They have built groynes, these stop longshore drift from taking sand / stones from the beach. Also they regrade cliffs so the cliff is at an angle where it wont slump. ~~Its~~ Next they replenish sand on beaches by pumping sand from ~~water~~ ~~it~~ the sea floor so that waves break on the beach. Also they have rip rap that is ~~a~~ ~~stones~~ bouder put at the bottom of the beach to break waves. Lastly they have sheet piling to help drain water from ~~rocks~~ clay so it doesnt slump.

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

(Total for Question 5 = 15 marks)

✓ groynes - Preserve beach
✓ cliff regrading - stop cliff slumping
✓ Beach replenishing - tops up sand
✓ Rip Rap - Breaks waves ~~out~~ before beach
✓ sheet piling - Drains water from cliffs

This candidate accurately describes several coastal management techniques. Slumping is a particular problem at Barton on Sea which is identified along with mention of the clay geology giving the candidate location specific details. This, along with the accurate description of several techniques elevates the response to Level 3. There was not quite enough for Level 3 SPAG - 'barton' not capitalised and there are missing commas and apostrophes whilst the language is also simplistic.

If you can make a mini-plan, as in this example, it will help you recall the detail - it'll only take a few seconds.

## Question 6 (b)

Most candidates found at least one process but surprisingly few managed a second. Too many reverted to descriptions rather than identifiable methods of erosion hence 'sideways' and 'downwards' featured rather too often.

## Question 6 (c)

As elsewhere over the three units the 'outline' questions caused difficulties for some candidates who found it challenging to develop their basic idea sufficiently for a second mark.

(c) Outline **one** way that human activity can increase flood risk.

(2)

A human activity such as blocking the river with waste can increase flood risk as it is stopping the river from flowing. This means that the amount of water in the river will increase. leading to a flood.

### ResultsPlus
**Examiner Comments**

This is an example of a very common response which scored 2 marks. Blocking the river or dumping waste into the channel is a human activity which contributes to river flooding. This causes the levels of water to rise which is the extension.

### ResultsPlus
**Examiner Tip**

Outline questions are asking for a basic idea which is extended as here with the cause and effect.

## Question 6 (d)

As with Question 5(d) this was a case-study based question and, as is usual, the major risk was that the Pavlovian response was simply to tell the 'story' of their chosen case study or case-studies without any commentary on their impact on flooding. 'Impact' is yet another of those keywords for which candidates need to be carefully prepared. The central point is that impacts can be broken down into economic, social and environmental rather than just 'impacts'. For the most part economic impacts dominated although they were often not explicitly identified as such. Environmental impacts were restricted to land and property either being flooded or not. Social impacts were often missing altogether.

*(d) For a named flood management scheme, explain how the impact of flooding has been reduced.

(6)

Named flood management scheme: ......... Sheffield

In a Sheffield, a small small-scale scheme has been done which is cheaper, and easy Planning has occured as buildings are restricted AO from areas where there is a low risk of flooding. This has reduced impact of flooding as buildings have no longer been flooded. Washlands were created as they are cheap, as flooding is diverted into open space of land. Also, flood warnings have been put in place as they are used to predict when a flood may occur. This has reduced impact of flooding as the evacuation process is much easier and quicker to alert individuals to take precautions.

**ResultsPlus**
**Examiner Comments**

This is a very well-focussed answer - location is here, although it is not developed, but is compensated for by good cause and effect for Level 3 marks.

**ResultsPlus**
**Examiner Tip**

Location matters and is often a relatively easy way to gain credit - learn something specific about your chosen case study places.

## Question 7 (b)

There were some very good answers to this with evidence of a sophisticated understanding of the threats to ocean ecosystems. Warming was the main focus and that was variably extended to an impact on coral reefs, especially. The explanatory extension wasn't always obvious so many scored 1 mark.

This response scored 2 marks.

(b) Outline **one** way climate change could damage marine food-webs.

(2)

The warmer it is some orangism might not survive so they die affecting the rest of the food web.

**ResultsPlus**
**Examiner Comments**

Food webs and food chains are part of another dark corner that deserves more attention.

**ResultsPlus**
**Examiner Tip**

'If in doubt spell it out' is a useful maxim. Although this candidate picks up both marks, it is a near thing because they don't clarify why one animal dying out affects 'the rest of the food web'.

## Question 7 (c)

This was a simple test of knowledge allied to recognition of the key phrase 'global action'. For too many candidates this was translated into a generic 'what we can do' response such as, at the stronger end, using fewer plastic bags or, at the other end of the spectrum, using fewer cars.

(c) Describe **one** global action which aims to maintain ocean health.

(2)

Charging for plastic bags now as so many were found in the sea so by charging people are more unlikely to do it.

**ResultsPlus**
**Examiner Comments**

Although not quite what was expected when asking for 'global action', charging for plastic bags is an acceptable global trend to address the issue of too much plastic in the oceans. Although the idea that charging will reduce the amount of plastic bags in the ocean is poorly expressed it just gets a second mark.

**ResultsPlus**
**Examiner Tip**

If you cannot recall details of 'global' treaties and agreements then using your wits as in this example might just get you a reward. Never leave questions unanswered.

## Question 7 (d)

Obviously the best answers to this question would need to address what a sustainable result might become or, more simply, what it might look like. Very few did this simply stating that the result 'was' or, much more rarely, 'was not' sustainable. The weakest responses didn't manage to identify an appropriate ecosystem at all, preferring to talk about the ocean in general. Obviously those that did find an eco-system usually identified coral reefs and most of them also found the appropriate local case study too.

*(d) Using examples, explain how local actions can manage marine eco-systems sustainably.

(6)

local actions such as anchor bans in certain coral or reef areas can help to sustain marine eco-systems by preventing further distruction of reefs and habitat for marine life such as seahorses. Other local actions that can help to sustain eco-systems are tourist free zones which prevent trampling or further damage to marine habitats. Both of these options can help on a large scale because the more habitats and coral reefs that exist the more sustainably fish and marine life exist.

**ResultsPlus**
**Examiner Comments**

Location was often weak, as in this example, but there are two legitimate actions here, both at an appropriate scale, with some explanation, and implied links to sustainability; no locational/place detail at all but Level 3 despite absence of location.

**ResultsPlus**
**Examiner Tip**

When asked for examples remember that this might be directing you towards particular case-studies.

## Question 8 (b)

Given the previous question and the resource it is hardly surprising that polar bears were the main focus of answers and again, with an 'Outline' instruction too many struggled to get beyond their fur with adaptation largely neglected in that the role of the fur was just assumed.

This response gained 2 marks.

(b) For a named plant or animal, outline **one** way it has adapted to its extreme environment.

(2)

Named plant or animal: _Cactus_

Spices - stop animals eating it
Wax sain - store moisture.
long roots - reach water.
stores water.

**ResultsPlus**
**Examiner Comments**

This is a rare example that didn't mention polar bears!

**ResultsPlus**
**Examiner Tip**

Adding more ideas is fine - you cannot lose marks, ever!

## Question 8 (c)

As with its equivalent, Question 7(c), this was a simple test of knowledge allied to a recognition of the key phrase 'global action'. For too many this was translated into a generic response looking at 'what we can do' to address such as, at the stronger end, using fewer plastic bags or, at the other end of the spectrum, using fewer cars.

(c) Describe **one** global action which aims to protect extreme environments from the impacts of climate change.

(2)

Greenpeace has prioritised that we cut down on the use of greenhouse gas, so thatice caps in the arctic won't melt and raise the sea levels because that would cause flooding

### ResultsPlus
**Examiner Comments**

As with its equivalent Question (7c) global actions were a little fuzzy but this choice was legitimate.

### ResultsPlus
**Examiner Tip**

Take care to reread your answers - if you allow just five minutes at the end it will help - it really will. In this case, although the candidate received both marks it was a close run thing. Surely not 'use of greenhouse gases' but 'production of greenhouse gases'.

## Question 8 (d)

The discriminating factor here was the clarity over what constituted a 'community' rather than just people in general and, in a minor key, what constitutes 'survival'. The population decline of many communities in both polar and arid environments is well known and creating economic opportunities to slow down this haemorrhaging of population should have been the focus but that was by no means always the case.

*(d) Using examples, explain how local actions can help communities survive in extreme environments.

(6)

In the polar region when inuets kill an animal they use every part of it they drink the blood because there is no drinkable water they use the hide for igloos they use eat every bit of it and they share it amoulgst eachother. people in the sarhar have been taught that makeing a fence out like with rocks stops the water from moving alowing it soak into the ground this stop soil erosion and makes land fertile so people are able to grow crops.

### ResultsPlus
**Examiner Comments**

This is a Level 3 answer because the focus is good with two/three ideas and it attempts to locate too. However the SPAG is very weak.

### ResultsPlus
**Examiner Tip**

Remember that SPAG is not just spelling. Punctuation matters, as does your grammar, so you really need to take care - 6 marks out of 78 could be worth a grade!

# Paper Summary

The new specification will offer new challenges when preparing candidates for the examination. Perhaps the most important message of this and other reports on the existing specification is to take especial care over the command words on the new papers and make sure candidates at all levels, but particularly at this level, are thoroughly prepared so that they know what to do with their knowledge and understanding on examination day.

# Grade Boundaries

Grade boundaries for this, and all other papers, can be found on the website on this link:

http://www.edexcel.com/iwantto/Pages/grade-boundaries.aspx