

Examiners' Report  
June 2013

GCSE Geography A 5GA2F 01

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June 2013

Publications Code UG036016

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## **Introduction**

This, the Natural Environment unit, requires candidates to answer a question on a physical geography topic (Coastal, River, Glacial or Tectonic Landscapes) in Section A and on an applied topic (Wasteful or Watery Worlds) in Section B.

The Foundation Tier was once again well received and there was an indication that centres had taken advice from previous sessions. The Coastal and Tectonic Landscape questions proved to be the most popular in Section A, while the Wasteful World topic was more popular in Section B. Candidates still scored, on average, higher marks in Section B than Section A.

This series was the second time SPaG (spelling, punctuation and grammar) marks were awarded on the extended writing sections of Question 5 and Question 6. Candidates were given a mark out of three for SPaG, but were judged on the same criteria as the Higher Tier paper.

This was the last examination of the 5GA2F paper in its current format and we say goodbye to the Glaciation section, which has not been overly popular in recent years. There will be no paper in January and the exam will now be linear from June 2014.

### **Question 1(a)(ii)**

Many of the candidates were able to identify the fact that constructive waves had larger wavelengths than destructive waves and that they deposited sand on the beach, therefore securing 2 marks. Candidates should ensure they study the resource before rushing into an answer.

### **Question 1(b)(i)(1)**

The majority of candidates recognised that the cliffs were composed of chalk.

### **Question 1(b)(i)(2)**

The majority of candidates were able to recognise that the cliff was 30m in height.

### **Question 1(b)(i)(3)**

The vast majority of candidates recognised the feature in front of the cliffs as a wave-cut platform.

### **Question 1(b)(i)(4)**

Many candidates correctly identified rocky/chalk as the correct answer. Both answers were accepted as possible answers, though candidates are advised to use each word only once.

### **Question 1(b)(i)(5)**

The majority of candidates recognised that the wave-cut platform was 20m wide.

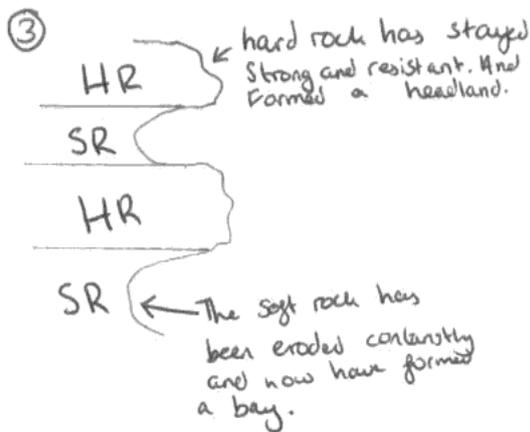
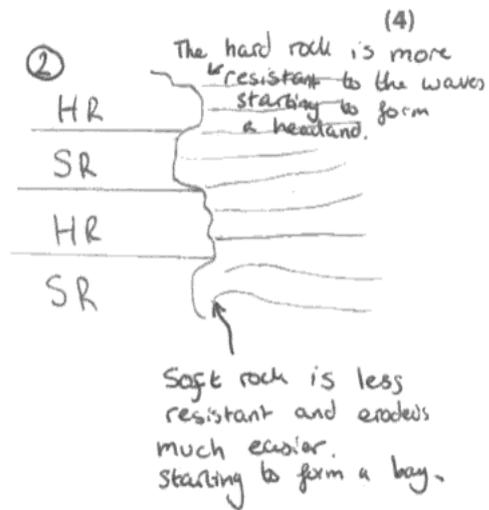
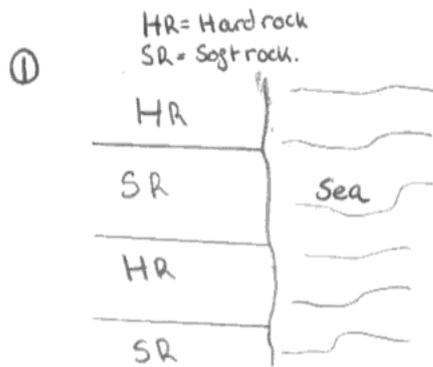
### **Question 1(b)(ii)**

Many candidates were able to show an understanding of what a headland and bay were, though some confused them with a cliff and wave-cut platform. Surprisingly, few managed to develop an answer to full marks as many simply described the headland or bay or gave simple comments on the fact that there was soft and hard rock. Candidates could improve by developing the idea of beach formation in the bay or headland recession over time. Candidates could also improve their answers with greater emphasis on process, relating clearly how types of erosion participate in the process of the landform formation. Development of process is a good way to secure marks.

This response was awarded full marks (4/4).

(ii) Describe the formation of a headland and bay.

You may use a labelled diagram(s) in your answer.



Hard rock is much more resistant to erosion than soft rock.

but hard rock is now likely form a cave, arch, stack stump because it is on its own. A headland and bay is formed by erosion and hydraulic action.

The soft rock eroded much faster and carry on being eroded because the wave has a larger distance to generate a stronger wave because of fetch there for the soft rock is under attack and pressure by the stronger waves.



### ResultsPlus Examiner Comments

This candidate has made good use of diagrams in their answer and shown a clear understanding of the development in the formation of the headlands and bays. They used the diagram well to show their understanding of the relationship of hard and soft rock and indicated that the harder rock is more resistant. They also developed the idea of a headland linking it to caves, arches, stacks and stumps.



### ResultsPlus Examiner Tip

On landform formation questions make good use of the space for a diagram by showing the different stages of formation. This will allow you to show the change over time.

## Question 1(c)(ii)

The level of understanding of the term mass movement was surprisingly low, as many candidates confused it with erosion, weathering or transportation - often longshore drift. However for those who showed an understanding they were often able to score 2 marks, as they received credit for the name of the process and the movement. Some candidates did not contextualise their answer on the coast and therefore were held at 2 marks. Common answers included slumping and soil creep as these are listed in the specification; however it was pleasing to see some candidates make reference to the Scarborough landslide as part of their answer. Candidates could improve with a clear understanding of the different processes - erosion, weathering, transportation, mass movement and deposition types.

(ii) Describe how mass movement impacts on coastal landforms.

(3)

Mass movement impacts coastal landforms because soil creep and slumping will destroy the coast line and make it unsafe and also maybe cover the beach and form a ~~delta~~ change of direction



### ResultsPlus Examiner Comments

This was a simple answer but nicely scored full marks (3). Clear reference to process was given, as well as recognition that the mass movements make the cliffs unsafe. Reference to 'covering the beach' is an impact on coastal landforms and therefore credit worthy for the last mark. Other candidates achieved full marks by developing the process of soil creep or slumping, or describing the shape of the coastline after mass movement.



### ResultsPlus Examiner Tip

Ensure you are able to clearly understand the differences between soil creep and slumping and can recognise these from images.

## Question 1(d)(ii)

Many candidates were able to offer an answer worthy of 1-3 marks and showed an understanding of their chosen form of management, though few managed to achieve full marks. This was because they were required to give two developed advantages of one form of defence. Often, common answers made reference to the durability and effectiveness of rip-rap or sea walls. Those candidates who chose groynes were able to understand the impact they had on longshore drift but struggled to make the link to reducing beach erosion via beach development. Candidates need practise in developing a point beyond a basic statement on 4 mark questions requiring two ideas, and avoiding descriptions. Some candidates were self-limiting, as they described or stated three advantages of one method, or gave advantages of different methods.

(ii) Choose **one** hard engineering method shown in Figure 1c.

Describe **two** advantages of this hard engineering method.

(4)

Chosen method Rip Rap (Rock armor)

Advantage 1

Effective as it cuts down the power of the wave and reflects it so it doesn't reach the drift and erode it.

Advantage 2

Will last a long time as it is hard rock it will take a long time before the sea erodes it completely.



**ResultsPlus**

**Examiner Comments**

Although the second point was a little simplistic, full marks (4/4) were given for this candidate as they were able to develop the idea of durability and effectiveness.



**ResultsPlus**

**Examiner Tip**

Candidates should ensure that when giving a reason they can fully explore the reason why. For Foundation Tier candidates practising such questions (offering structure eg what is the reason, how does this stop erosion) could help them develop their answers.

## Question 1(e)

Candidates coped well with this question, though many scored 1-3 marks as they did not relate their points to a relevant example. Most candidates understood the concept of 'effects of recession' but some still gave a clearly prepared answer on coastal management, which unless put into context was not entirely relevant. Good answers made reference to the Happisburgh case study, and were often able to mention loss of land at a rate of 2-8cm/yr or the loss of property value on Beach Road from £80000 to £1. Candidates need to understand the differences between effects and management. Centres should make sure that they prepare their candidates with examples of effects of recession which relate to both the people and environment as many examples favour the impact on people. Effects on people and the environment are often integrated; however candidates must ensure they make specific reference to each.

(e) Outline the effects of coastal recession on people and the environment.

Use examples in your answer.

(4)

In Happisburgh houses are valued at £1 on beach road causing people to lose money and stress meaning they need to see doctor as their mental health is at risk. Sheringham golf course is losing land holes 7, 8, 9 have been lost due to erosion. Habitats destroyed due to land loss and homes being lost into the sea. People lose their life at Happisburgh as they can't afford to sell and move elsewhere so nothing they can do when everything is gone. (Total for Question 1 = 25 marks)



**ResultsPlus**  
Examiner Comments

This answer uses two examples and has specific detail from each, which enables it to score full marks (4). This candidate is able to develop their ideas to offer an outline which also takes it to 4. A range of impacts on environment and people are offered.



**ResultsPlus**  
Examiner Tip

Ensure that your case study examples for effects of recession concentrate on the effect on both people and the environment. Happisburgh, Barton on Sea, the south coast of the Isle of Wight are among many examples which could be used.

### **Question 2(a)(ii)**

Most candidates were able to recognise the source and confluence as the correct features of the drainage basin.

### **Question 2(b)(i)(1)**

The majority of candidates recognised the feature in Figure 2b as a waterfall.

### **Question 2(b)(i)(2)**

Most candidates identified that the waterfall was 90m in height.

### **Question 2(b)(i)(3)**

The majority of candidates recognised that the valley sides were steep.

### **Question 2(b)(i)(4)**

Most of the candidates identified that there were interlocking spurs on the valley side.

### **Question 2(b)(i)(5)**

The vast majority of candidates recognised that the rocks were rounded.

## Question 2(b)(ii)

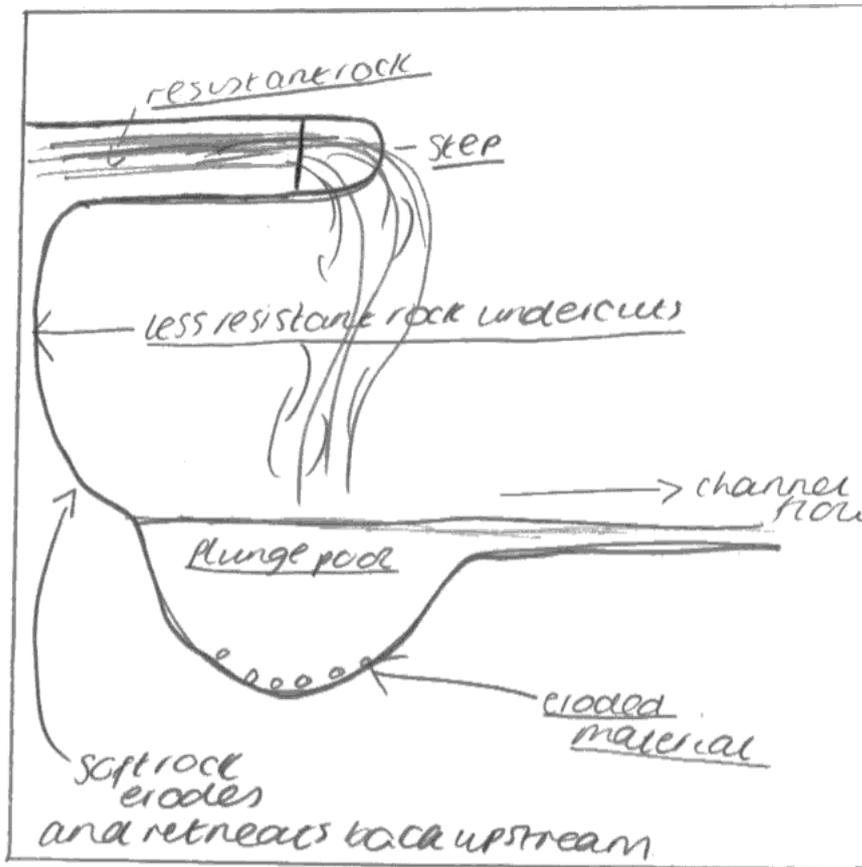
Although this is a well-known landform many candidates only reached 2-3 marks, and few were able to score 4. Many answers linked to the difference between the hard and soft rock layers (differential erosion) and the idea of collapse of the overhang. However, surprisingly few developed this any further into the gorge formation, or linked it to the specific processes which were involved, instead opting to write on generalised erosion. As expected, few candidates were able to relate to the initial formation of the waterfall, many instead believing that the soft rock under the hard rock was exposed by magic. Although these are well-known features it would help candidates if they spent time studying these landforms in detail since this was an area of weakness this year.

This is an example of a response that scored full marks (4/4).

(ii) Describe the formation of a waterfall.

You may use a labelled diagram(s) in your answer.

(4)

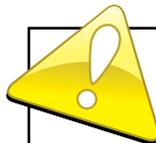


A waterfall is formed by a river flowing over an area of hard rock, (resistant rock), and less resistant rock, as the river flows over the soft rock gets worn away due to hydraulic action, the soft rock undercuts, creating a step of resistant rock, eventually, this step will break, and the soft rock will continue to retreat back upstream. A plunge pool is formed where abrasion <sup>and</sup> attrition take place.



### ResultsPlus Examiner Comments

This candidate uses a meaningful diagram to show the different features of a waterfall to give the examiner a clear idea of their understanding of the landform. The candidate then goes on to give a full outline of the stages of waterfall formation, even though it is a little descriptive. However, this candidate is able to make clear reference to processes and make links between the stages, which at Foundation Tier is enough to score full marks. They could improve by developing an understanding of one of the processes eg hydraulic action.



### ResultsPlus Examiner Tip

Ensure that in a landform question you understand how to link process to the formation. An understanding of that process would clearly help you develop your answer.

## Question 2(c)(ii)

This question was a good discriminator as it determined whether candidates understood the concept of mass movement. For many it presented a problem and it was common to see a comment on erosion or transportation. Therefore candidates either scored 2 or 0 (out of 3) because if they understood the concept they could often name one of the processes (soil creep/slumping) which was credited with a mark. Candidates must ensure that they follow the demands of the question, as they needed to outline how the mass movement changed river landforms - the most common of which was bank collapse. Overall an improvement in understanding the different fluvial processes would improve candidates' understanding.

This is a good response which scored full marks (3/3).

(ii) Describe how mass movement impacts on river landforms.

(3)

~~Mass movement are~~ - An example of mass movement is slumping, this occurs when gravity and the rain pushes rocks near the river banks to fall causing a landslide. This may stop river flow or slow it down, it may also stop the ecology, e.g. salmon swimming upwards may be blocked.



**ResultsPlus**  
Examiner Comments

This candidate has a clear link to process (slumping) and understands the mechanism behind it. They also make clear comment on its impact on the river - eg stopping flow due to banks falling.



**ResultsPlus**  
Examiner Tip

Make sure you learn the different types of erosion, mass movement and transportation and can clearly apply them to formations and landforms.

## Question 2(d)(ii)

Many candidates did not recognise the management as flood relief channels or channelisation but instead as embankments or flood walls. However, this did not affect the outcome of candidates' answers as many were able to recognise the durability of the concrete or the increased capacity of the channel. Some recognised the role of vegetation beyond the banks of the river and were able to comment on the increase in interception or the fact that it acted as a buffer zone. Good answers were able to develop each point. However, many candidates simply put statements which were only worth 1 mark. Some candidates were self-limiting by mentioning more than two advantages as they often then did not develop their answers. Candidates need to practise developing a basic point, even at Foundation Tier.

(ii) Describe **two** advantages of the type of river management shown in Figure 2c.

(4)

Advantage 1

The flood channel takes away most of the water which can then flow as a stream -

Advantage 2

The sides are very steep so the water won't escape unless the channel overflows itself.



### ResultsPlus Examiner Comments

This candidate cleverly recognises that the channel is for flood relief and therefore the first part of the answer makes sense. The second part of the answer was a more common approach focusing on the channel capacity. This candidate has two clear ideas and is able to offer some development on each and therefore scores full marks (4).



### ResultsPlus Examiner Tip

Ensure that if you are asked to describe two things for four marks you develop each point - this will avoid missing out on marks by just making statements. Candidates should also practise looking at images of different flood relief measures so that they understand which is which.

## Question 2(e)

Many candidates coped well with this question and understood the differences between the effects of flooding and management better than those who opted for the coasts equivalent. Many candidates achieved 3 marks for simple descriptions of effects on people, however full marks were reserved for those who used at least one example in support of their answer. Common examples included floods in India, Pakistan, Boscastle or Carlisle. It was pleasing to see some centres make reference to examples that were not in the course texts. Those that used the Northampton case study often were focused on management and were therefore self-limiting.

This response was awarded 3 marks.

(e) Outline the effects of flooding on people and the environment.

Use examples in your answer.

(4)

Flooding can effect people by ruining their homes and belongings by soaking them and causing them to either wear away or break, and it can effect people physically by injuring them depending how bad it can get.

It also has an effect on the environment by ruining nature, killing plants and destroying the fertile soil from underneath as well as animals - being in there local habitat.

(Total for Question 2 = 25 marks)



### ResultsPlus Examiner Comments

This is a good example of a candidate who was held at 3 marks. Although the answer has clear focus on both the environment and the people and evidence of an outline, the lack of an example held it at 3. Candidates did not gain any credit for the naming of an example but needed one to reach full marks as it was specifically requested in the question.



### ResultsPlus Examiner Tip

If the question requests an example please make sure that you are able to use one. Learn one or two specific facts from the example to help you formulate an answer.

### **Question 3(a)(i)**

Most candidates were able to recognise freeze thaw as the weathering type in Figure 3a.

### **Question 3(a)(ii)**

Many candidates were able to recognise the two types of erosion as abrasion and plucking.

### **Question 3(b)(i)(1)**

Many candidates were able to recognise the highest point on Figure 3a as a pyramidal peak.

### **Question 3(b)(i)(2)**

Most candidates recognised that there were 3 aretes leading up to the pyramidal peak.

### **Question 3(b)(i)(3)**

Most candidates recognised that small valleys either started/ended in the corries. Both answers were accepted so as to be fair to the candidates, depending on how they had interpreted the diagram.

### **Question 3(b)(i)(4)**

Most candidates were able to recognise that most of the valleys had a stream in them.

### **Question 3(b)(i)(5)**

The vast majority of candidates recognised that the U-shaped valley was 200m wide, therefore making good use of the scale.

### Question 3(b)(ii)

Unfortunately the majority of candidates found the concept of a ribbon lake beyond them, and failed to give a credit worthy answer. For those who remembered what it was, they often scored no more than 1 or 2 marks as they recognised that the glacier formed a U-shaped valley through erosion. Few were able to develop this into how the lake formed, many confusing it with a mis-fit stream. Some good answers made reference to the over-deepening of the valley due to softer rock; almost no candidates were able to link the formation of the lake to the damming of the glacial valley. Centres are reminded to study all the landforms listed in the specification.

This response scored full marks (4/4).

(ii) Describe the formation of a ribbon lake.

You may use a labelled diagram(s) in your answer.

(4)

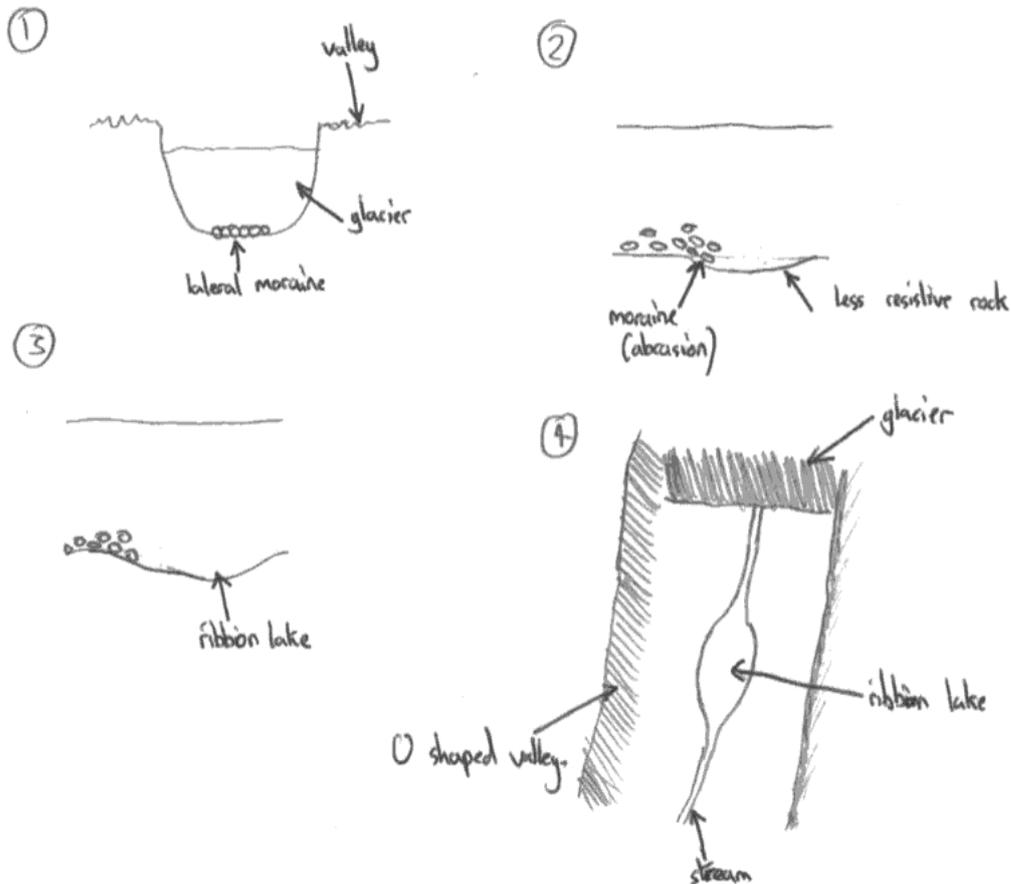


Figure 1 shows the glacier bulldozing down the valley forming a U-shaped valley with lateral moraine. As the glacier gets to rock which is less resistive abrasion occurs more digging out and eroding a larger hole, shown in figure 2. This process carries on making it bigger and bigger shown in figure 3. Then the glacier will begin to retreat due to it be the summer season as it retreats a river will be left and where the less resistive rock was will be a lake known as the ribbon lake shown in figure 4.



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### Examiner Comments

This was an unusually good answer and sets a standard which other candidates should aspire to. This candidate makes excellent use of the space for diagrams to show the progression in the ribbon lake formation. They show a clear understanding of the stages and these are very well-described, even with some partial explanation in places. Overall this was an excellent answer for Foundation level.



## ResultsPlus

### Examiner Tip

You are encouraged to use a series of diagrams in the formation of a landform, as it helps understand the progression of formation over time.

### Question 3(c)(ii)

This question was answered enthusiastically by many candidates, who were very familiar with the content. Most candidates were able to score at least 2 marks by referring to one different use and some development of the use. Some were prevented from scoring full marks as their example was just a name eg Alps, and too generic. Good answers made reference to skiing in Alpine resorts such as Chamonix or farming in the Nant Francon valley.

(ii) Outline **one** other way people use glaciated landscapes.

Use an example in your answer.

(3)

Farmers use glaciated landscapes for pastoral farming to farm sheep such as in Nant Francon Valley. The flat valley floor and steep valley sides are great for sheep to graze. Farmers cannot grow crops as the valley sides are too steep and the valley floor can flood when it rains and ruin the crops.



#### ResultsPlus Examiner Comments

This is a good answer relating to farming in the Nant Francon valley in Wales, which is clearly contextualised and developed through the link between hill farming and the morphology. This candidate scored 3 marks with relative ease.



#### ResultsPlus Examiner Tip

Ensure that examples are not just a name; in your answer make it clear that the example applies to your point.

### Question 3(d)(ii)

Many candidates were able to identify the appropriate method of management, eg afforestation or snow fences. Candidates were often able to score 1-3 marks, but found it difficult to develop a second point to reach the 4th mark. The better answers often related to the snow fences, as candidates wrote about the blocking action of the fences, or the number of fences in case of failure (of one). Top answers not only made reference to the advantages but were also able to develop the response with reference to how they reduced effects on areas downslope. Candidates should practise developing multiple points based on advantages (or disadvantages).

(ii) Describe **two** advantages of **one** avalanche management method shown in Figure 3c. (4)

Chosen method ..... Snow fences

Advantage 1

It ~~stops~~ slows down the speed of avalanches as it takes away some of the snow and stalls it making the snow not move

Advantage 2

It gives people a chance to escape as the avalanche is slowed meaning less people are at risk.



#### ResultsPlus Examiner Comments

This candidate scored 3 marks out of 4, as they were able to recognise the idea that snow fences blocked (slowed down) avalanches, and then they developed the idea that such defences could enable evacuation and decrease risk. They could have developed their point on slowing down the avalanche by commenting on how the power of the avalanche would be significantly reduced. Overall this was a good attempt considering candidates had to apply their knowledge based on an unseen resource.



#### ResultsPlus Examiner Tip

With questions asking for advantages and disadvantages, practise developing multiple points based on one resource. It was clear that many candidates found this quite difficult.

### Question 3(e)

This question proved to be a good discriminator as it divided those who understood the difference between the cause and the effect. Therefore answers either scored 3-4 marks or zero. Many candidates referred to the Galtur case study, though impressively some had been taught about recent avalanches in Scotland. As many talked about Galtur, they were able to access full marks as they set their answer in the context of the example. Good answers made reference to the Atlantic storm, the snow drifts and the melt crust in Galtur.

This answer scored 4 out of 4.

(e) Choose an avalanche you have studied.

Outline the causes of this avalanche.

(4)

Chosen avalanche Galtur

An Atlantic storm came on the resort from 400km away. Winds of up to 100kmph lasted for 3 weeks. There was 4 meters of snow fall which was the resorts highest recorded snow fall, all the snow accumulated in one focused area. Due to the changing temperature of day and night this caused a siltation layer which means the snow was resting on an unstable surface and could give way when ever. The resort did not check to see if the resort was safe.

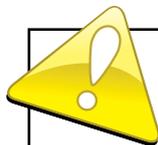
(Total for Question 3 = 25 marks)



**ResultsPlus**

**Examiner Comments**

An excellent answer, which would have scored well on the Higher Tier paper. The candidate makes excellent use of the case study and has a clear understanding of avalanche formation.



**ResultsPlus**

**Examiner Tip**

Ensure that you understand the command words and know the differences between the cause and effect. Please use case study material when asked, and try if possible to find new case study material which is not in the text book!

### **Question 4(a)(i)**

Most candidates were able to identify an active volcano thereby scoring 1 mark.

### **Question 4(a)(ii)**

Although there was some confusion with the Australian and Pacific plates, many candidates were able to identify the names of the plate boundaries as Hikurangi and Puysegur.

### **Question 4(b)(i)(1)**

Almost all candidates recognised three volcanoes shown in Figure 4a.

### **Question 4(b)(i)(2)**

The majority of the candidates were able to recognise the correct height of the volcano for 1 mark.

### **Question 4(b)(i)(3)**

The vast majority of candidates correctly identified the main volcano as having steep sides.

### **Question 4(b)(i)(4)**

Most candidates identified the main volcano as erupting lava, though steam was given as a correct answer as well.

### **Question 4(b)(i)(5)**

The vast majority of candidates recognised the volcanoes all erupting steam.

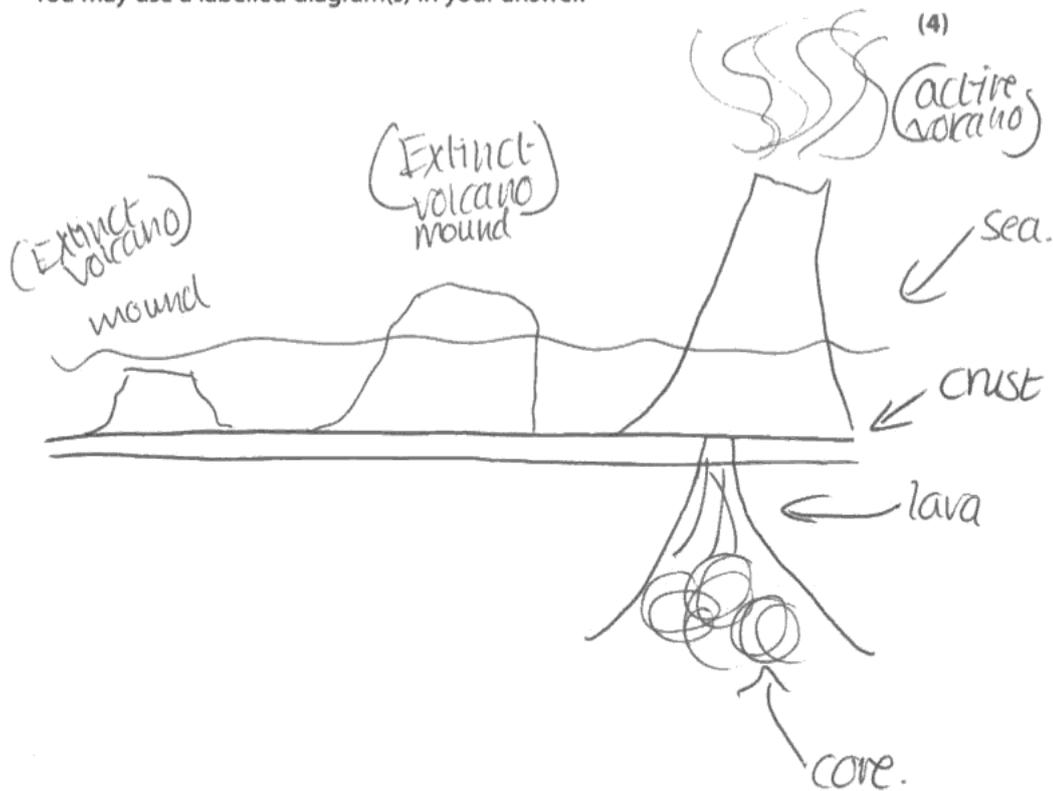
### Question 4(b)(ii)

This question was a good discriminator, though unfortunately few candidates showed a true understanding of the concept. Many described volcanoes found at any plate boundary or alternatively gave a generic scenario of a volcanic eruption. For those who did understand the concept of a hotspot they described the feature rather than explaining how it was formed - focusing on its location or the idea of an island chain. Those that showed understanding were able to gain marks in a variety of ways including the description of the rising magma, the influence of the plume on the crust, the build-up of the island over time or the subsequent erosion of the island. One point worth noting is that hotspot volcanoes do not occur where there is a weakness in the crust (as quoted by some text books) instead they cause the weakness in the crust as the plume uplifts the crust.

This response scored full marks.

(ii) Describe the formation of a volcano at a hotspot.

You may use a labelled diagram(s) in your answer.



convection currents cause the plate to move, when there is a weakness in the crust the ~~the~~ magma is able to push up through the crust forming a volcano. This is because the land is pushed up by the magma.



**ResultsPlus**

**Examiner Comments**

This candidate gives a simple answer but does just enough to reach full marks. Although the order of the answer is not entirely logical, they understand the link between convection and plate movement, the exploitation of a crustal weakness (acceptable at Foundation level) and the idea of an eruption building up on the surface. The diagram gives the answer clear context and could have been improved with some simple annotation to explain the size or position of the islands.



**ResultsPlus**

**Examiner Tip**

When learning landforms, especially volcanoes, try and learn the type of volcano at the same time as the plate setting so you can easily make the association. Remember hotspots are not specifically linked to plate boundaries. Learn the formation (especially at Foundation Tier) as a sequence so that it follows a logical order.

### Question 4(c)(ii)

Many candidates were able to recognise the economic link and identify a reason, most commonly fertile soils, resource exploitation or lack of income and then develop this for 2 marks. Acceptable examples had to be more than the name of the country; instead it should be the name of the volcanic region, eg the bay of Naples, or the volcanic cone, eg Montserrat.

(ii) Outline **one economic** reason why people continue to live in areas of volcanic activity.

Use examples in your answer.

(3)

There's jobs for local's, for example  
the local's can be guides for somewhere  
like MT Etna. Also there ~~is~~ is lot's of minerals  
found around these areas. The minerals are  
gold, copper, tin and silver.



**ResultsPlus**

**Examiner Comments**

This candidate scored 2 out of 3, but failed to fully develop (outline) the first point, which had an example, whereas the second point lacked a clear example and development.



**ResultsPlus**

**Examiner Tip**

Make sure you follow the command, eg 'one economic reason', rather than giving a range. Ensure, with the command outline, that you offer some development to the point or some partial explanation.

## Question 4(d)(ii)

Many candidates had mixed success on this question, scoring most on the second part of the answer. Many candidates believed that the seismometer enabled earthquakes to be predicted, even though this has never been achieved. Some higher scoring candidates recognised that seismometers were accurate devices and could record seismicity, which could therefore inform planning. Many candidates scored marks on the protection idea, focusing on the ideas of hiding for cover to protect against falling debris, or bolting bookcases to prevent falling items from shelves. Most candidates scored at least 1-2 marks on this question. However, few candidates scored full marks.

(ii) Describe **one** advantage for each of the following:

1. earthquake monitoring as shown in Figure 4c1
2. earthquake protection as shown in Figure 4c2.

(4)

Advantage – earthquake monitoring

This will show how strong an earthquake is on the Richter Scale which may help prevention of damage in the future if a large one occurs people will prepare for it to happen again.

Advantage – earthquake protection

teaching children earthquake protection at a young but understanding age may save the lives of many if one strikes their country so it's a necessity for vulnerable countries.



**ResultsPlus**

**Examiner Comments**

This candidate scores full marks (4) as they recognise that the seismometer can be used to determine earthquake strength which can be used for prediction of future events. The second part of the answer explores the idea of teaching and puts this into a context to help minimise future risk. This candidate develops two points well and shows a good level of understanding.



**ResultsPlus**

**Examiner Tip**

Ensure that candidates understand the difference between hazard monitoring and hazard protection. Also ensure that candidates are able to develop a single point for 2 marks instead of giving statements.

## Question 4(e)

It was clear from marking this question that many candidates learn the case study as a story and want to include the effects even if they are not asked for them. Learning the case study separately as causes and then effects would help improve candidates' understanding, especially if they could then draw the links between the two. Here the candidates' performance was determined by their understanding of the word 'causes'. Candidates who scored zero wrote entirely on effects. Many who included causes gave simple statements like the names or type of the plate boundary and subsequently scored only 1 or 2. High scoring candidates were able to develop the actual cause eg pressure build up on the plate, for an earthquake or subduction or magma related process for a volcanic eruption. Good answers focused on the Haiti earthquake or the Montserrat eruption as these seemed to have specific detail related to cause.

(e) Choose an earthquake or volcanic eruption you have studied.

Outline the causes of this event.

(4)

Chosen earthquake or volcanic eruption Turkey in 1999

Turkey is being squeezed by 3 tectonic plates.

The African, Eurasian and Arabian tectonic plates

have caused numerous faults, and Izmit

is on the North Anatolian fault. The plates

have slipped between 2-5 metres and this

has caused the earthquake to occur.

The plates are situated on clay rock

and this makes it easier to move

than solid hard rock.

(Total for Question 4 = 25 marks)

TOTAL FOR SECTION A = 25 MARKS



**ResultsPlus**

**Examiner Comments**

This is a very good answer which scores full marks (4). The candidate has clear locational detail, specific to the name of the fault line. They have developed the idea of fault line slippage and even given local geological conditions which were relevant to the event. The focus is clearly on causes.



**ResultsPlus**

**Examiner Tip**

When asked about causes of a tectonic event ensure that the focus is just cause. Learn case studies in two parts, causes and effects. Inclusion of specific plate detail is a good way to gain the credit for use of examples.

### Question 5(a)(i)

Candidates managed the skill of drawing a stacked bar chart well and the majority of them scored full marks (2). Candidates were required to accurately draw each bar for a mark and complete the shading as shown in the key. Some candidates adopted their own shading, however this was not common.

Spelling, punctuation and grammar will be assessed in \*(c).

5 (a) Look at Figure 5a.

It is a graph showing the different types of waste produced by different countries.

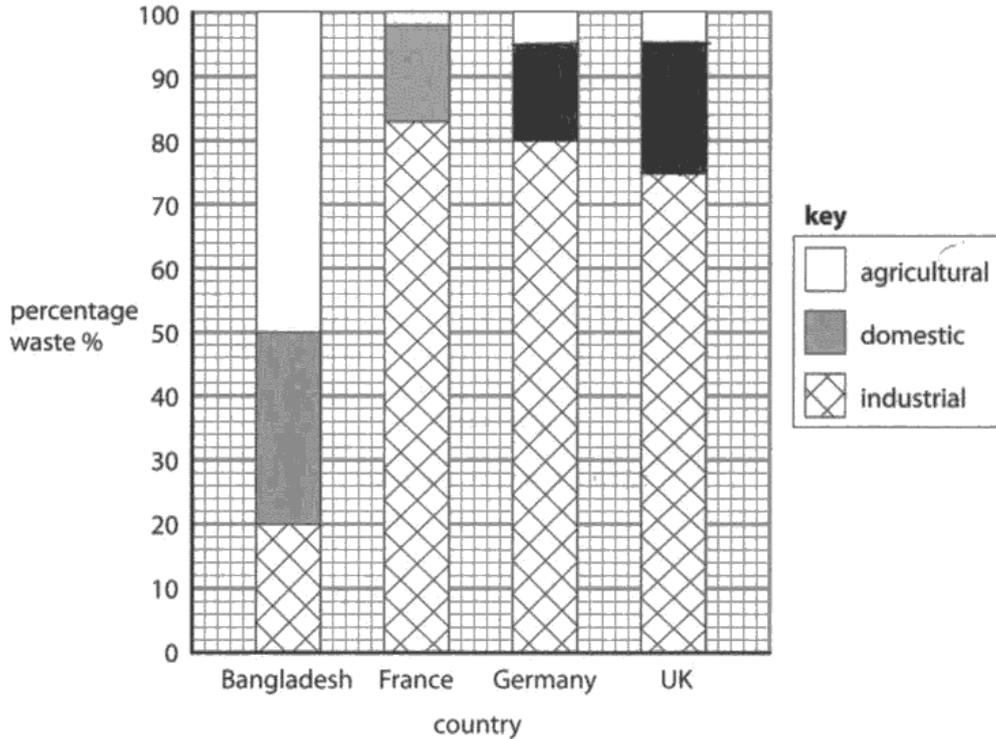


Figure 5a

(i) Complete the bars using information in the table below.

(2)

Country	Type of waste	
	Domestic %	Agricultural %
Germany	15	5
UK	20	5



**ResultsPlus**  
Examiner Comments

This is an example of an accurately drawn graph with the lines carefully drawn and the key followed in an appropriate manner. This candidate scored full marks (2).



**ResultsPlus**  
Examiner Tip

Remember to follow the key provided when completing a graph.

### **Question 5(a)(ii)**

The vast majority of candidates recognised that Bangladesh was the LIC.

### **Question 5(a)(iii)(1)**

Most candidates were able to identify France as the country with the highest percentage of industrial waste.

### **Question 5(a)(iii)(2)**

The vast majority of candidates recognised Bangladesh as the country with the highest percentage of agricultural waste.

### **Question 5(a)(iii)(3)**

The majority of candidates identified that Bangladesh had 50% agricultural waste.

### **Question 5(a)(iii)(4)**

Only some candidates recognised that the answer was 'over'. If the incorrect answer was provided here, then often candidates incorrectly answered part (a)(iii)5.

### **Question 5(a)(iii)(5)**

Some candidates recognised that the answer to this section was the 'UK'. However, again this depended on the answer to the previous question. There was some confusion here, and candidates needed to spend time carefully interpreting the completed bar charts.

## Question 5(a)(iv)

Although many candidates adopted the correct theme to their answer, there were still some who focused their answer on water (most likely completing the wrong option) or energy, therefore suggesting that candidates should clearly read the question. However, for the majority many were able to pick up 3-4 marks. The most common way to secure marks was to focus on the consumer society approach, however other good answers focused on the amount of packaging provided with products or the casual attitude people have towards buying replacement items. Candidates were clearly familiar with the concept and had been prepared well for this section.

(iv) The wealthier people in HICs create more waste than poorer people in LICs.

Outline how.

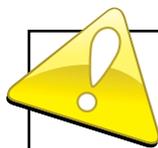
(4)

People in HIC's produce more waste than people in LIC's simply because they are wealthier. They have more disposable income. Therefore they buy a lot more than people would in LIC's. Also HIC's have more packaged items compared to LIC's. Richer countries also have a lot more white waste like dishwashers and washing machines.



**ResultsPlus**  
Examiner Comments

This is a good answer which scores full marks (4). Here the candidate has clear focus from the start and links the wealth to increased disposable income. Then they link this idea to the point on more goods which have more packaging. The final mark comes from the idea of greater amounts of white waste in HICs, with an example included. This candidate has a clear outline and makes good links between their points.



**ResultsPlus**  
Examiner Tip

When commenting on why people have more waste, try not to focus on just wealth, especially as this is in the title of the question. There is often no credit for repeating the idea stated in the question.

## Question 5(b)(iv)

This question presented little difficulty for many of the candidates. However, some candidates did limit their performance with reference to waste and recycling and not energy as outlined in the question. Candidates were familiar with a range of energy saving measures, the most common included double glazing, cavity wall insulation, and switching off appliances/lights. Candidates should be careful not to be overly repetitive when answering, eg double glazing stops heat loss, cavity wall insulation stops heat loss. Higher scoring candidates were able to develop their answer either adding statistics or giving the consequence of installing such measures, eg reduced heat bills. Remember that renewable energy measures are not methods of reducing energy use; instead they are just an alternative source. It was pleasing to see candidates refer to reducing energy use from transport and bringing in information they had clearly learned from Unit 1.

(iv) Describe how people can reduce their energy wastage.

and buying  
People can reduce their energy wastage by investing in more energy efficient electrical appliances. eg 50 watt light bulb instead of a 100. They can also ~~invest in~~ <sup>turn off</sup> their lights, tv's and other electrical appliances that use energy when they ~~leave~~ leave their homes even just for a 10 minute walk. They can also install loft insulation in their homes to ~~stop~~ stop heat from going outside by reducing the need of turning on a heater <sup>or</sup> radiator. They can also take the government's advice by covering their boiler with a blanket or coat to stop heat from escaping.



**ResultsPlus**

**Examiner Comments**

This is an excellent answer which would be worth more than the four mark allocation if such marks were available. It would also compete for full marks on the Higher Tier. The candidate gives a wide range of descriptive methods and for many of them develops the point or gives an example. Instead of just stating that measures reduce heat loss or energy wastage they elaborate eg loft insulation.....reduces the need to turn the radiator on. Candidates should be encouraged to develop their answer in such a way.



**ResultsPlus**

**Examiner Tip**

Ensure that when writing about energy waste you do not focus on solid waste. When trying to develop an answer, try and think of the reason (eg method of reducing energy waste) then think of how it achieves its aim. For example loft insulation reduces energy loss (method) therefore it reduces the need to turn on the heating/ saves on energy bills (the consequence).

## Question 5(c)

This was clearly a case study question that candidates had prepared well for, as many scored at least Level 2 marks (3-4) for descriptions about relevant methods. Some candidates were self-limiting by referring to local-scale methods, and these were often candidates who focused their answers on the UK. Although UK waste management may be at a local-scale (recycling) this context is needed in the introduction to an answer to allow it to progress through the levels. Many higher scoring candidates referred to the Germany case study (the waste management capital of the world!), as this case study gave specific details which enabled candidates to reach Level 3 marks. Candidates are required to have some explanation to get to the top of Level 3 and would therefore be advised to practise this, as many had enough points in their answer but never explained any of them. SPaG often returned a mark of 1 on this question, as candidates were sometimes challenged by the rules of grammar and punctuation. The spelling of some geographical words, such as incineration, was surprisingly good.

\*(c) Choose an HIC you have studied.

Explain how it disposes of different types of waste.

(6)

Chosen HIC Germany

Germany uses incinerators, for example. Many incinerators have been used with around 450, with 32 a few years earlier. Also the waste is recycled, and is widely used in Germany because of the 'Green Point' symbol. Many electronics are recycled and remade in factories. Nuclear waste is being disposed in plants and power stations where it is safely gotten rid of with harming people/environment. Even sometimes it is dumped into rivers/streams afterwards.



### ResultsPlus Examiner Comments

This is a typical answer relating to the Germany waste management case study. It makes a series of descriptive statements, none of which were developed enough for explanation, but there was inclusion of specific locational/case detail which meant that it could access Level 3 marks. To gain Level 3 a candidate must have reasonable description and either specific locational detail or explanation. Here the quality of SPaG is enough for only 1 mark as the level of language use is simplistic. Overall this candidate scored 5 for their answer and 1 for SPaG.



### ResultsPlus Examiner Tip

Practise developing descriptive points into explanation at Foundation Tier. Many candidates struggle to reach 6/6 because they are weak in this area.

### Question 6(a)(i)

Candidates managed the skill of drawing a stacked bar chart well, as the majority of them scored full marks (2). Candidates were required to accurately draw each bar for a mark and complete the shading as shown in the key. Some candidates adopted their own shading, however this was not common.

Spelling, punctuation and grammar will be assessed in \*(c).

6 (a) Look at Figure 6a.

It is a graph showing water use in different countries.

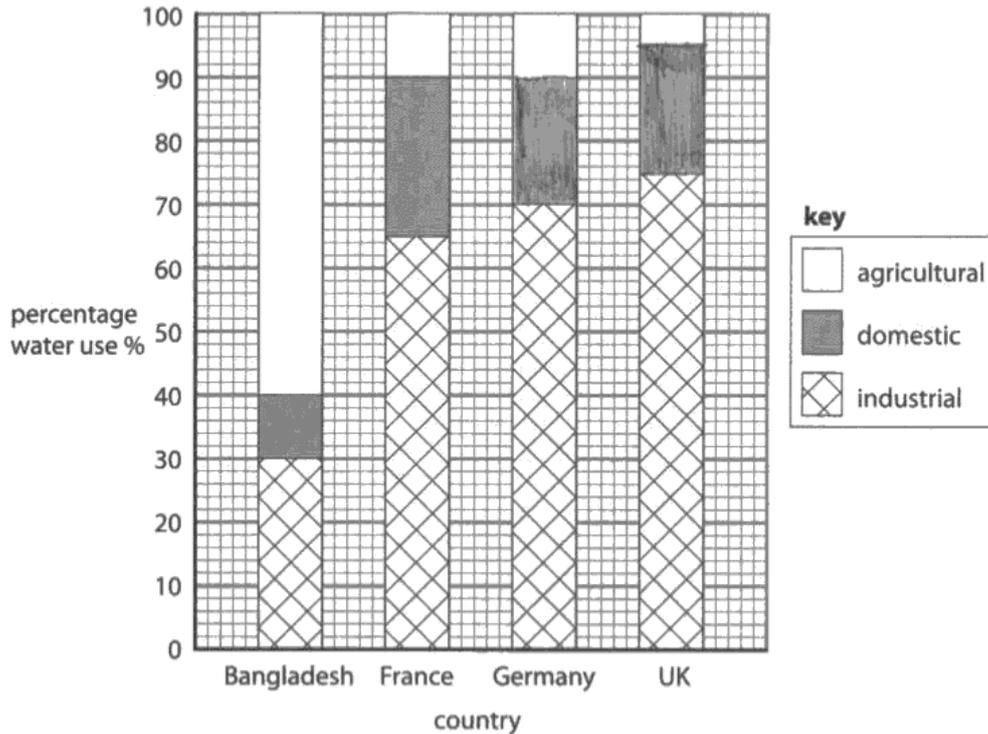


Figure 6a

(i) Complete the bars using the information in the table below.

(2)

Country	Water use	
	Domestic %	Agricultural %
Germany	20	10
UK	20	5



**ResultsPlus**  
Examiner Comments

This candidate scores full marks (2), and accurately draws the different parts of the stacked bar for both Germany and the UK.



**ResultsPlus**  
Examiner Tip

Practise different graphical techniques so that you are familiar with these in an unseen context and if they appear in the exam you will be comfortable with the demand.

### **Question 6(a)(ii)**

The vast majority of candidates recognised Bangladesh as the LIC.

### **Question 6(a)(iii)(1)**

The majority of candidates identified France as the country with the highest percentage of domestic water use.

### **Question 6(a)(iii)(2)**

The vast majority of candidates recognised Bangladesh as the country with the highest percentage agricultural water use.

### **Question 6(a)(iii)(3)**

The majority of candidates recognised that agriculture accounted for 60% of its water use.

### **Question 6(a)(iii)(4)**

Most candidates recognised that the correct answer was '75%'.

### **Question 6(a)(iii)(5)**

Most candidates recognised that the correct answer was the 'UK'.

## Question 6(a)(iv)

This question was welcomed by many candidates who felt comfortable with the concept of water use. Many candidates referred to the idea of access to water, or luxury use while some developed the idea of a showering society. Many were able to get to 3-4 marks. Some candidates were self-limiting because they gave mirror answers, eg in HICs there is greater water use as people can afford piping to their homes, whereas in LICs they do not have the money to pipe water to their homes. Candidates should avoid this where possible.

(iv) The wealthier people in HICs use more water than poorer people in LICs.

Outline why.

(4)

In the UK we live in a Showering Society, which means we are big on hygiene and have showers <sup>up to</sup> 5 times per week, where as LIC's do not wash everyday. HIC's have many factories, this means that lots more water is used ~~is~~ for toilets and cleaning products. HIC's are free to use water wherever and whenever, therefore it is taken majorly for granted.



**ResultsPlus**

**Examiner Comments**

This is a good answer which scores full marks (4). The candidate develops a couple of points and therefore satisfies the command to 'outline'. They understand the concept of a showering society and develop that point, they also make the point about industrial water use and finally the 'taking water for granted' concept. Although the wording is simplistic it covers a range of points and develops ideas.



**ResultsPlus**

**Examiner Tip**

Ensure that you do not use mirror statements in your answers as these serve just to take up space. Try to think of 2-3 reasons and develop a couple of them. Give the point and then the consequence of that point.

### **Question 6(b)(iv)**

This question discriminated quite well as some candidates did not use an example and therefore were held at 3 marks, while others did not focus on water use instead they concentrated on water supply and therefore scored zero. Many high scoring candidates recognised water metering, or other domestic measures, while some focused on agricultural water management in HICs, namely drip irrigation. The most common examples used were references to the Cadburys or Walkers Crisps factory water use management.

### **Question 6(c)**

This question produced a range of answers, although many candidates were able to select appropriate case study examples. A common focus was on the GAP scheme along the Tigris and Euphrates, or the series of dams along the Colorado River, as these gave good focus on the conflict between two areas. Some candidates tried to use the Three Gorges Dam, which was acceptable as long as they made the explicit link to conflict - though many struggled with this, instead focusing on the effects of dam building. High scoring candidates made clear reference to the conflict and the causes of conflict which were often routed in a lack of supply and subsequent effects of salinisation for the losing party. It was good to see some centres teach water transfer issues in western England and the issues it has caused; remember though that conflict does not have to be fighting it can simply be a dispute. Many candidates scored 1 mark for SPaG as the place names often presented too much of a challenge to spell correctly.

## Paper Summary

It was pleasing to see an improvement in the performance of many candidates at Foundation Tier in this series, with a particular improvement in the skill-based questions, the MCQ and the description questions. However, based on their performance on this paper candidates are offered the following advice:

- Develop landform learning through the use of a series of diagrams which enable one to see the progression of landform formation.
- Learn terminology of process, so that you are able to define terms in Section A and use process in support of landform formation.
- Practise developing points on the case study questions so that you have evidence of explanation.
- Ensure that when asked for an example you try and give more than just a place name. Use of a couple of pieces of specific data can often turn a generalised answer into a more substantial one.

As a final point, examiners have been pleased with the progression in the performance of Foundation Tier candidates who have over the past 7 series shown an improvement in performance and understanding of geography. The examiners would like to congratulate the candidates and welcome centres in advance to the linear exam in 2014.

## **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>



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