

# Examiners' Report January 2013

## GCSE Geography 5GA2H

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January 2013

Publications Code UG034543

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## Introduction

The Natural Environment paper (Higher Tier) requires candidates to answer one question on a physical geography topic (Coastal, River, Glacial or Tectonic Landscapes) and one question on an applied topic of either Wasteful or Watery Worlds.

The paper was once again well received by centres and it was pleasing to see that overall attainment has improved in comparison to previous series. Once again both Coastal and Tectonic Landscapes proved to be the most popular options, with Glaciers again proving least popular in Section A. In Section B, Wasteful World was clearly more popular than the Watery World counterpart.

This was the first inclusion of a spelling, punctuation and grammar (SPaG) mark in the paper. Candidates were awarded between 0 and 3 marks for the quality of SPaG on the extended writing item in either Q5 or Q6, therefore increasing the overall score for this section to 28 (from 25) and the overall paper mark to 53 (from 50).

In Section A, the Tectonic Landscapes question scored the highest mean mark, while Glaciers realised the lowest. In Section B, Wasteful World was not only the most popular option but also scored the highest mean mark.

### **Question 1(a)(i)**

Many of the candidates who attempted this item correctly identified beach or spit as the correct answer.

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

Many candidates were able to make the link between longshore drift and the movement of sediment along the beach. However, the 'outline' command confounded some candidates, as they instead opted to 'describe'. Candidates that were able to develop the movement of swash, as a consequence of the prevailing wind, or the movement of backwash due to gravity were able to access the full range of marks. Some lower scoring candidates were not aware that the movement involved sediment, as they instead commented on the movement of waves or water.

(ii) Outline the process of longshore drift.

You may use evidence from Figure 1a in your answer.

(3)

Longshore drift is the movement of sand and pebbles from one place to further down the coast. The prevailing wind creates the swash, which is a wave that goes up the beach in an angle, ~~pickles up~~ ~~upward~~ deposits its material it carries on the beach. Then the backwash, which goes back to the sea in an right angle, picks up ~~the~~ some of the sand and pebbles and carries it away. The process repeats and this causes the materials to move down the beach.



**ResultsPlus**  
examiner comment

This candidate gets to the heart of the question immediately, describing the movement of sediments. This is logically followed by the outline of swash, highlighting a clear understanding of the longshore drift process. The candidate also shows understanding of the temporal changes associated with the process, indicating the repetition of process. This is an excellent answer, showing a full understanding of the process, which was awarded three marks.



**ResultsPlus**  
examiner tip

Candidates need to ensure that when asked to 'outline', they develop or briefly explain a part of their answer. When writing about process, they should logically develop their answer as a series of stages which follow on from each other. They should develop the answer in the context of the wave moving onshore, the swash and backwash and then the subsequent repetition and movement of the sediment along the coast.

## Question 1(b)

Although this question only required description, it proved a good discriminator as candidates could only access full marks if they were able to comment on both building design and planning, and provide a valid place example. Many candidates showed a clear understanding of either building design or planning, while surprisingly few managed to cover both. Building design was often confused with coastal defences or planning. Higher scoring candidates often made reference to buildings on stilts or waterproofing measures. There were some excellent references to land-use zoning for planning, while some made reference to evacuation measures undertaken in Bangladesh. References to forecasting and defences were accepted as planning, although the link between them had to be explicit.

Candidates need to ensure that when asked they give specific place references as examples of measures to protect against coastal flooding. It was nice to see some centres teach protective measures on areas that they had visited for their fieldwork component of Controlled Assessment.

(b) Describe how building design and planning can reduce the effects of coastal flooding.

Use examples in your answer.

(4)

In Bangladesh it is a mandatory law to have an external staircase leading to the roof in a one or two storey building. This is because Bangladesh is flat and has high rain-fall which can flood rivers and causes damage to the building. In Los Angeles, some houses are built on stilts to protect them from the extreme weather fronts america gets.



### ResultsPlus examiner comment

This candidate has a clear understanding of building design measures and gives a range of examples. Unfortunately the lack of reference to planning restricts this answer to three marks. It is pleasing to see a candidate apply different examples and understand their context.



### ResultsPlus examiner tip

Candidates must ensure that when a question asks for 'examples' that they give more than a simple name of a place. They must also ensure that their examples are in the correct context, eg in coastal regions and about flooding. If they can give specific references to place it, it sounds more plausible than a generic country-wide example.

### Question 1(c)(i)

Although description has proved to be a challenge for some in the past, this question was relatively straight forward for most candidates. The change in command, of describing changes, rather than describing the pattern or trend, proved to be helpful to candidates. Many were able to gain some credit by describing the changes at different sites. Common errors included failing to include evidence to support answers or only concentrating on one or two sites. As the question required candidates to describe the changes across the coastline, they had to describe at least three out of four sites.

(c) Study Figure 1b.

It shows erosion rates at four sites (A–D) along a coastline.

Each site has a different type of coastal management.

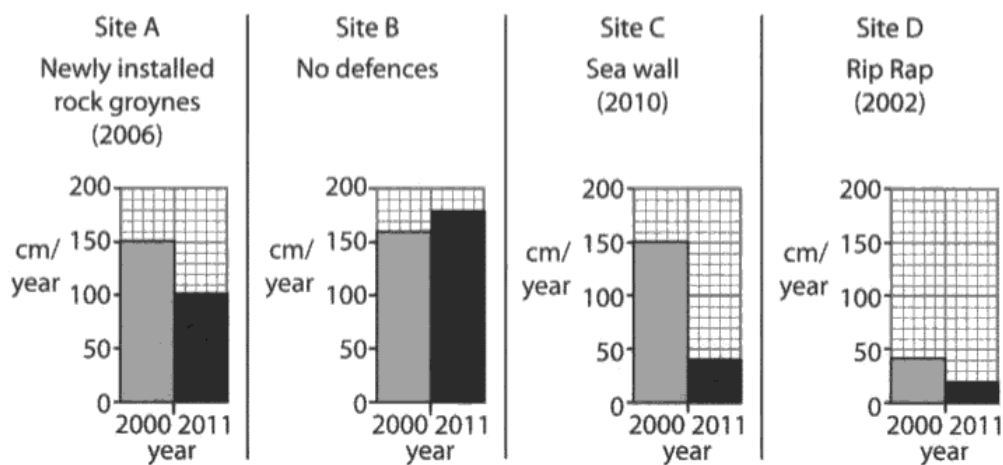


Figure 1b

(i) Describe the changes in erosion rate along the coastline shown in Figure 1b.

Use erosion rate data (cm/year) in your answer.

(4)

In sites A, C and D erosion rate has dropped as they are defences put in place to prevent erosion. Site B has no defences and as a result erosion has risen by 20cm/year. The most effective form of defence is the sea wall in Site C as the rate of erosion has dropped by 110cm/year. The site with the least effect with defences is Site D as the rip-rap has only reduced the rate of erosion by 20cm/year. Site A rock groynes have improved the rate of erosion by 45cm/year.



**ResultsPlus**  
**examiner comment**

This candidate has a well-organised answer, which covers the overall pattern and gives an exception. The candidate also uses data in the context of the question and comments on the extent of success in coping with erosion. Candidates could either comment on rates of change or assess which was the most or least effective form of management. Overall this candidate easily achieves full marks.



**ResultsPlus**  
**examiner tip**

When describing changes, ensure that you comment on all of the graphical information given. Try not to offer a possible reason for the changes shown.



## Question 1(c)(ii)

The term 'geology' proved a challenge for some of the lower scoring candidates, who commented on fetch or management. However, for those who understood the term, many candidates were limited to two marks, as they were unable to comment on anything other than the strength of the rock, some with examples. Candidates were required to have another point other than rock strength and only a few were able to develop their answer with appropriate reference to structure or chemical composition of the rock.

(ii) Outline how geology affects the rate of coastal recession.

(3)

Geology is a big factor in the rate of coastal recession as soft and impermeable rocks like chalk or limestone are eroded faster than a harder rock like granite or a more porous one like clay.



**ResultsPlus**  
examiner comment

This was a classic answer, which commented on just rock strength, using appropriate examples, therefore limiting the mark to two. Candidates should, however, be wary of using examples such as limestone as softer rock, unless compared to an igneous rock, as this is often not the case.



**ResultsPlus**  
examiner tip

Candidates should look at two aspects of geology to determine erosion rates. Rock strength is an obvious answer, but rock structure (eg faulted or jointed rocks) is another method of assessing rates of erosion.

## Question 1(c)(iii)

This question proved to be a good discriminator as some candidates clearly struggled with an understanding of offshore reefs. One mistake included candidates applying the advantages and disadvantages of other methods to offshore reefs; however, these were often inappropriate. Another included the confusion of offshore reefs with coral reefs, which led to equally inappropriate answers. Those who did understand the meaning of offshore reefs often described instead of explained. Candidates need to ensure that they fully develop their point so that full explanation is given. Questions that require explanation are limited to a maximum of two marks for description.

Good answers often focused on the ability of reefs to break destructive waves and subsequently reduce the power of the wave, or the fact that they were visually unobtrusive, as advantages. Disadvantages were often ambiguous, with some generic comments on cost or effectiveness. Candidates need to ensure that if cost is mentioned it must be in context (eg expensive to set up) or give an actual cost as qualification.

(iii) Explain the advantages and disadvantages of offshore reefs as a method of coastal defence.

(4)

The advantages of offshore reefs are that they are able to significantly reduce wave energy before the wave reaches the coastline. This reduces the rate of coastal recession greatly as it reduces erosion and allows a wide beach to develop, which can act as a defence against erosion and as a tourist attraction.

The disadvantages of offshore reefs are that they can prevent the movement of boats along the coastline, which can be both inconvenient and dangerous.

They are also expensive to install (steel piers) and are costly to maintain as they can become damaged over time.



**ResultsPlus**  
examiner comment

This is an example of a good answer with evidence of clear explanation of the advantages and disadvantages. The candidate has a range of points, many of which are developed or qualified. The answer was awarded four marks.



**ResultsPlus**  
examiner tip

Candidates must fully develop their points when explaining. When they are asked to explain the advantages and disadvantages, they need to make sure they explain both an advantage and a disadvantage.

### **Question 1(d)**

This question was well received by candidates who were able to apply their case studies of coastal management. Common examples included Swanage, Walton on the Naze and the Holderness coastline. As the question was open, candidates were able to explain measures to protect against erosion, mass movement or flooding. However, candidates should be careful to learn examples that cover all of these eventualities. Some candidates failed to explain how areas were managed, instead commenting on what was put in place rather than how it worked. Candidates should be mindful to explain the relevance of building groynes, eg to build beaches to absorb wave energy.

Candidates used a range of examples in their answers and it was great to see some centres use local coastlines as examples rather than the increasingly out-of-date cases from the text. Centres should, however, ensure that information on local examples has the necessary statistical data to support the points made.

(d) Choose a study of a coastal area.

Explain how this area is managed.

(6)

Chosen study Holderness Coast

It is a long stretch of coastline, stretching from Flamborough Head to spurn point. It is the fastest eroding coastline in the UK as made from boulder clay and is eroding at 1.8 metres a year in some ~~places~~ in other places <sup>less, due to coastal management</sup> ~~greater~~. However in ~~some~~ <sup>the</sup> ~~east~~ <sup>east</sup> ~~of~~ <sup>of</sup> ~~the~~ <sup>the</sup> ~~coast~~ <sup>coast</sup> ~~at~~ <sup>at</sup> ~~the~~ <sup>the</sup> ~~mouth~~ <sup>mouth</sup> of the Humber and Bridlington the rate is lower because the towns are managed with sea walls, groynes and Rip-rap, because they are tourist areas so have to be managed with hard engineering methods and both sea walls and groynes help to build up <sup>the beach</sup> ~~the beach~~. Mappleton is a coastal village situated along Holderness coast it was going to be left as a managed retreat but because of the key coastal role in 1244, the EU in 1991 <sup>summit</sup> granted them money to build 2 large rock groynes and rip-rap as they made it more tourist friendly so installed a toilet and a car park. However, the groynes are leading to further bath, causing being eroded more quickly as sand being stored so increased to 10m per year. Mappleton has groynes, to prevent long shore drift and build up the beach, <sup>units</sup> which is best form of natural defence against cliff. Also in eastington ~~it~~ <sup>its</sup> ~~has~~ <sup>has</sup> ~~been~~ <sup>been</sup> ~~protected~~ <sup>protected</sup> by a £2 million sea wall, due to it having a gas terminal providing 25% of gas to the ~~UK~~ <sup>UK</sup> ~~national~~ <sup>national</sup>



**ResultsPlus**  
examiner comment

This candidate scores full marks comfortably with this answer as it not only explains the types of management, but also includes the spatial variation along the Holderness coast. This approach clearly outlines a sound understanding of the varying approaches with clear explanation of what the methods achieve. The candidate also uses local information such as geology type, erosion rates and cost as supporting data, which acts as clear locational detail. In case study questions candidates need to show clear evidence of explanation and locational detail in their answers.



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examiner tip

Candidates must ensure that their supporting locational data is used contextually to answer the question. Stating that a lack of defences cost a named area £xx millions is irrelevant if the question asks for how the area is managed.

## Question 2(a)(i)

Many candidates were able to identify Taringa and Mount Coot-Tha as the settlements that were not flooded.

## Question 2(a)(ii)

This was a well-answered question with many candidates able to identify plausible effects on people and the environment. Lower scoring candidates either struggled to use map evidence (in this case often place names) or identify environmental effects.

- (ii) Describe the effects of flooding on people and the environment in the area shown on Figure 2a.

Use evidence from Figure 2a in your answer.

(3)

The effects of flooding on the people and the environment are river channels overflowing causing local areas such as Yeronga and St. Lucia to be affected which destroys habitats and homes and may result to deaths if very severe. ~~Saturated~~ Not enough afforestation in the ~~the~~ area to soak up the water. In addition Rocklea is in a washland area causing any flooding that occurs to most likely affect Rocklea.



**ResultsPlus**  
examiner comment

This candidate clearly identifies place names as evidence in their answer, followed by simple effects on the environment and the people. The candidate then develops the answer with reference to the possible washland in Rocklea. This candidate clearly has used the resource and logically applied possible flood impacts to it. The answer was awarded three marks.



**ResultsPlus**  
examiner tip

Candidates must ensure that when asked to give map evidence they refer to names, scale, symbols or direction.

## Question 2(a)(iii)

Candidates generally performed well on this question and showed an impressive understanding of the processes leading to flooding in an urban area. Many candidates made clear links between more impermeable surfaces, reduced infiltration and increased surface runoff. It was also pleasing to see that many candidates were able to use the appropriate terminology. As a consequence many found it easy to develop their answers sufficiently for an 'outline' question. It was also pleasing to see some higher scoring candidates develop links between an increase in surface runoff and a reduced lag time. Centres have clearly prepared candidates well for this part of the specification.

(iii) Outline how urbanisation increases the risk of flooding.

(3)

Urbanisation increases the risk of flooding because if it is built on the floodplain, ~~it~~ will be used impermeable rock will be used so therefore the water will have nowhere to go but ~~back into the river~~ <sup>into the river</sup> causing the water levels to rise



**ResultsPlus**  
examiner comment

This candidate was typical of those who clearly had the correct concept and identified that urban areas have impermeable surfaces. However, they did not develop the significance of the surface, ie a reduction in infiltration and therefore only scored two marks instead of three.



**ResultsPlus**  
examiner tip

When studying flooding, it is a good idea to develop the sequence associated with flooding in different situations. For example, in urban areas there is more impermeable surface, therefore there is less infiltration and as a result there is more surface runoff and water gets into the river quicker. You could also do the same for areas of forests or open grassland.

## Question 2(a)(iv)

In a similar way as in Coastal Landscapes, candidates had to talk about building design and planning, as well as give examples to get full marks. Although this question had a descriptive command, many candidates struggled to score full marks as they only referred to planning or building design, or they did not relate to examples. Some higher scoring candidates made reference to houses on stilts or waterproofing measures for building design and to floodplain zoning or evacuation measures for planning. Other candidates made general references to measures; some were generic references that did not clearly relate to either.

Some lower scoring candidates made reference to defences or forecasting. However, without explicit reference to planning, such answers were not accepted. The use of examples was varied, but some good examples included references to local scale fieldwork, whereby centres had made references to what they had seen on Controlled Assessment tasks. Common generic examples included references to Bangladesh or the River Nene. Candidates could improve if they did not just state place names but gave examples that are more specific.

(iv) Describe how building design and planning can reduce the effects of flooding.

Use examples in your answer.

(4)

To reduce the effects of flooding buildings can have sockets placed higher up the wall to stop water getting in the electrics. Also people don't have carpets so that each time a flood occurs it doesn't have to be replaced. Sometimes the bottom step of the stairs is made from concrete so that wood doesn't get damaged and replaced. Often storage within garages are high off the ground on shelves so they aren't reached by the



**ResultsPlus**  
examiner comment

This was a good answer, which scored three marks. However, the candidate only makes reference to building design and lacks reference to both planning measures and an example.



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examiner tip

When a question asks you to make reference to more than one factor, you must ensure that you cover both aspects. Equally, it is important to ensure that examples are more than just a named place. Try to ensure that they are in the context of the question.



## Question 2(b)(i)

Although descriptive questions have posed an issue in the past, this proved to be straight forward for many candidates. Many candidates were able to identify the overall pattern and gave the exception of site 4-5, where there was a reduction in velocity. Some candidates limited themselves by trying to explain the reasons for changes. Candidates should try to look for patterns within the overall change, eg parts of the graph where there are steady or steeper rises.

(i) Describe the changes in velocity shown in Figure 2b.

Use velocity data (m/s) in your answer.

(4)  
The change in velocity from upstream to downstream has increased by 0.8 (m/s). Upstream it is slower between 0 and 0.4 (m/s), whereas downstream it is from 0.3 to 0.8 (m/s). Downstream has a much faster velocity as the range is 0.4 (m/s) within a stream number of 4. The graph's change in velocity is positive it goes up. It also gradually gets steeper, but in the middle it fluctuates a little.



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examiner comment

This is a good answer, which starts by giving the overall pattern with use of data. Although the language used is implicit to the graph, the candidate clearly identifies the differences between the river in the upper and lower courses. The answer was awarded four marks.



**ResultsPlus**  
examiner tip

When asked to use data, ensure that its use is in the context of the question. For example, in this question do not just state that the velocity is 0.1m/s at site 1 and 0.2m/s at site 2. Instead the data should be used in support, eg the data rises by 0.1m/s from site 1 to 2.

## Question 2(b)(ii)

This question was poorly attempted by many candidates as they had a poor grasp of how discharge and gradient changed. This was despite the fact that many candidates would theoretically cover this concept if they opted for the Rivers Controlled Assessment. Higher scoring candidates were often able to recognise that discharge increased with distance downstream and gradient decreased. However, few were able to offer valid reasons for the changes. Many candidates tried to explain the increase in

discharge as a consequence of a widening channel due to erosion. However, this is only possible with increased water in the channel and many candidates overlooked the simple idea of increased water from tributaries. Many candidates' justification for a decreasing gradient was that it just happened, so this needs to be revised carefully.

For those centres that attempted the 'Rivers' Controlled Assessment task, it seemed that the justification for the changing gradient and discharge was confused with the reason for load changes, which had been the aim of the Controlled Assessment.

(ii) Explain how discharge and gradient change with distance downstream.

(4)

Gradient and discharge changes between the lower, middle and upper-course because in the upper-course there are V-shaped valleys because there is very high ~~steeper~~ downward erosion, making the gradient steeper. The middle course has a slightly lower gradient than the upper course because there is less down-ward erosion but the lower-course has an almost flat gradient because it is nearer the mouth. The discharge is low in the upper-course but then there is more in the middle-course but greater discharge in the ~~upper~~ <sup>lower</sup> as it's near the mouth.



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examiner comment

This candidate shows a good descriptive understanding of the changes to both discharge and gradient. The changing style of erosion, from vertical to 'less downward' is good enough for an explanation. However, there is no reference to explain the changes in discharge so the answer is kept at three marks.



**ResultsPlus**  
examiner tip

When learning changing river characteristics, candidates could have a table with one column for the descriptive changes and one for the explanatory changes. Higher ability candidates should look to explore how the explanations for each characteristic interlink.

## Question 2(c)

Candidates were generally well prepared for this question and were able to use a range of case study materials to help answer it. Many higher scoring candidates made reference to the River Nene or the Blandford Forum case studies, and these responses with their specific examples and range of measures often reached Level 3. Candidates must ensure that they focus their answer not only on what measures were put in place to manage the river, but also on an explanation of how these measures worked. It was pleasing to see some centres include examples from Controlled Assessment sites.

(c) Choose a study of a river.

Explain how this river is managed.

(6)

Chosen study River Nene

One way in which the river is managed is the use of embankments. In 2002, a 450m clay flood embankment was built in Weedon. This raised the banks by 6.8m meaning that if the river was to flood, the excess water can be stored inside the defence system and not freely flow over land.

Another way in which the river is being managed is the use of warning systems. In 2003, EA upgraded and tested their warning system in Far Cotton and St. James. The <sup>system</sup> ~~warning~~ gave the residents a 2 hour warning of a likelihood of a flood meaning that the local residents would be able to save their valuable belongings and evacuate to a safer area, reducing the ~~loss~~ damage done.

Another way in which the flood is managed is the use of wetlands. In 2007, a wetland was created in Upton, near Sixfields which had a capacity of 12million m<sup>3</sup>. This means that the ~~river~~ <sup>river</sup> can freely flood onto this spare land without ~~it~~ damaging any valuable settlements.



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**examiner comment**

The River Nene proved to be a popular example as it makes reference to a range of measures taken with very specific detail about them. This answer uses that detail, which without any explanation would get it to top Level 2. However, the candidate has given an explanation of how the surrounding areas are managed, so enabling the answer to reach top Level 3 with six marks.



**ResultsPlus**  
**examiner tip**

Candidates must ensure that they use an example that is not generic and that they have a range of specific facts or statistics that supports the answer. When focusing on how an area is managed, they should include information on how much it costs, the size of the defences or the different locations where the defences are employed.

### Question 3(a)(i)

Most candidates were able to identify the answer as an arête. However, there was some confusion with other upland glacial landforms such as corries, hanging valleys or even drumlins.

### Question 3(a)(ii)

Candidates were often able to identify relevant landforms but some then opted to try to explain them. Good answers used map evidence well to describe their position clearly. References to direction (from another point on the image) or numbers of a particular landform often led to full marks. Some candidates did not clearly refer to places in the figure, instead adopting a more generic approach. Some candidates did, however, simply identify every landform they could think of, even if it was not in the photograph.

(ii) Describe the other upland glacial landforms shown on Figure 3a.

Use evidence from Figure 3a in your answer.

(3)

~~To the~~ To the South East of Z you can see a hanging valley. To the North East of Z you can see a U-shaped valley. There is an arête near Z.



**ResultsPlus**  
examiner comment

Although this is a simplistic approach, the candidate clearly uses direction to place each landform in context and therefore achieves full marks.



**ResultsPlus**  
examiner tip

Candidates should practise identifying landforms from photographs and using direction to place them.

### Question 3(a)(iii)

Many candidates understood the meaning of moraine. However, far fewer were familiar with the concept of ground moraine. Of those who did have a good understanding, many were able to identify where ground moraine was formed, but few were able to identify the mechanism leading to deposition. Candidates would benefit from learning the different types of moraine as separate definitions on a diagram of a glacier, so they have a context of where the moraine would occur in relation to the glacier.

(iii) Outline how ground moraine is formed.

(3)

This is when a glacier collects deposition from ~~water~~ plucking ~~at the bottom~~. This happens at the bottom of a glacier as ground moraine forms underneath. Also, the ~~plucking~~ moraine provides material for abrasion.



**ResultsPlus**  
examiner comment

This candidate clearly identifies where the moraine is in relation to the glacier and relates it to material associated with plucking. However, this could be improved with clearer reference to the deposition mechanism. The answer was awarded two marks.



**ResultsPlus**  
examiner tip

Candidates should ensure that when they outline moraine, they refer to how the material is deposited, as this is often overlooked.

### Question 3(a)(iv)

Candidates were often able to reach two marks as they could identify relevant uses in glacial landscapes. Examples that referred to post-glacial landscapes were also acceptable. However, candidates often found it difficult to explain how the landscape was beneficial for that particular activity. For example, a comment that skiing and snowboarding were popular in glacial environments was good for description. However, candidates needed to develop the idea to explain that the landscapes produced steeper slopes, which created different ski runs, to enable access to the explanation mark. Candidates also struggled to provide suitable examples, other than generic comments like skiing in the Alps.

(iv) Explain how people use glaciated landscapes.

Use examples in your answer.

1. Tourism - boost economy
2. Skiing - Chamonix
3. Mining - Snowdonia
4. Sheepfarming

(4)

People can use glaciated landscapes in many different ways. Firstly, glaciated landscapes are known to be beautiful and fascinating so it provides a lot of tourism, which boosts the economy and helps out the local people living there. Skiing can also be put up although there are risks of avalanches, for example Chamonix, France or Garmisch-Partenkirchen. Glaciated landscapes also provide suitable opportunities for hiking, and many people do this in Snowdonia. <sup>can</sup> Sheep farming, ~~and~~ for example in Snowdonia and the Lake District.



**ResultsPlus**  
examiner comment

The candidate provides a range of activities relevant to glacial areas and gives clear development for the first two examples. The candidate also gives relevant examples of place, which shows overall that they clearly understand the human use of upland areas. The answer was awarded full marks.



**ResultsPlus**  
examiner tip

Candidates must ensure that they are able to explain a range of uses in glaciated areas, rather than simply describe them. Centres should ensure they provide candidates with a range of examples.

### Question 3(b)(i)

Many candidates found this question straight forward and were able to score full marks. They logically identified the correct changes and used temperature evidence in support. Lower scoring candidates either did not use data or gave a generic overview of the graph.

- (i) Describe the changes in temperature shown on Figure 3b.

Use temperature data ( $^{\circ}\text{C}$ ) in your answer.

(3)

Day 1 it drops from  $5^{\circ}\text{C}$  to  $-7^{\circ}\text{C}$  in 12 hours on day 2 there is a slow slow increase up to  $-5^{\circ}\text{C}$  then a quick increase to  $3^{\circ}\text{C}$  at 18:00, from 18:00 to 24:00 there is a temp drop from  $3^{\circ}\text{C}$  to  $-6^{\circ}\text{C}$



**ResultsPlus**  
examiner comment

This is a typical example of a high-scoring candidate who was able to use data well to support their descriptive changes. The answer was awarded three marks.



**ResultsPlus**  
examiner tip

When asked to describe changes, ensure that you start at the beginning of the graph, logically go through it and use data throughout in support.

### Question 3(b)(ii)

Many candidates were able to recognise freeze-thaw as the type of weathering associated with the graph.



### Question 3(b)(iii)

This question produced a range of responses. However, the majority of candidates struggled to identify and explain both processes correctly. Lower scoring candidates were unable to identify either process correctly, but high scoring candidates could give a clear context for the action of both processes, as well as define the processes.

(iii) Explain the difference between lodgement and ablation.

(4)

*means the glacier*  
Lodgement, carries a heavy amount of debris and no longer has the energy to transport it and begins to deposit material along the way. But, Ablation means that the ice melts and the material is deposited there. The difference is that Ablation doesn't transport the material and Lodgement does. Also, lodgement causes the glacier full of debris to be very heavy and the ice thickens - this doesn't happen in Ablation. In addition, the sun can't melt anything on lodgement but can on Ablation.



**ResultsPlus**  
examiner comment

This candidate has a clear understanding of both ablation and lodgement. However, they are not clearly able to convey the difference and are therefore held at three marks.



**ResultsPlus**  
examiner tip

Candidates should not only learn the definitions but learn the different contexts in which each process occurs. This will enable them to explain the differences.

### Question 3(c)

There were mixed responses from those who confused the question with effects and those who clearly understood and focused their answers on causes. Of those candidates who did focus on causes, there was a clear lack of balance in favour of the physical causes to avalanches. Centres should ensure there is balance between the different types of causes. Most common examples used were of Galtur and Montroc.

It would be nice to see centres use some of the recent avalanches that have appeared in the news.

(c) Choose a study of an avalanche.

Explain the physical and human causes of this avalanche.

(6)

Chosen study Galtür, Austria

On the 23rd of February 1999, an avalanche occurred in Galtür. There are many causes of this avalanche. One cause is that 4m of snow fell in that February causing the snow on the mountain to become too heavy and fall.

Another possible cause is strong winds. Galtür had strong winds up to 100 km/h. This caused 20 tonnes of snow to be moved from one side of the avalanche to the other. This also made the snow on the mountain to become too heavy. The mountain could not hold this amount of snow, therefore it caused an avalanche.

The melt crust layer on the snow should fall, however the melt crust layer in Galtür didn't. This caused the weight to be a lot heavier, and there was too much weight for the mountain to hold so an avalanche occurred.

Another cause is that there was not a lot of prevention. It is possible to prevent an avalanche by putting explosives in the snow to get rid of some of the weight. People in Galtür did not do this, so there was still too much snow on the avalanche. People also went skiing where they were told they shouldn't.



**ResultsPlus**  
**examiner comment**

This candidate has a clear understanding of the physical causes of the Galtur avalanche; however the human causes were not well developed. Some of the reasons given were not specific human causes, but non-actions. It is important that examples used have balance in both human and physical causes. The answer was awarded five marks.



**ResultsPlus**  
**examiner tip**

Candidates need to be able to differentiate between human and physical causes and effects. Equally, centres need to ensure candidates have balance in their responses.

### Question 4(a)(i)

The vast majority of candidates recognised that there was only one earthquake of magnitude 7–8.

### Question 4(a)(ii)

Many candidates seemed well prepared by centres and were able to describe the distribution of earthquakes on the map. Although the main pattern was intended to be the east-west distribution, some candidates recognised the fact that most earthquake activity was onland while a few were at sea. It was also pleasing to see candidates use terminology such as 'clustered' or 'linear' when describing the distributions. Many candidates were also able to use map evidence, most commonly in the form of place names. As a consequence, more able candidates often achieved full marks while lower scoring candidates often achieved only two.

(ii) Describe the distribution of earthquakes shown in Figure 4a.

Use map evidence in your answer.

(3)

In general, most earthquakes occur on land, in the area of Christchurch or west of it. For example, there have been 9 earthquakes within the area of Christchurch itself. An exception is that there have been 3 off-shore earthquakes, east of Christchurch.



**ResultsPlus**  
examiner comment

The candidate organises this answer in a logical fashion with reference to the overall pattern, clear use of named map evidence and the exception to the trend. Therefore this candidate satisfies the requirements for full marks.



**ResultsPlus**  
examiner tip

When describing distribution, a solid approach is to identify the overall pattern, use map evidence and identify exceptions to the pattern. Practising this skill will often help in preparation for exams.

### Question 4(a)(iii)

Many candidates clearly had an understanding of earthquake formation. However, the ability to articulate the ideas was a determinant of how well candidates performed. Almost all candidates who scored marks realised the link between plate movement and earthquake formation. However, fewer were able to identify the idea of pressure build up and subsequent pressure release as the cause. Instead some candidates gave reasons for plate movement, such as convection, while others gave the generic idea of plates rubbing together. Many candidates do not always make the link between the breaking of the brittle crust and the earthquake occurrence.

(iii) Outline how earthquakes are caused.

(3)

earthquakes can be caused when two plates move along side each other because of convection currents. When the plates get stuck, it builds up a force, which is then released ~~after~~ after many of years, but because of the pressure build up, it causes the plate to jolt forward, causing an earthquake.



**ResultsPlus**  
examiner comment

This is a good answer that clearly understands the sequence involved in earthquake formation, from the cause of the plate movement through to the pressure build and release. It was awarded full marks. Often higher scoring candidates are able to show the temporal changes involved in formations.



**ResultsPlus**  
examiner tip

Try to learn the formation of landforms as a sequence so that there is a logical sequence in the formation of either earthquakes or volcanic eruptions.

## Question 4(b)

Candidates were well prepared for this question and were often able to write in detail. However, not all showed evidence of explanation. Equally, many candidates glossed over the question demand for why people 'in HICs' continue to live in areas affected by volcanoes because they had some examples that were based in LICs. As such, this question discriminated well. Candidates need to ensure that they provide examples relevant to volcanic eruptions when asked and that they have a range of examples to use. When referring to examples, better answers often made reference to the specific volcanic region or volcanic cone rather than just the country in which it is found.

(b) Explain why people in High Income Countries (HICs) continue to live in areas affected by volcanoes.

Use examples in your answer.

(4)

1. Volcanoes g make soil fertile because of ash produced by the volcano e.g Best coffee is made in Columbia in volcanic soils
2. Geothermal energy is cheap in <sup>some</sup> volcanic areas e.g In Iceland 28% of its energy comes from this source
3. Volcanoes make a beautiful environment which makes it a tourist attraction. The tourist industry built around such a beautiful places e.g Mount Etna people drive their cars there
4. Volcano produces a environment for health purposes e.g in Mount Fuji Japan elderly people go to have mud baths and they are cured of their diseases.



**ResultsPlus**  
examiner comment

This candidate produces a range of responses that are valid with regard to a volcanic eruption. The candidate gives a series of equally valid examples and provides brief but sound explanation. Most of the examples are valid for the HIC requirement of the question. The answer was awarded four marks.



**ResultsPlus**  
examiner tip

Candidates must ensure that answers are explicit to volcanic eruptions (eg fertile soils) or geothermal energy, and not be confused with earthquakes. Equally, avoidance of the generic answer (eg family and friends or lack of money) often enables sound explanation.

### Question 4(c)

Many candidates were able to identify the overall trend of an increasing number of earthquakes, with use of data. Fewer were able to identify the exceptions to the trend, such as 1992–94 where there was a reduction or where the number of earthquakes did not change. Higher ability candidates were also able to identify different rates of rising across the time frame, such as the steeper rise between 1994 and 1998 or the steadier rise between 2002 and 2006. Some candidates simply described the changes and did not understand the command to describe the trend. It is important that candidates are aware of the differences between these commands.

(c) Study Figure 4b.

*good for farmers and the volcano may be dormant so people feel it's worth the risk.*

It shows the number of earthquakes in the world between 1990 and 2006.

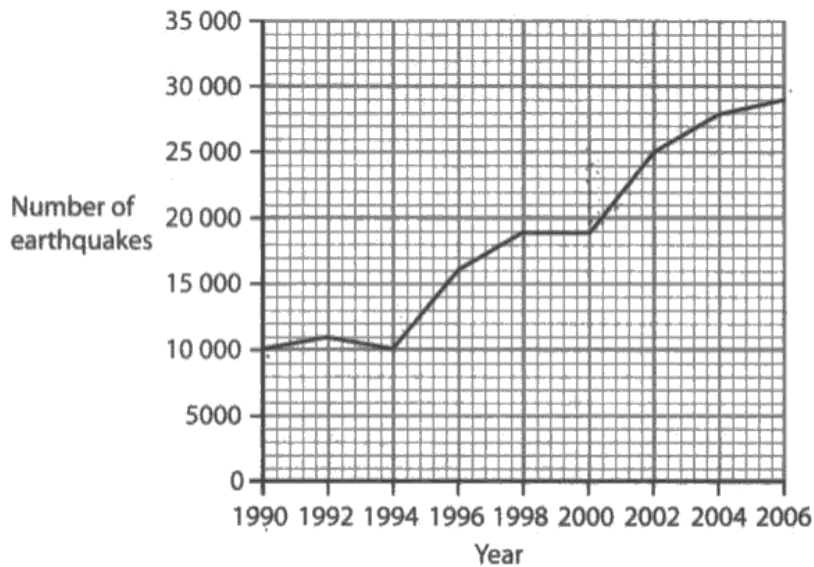


Figure 4b

Describe the trend shown in Figure 4b.

Use earthquake data in your answer.

(4)

The trend is generally increasing. It has increased by 19,000 in the last 16 years. The greatest increase was between 2000-2002, increasing by ~~16,000~~ 6,000 in two years. The only anomalies to this increasing trend were between 92-94 where it fell slightly and 98-2000 where it remained constant. The lowest point was at 10,000 and the highest is 29,000. A general positive correlation.



**ResultsPlus**  
examiner comment

Here the candidate clearly identifies the trend in the opening sentence, supported by specific data (number of earthquakes). The candidate also identifies periods of larger/smaller rises and identifies the anomaly. They clearly satisfy the command 'describe the trend', as they do not give a blow-by-blow account of the changes each year. They were awarded full marks on this question.



**ResultsPlus**  
examiner tip

Make sure that you understand the difference between describe the changes and describe the trend. Candidates should be encouraged to practise looking at different graphs to identify the patterns.



## Question 4(d)

Many candidates were able to describe the different characteristic features of convergent plate boundaries, but few were able to fully develop the two they had described. Some lower scoring candidates confused the landforms or the movements involved, often with divergent plate boundaries. Some candidates simply told a story of convergence without picking two features, so these answers often had little focus on explanation of the features. Higher scoring candidates were able to identify two features and specifically explain these. Some excellent responses included explanations of explosive volcanism, high magnitude earthquakes in the subduction zone or the formation of fold mountains.

Some candidates were unsure of the 'characteristic features' at plate boundaries; these include plate movements, landforms or types of tectonic activity.

(d) Explain **two** characteristic features of convergent plate boundaries.

(4)

Convergent plate boundaries are when plates push into each other. As a result fold mountains occur at this plate boundary as a result of intense buckling, uplifting and folding. Also as the oceanic plate is being subducted beneath the continental plate; earthquakes are common at this plate boundary.



**ResultsPlus**  
examiner comment

This response has clear description of the different features associated with a convergent plate boundary but fails to develop any one of them into detailed explanation. The candidate could have explained the cause of the plate convergence or given reasons why the plates buckle upwards to form fold mountains. The answer was awarded two marks.



**ResultsPlus**  
examiner tip

Candidates could learn the features at convergent plate boundaries using annotated cross sections to help them explain the features. Many tectonic features can be explained in the context of density, eg fold mountains form due to similar density crusts resulting in a lack of subduction or melt from the subducted plate rises to the surface due to its lower density than the surrounding rocks.

## Question 4(e)

Candidates seemed well prepared for this question and as a result many were able to access Level 2 marks and give some explanation or locational detail. A range of common examples was used including Mt St Helens, Montserrat, Eyjafjallajokul, Haiti, Izmit, Bam and the recent earthquake in Japan (2011). It was pleasing to see that centres were not wholly reliant on textbook examples. When answering a question on effects, candidates should ensure that they do not waste space by outlining the causes, although a one-sentence introduction is always helpful. Many candidates reached the top of Level 2 with specific locational detail but need to focus on improving the quality of explanation of the effects.

(e) Choose a study of an earthquake or a volcanic eruption.

Explain the effects of this event.

(6)

Chosen study Montserrat (volcanic eruption)

Montserrat volcano, on Chances Peak erupted at 1pm on the 25<sup>th</sup> June 1997. It measured a 4.5 on the VEI (volcanic eruption index) and the effects were large.

19 people died from pyroclastic flow which is a primary effect of the volcanic eruption. ~~The cap~~ Another effect of this event is that the capital (Plymouth) was destroyed so was the airport meaning no-one could leave the island. Due to the intense heat, things like car tyres burned meaning that you couldn't drive your cars, another primary effect. A secondary effect and an economic effect would be that ~~it~~ it ~~costed~~ cost them a lot of money to replace buildings, homes and supplies, damaging their ~~economic~~ wealth. Deforestation was another effect of this volcanic eruption, which meant that all their crops and forests and trees etc were destroyed.



**ResultsPlus**  
examiner comment

This response has evidence of locational details relevant to the effects. Although there is specific detail of the case in the first sentence, it was not credited as it is not directly relevant to the effects. This could be improved with inclusion of more specific detail on the effects, which would help focus the explanations. It was awarded five marks.



**ResultsPlus**  
**examiner tip**

When learning case studies, try to focus on three to four effects. Revise a specific piece of information for each point and an explanation of each point, rather than just reciting a story of what happened.

### **Question 5(a)(i)**

There was a clear difference between those candidates who had graphically produced a stacked/compound bar and those who had not. Many candidates were able to access full marks. However, common errors included not completing the correct shading for each section and not drawing accurate lines to mark the meeting point of the two bars. Another mistake was to have a total of 350kg waste per person as a total rather than adding 150 to 350kg waste per person to give a total of 500kg waste per person.

Candidates would benefit from practising different graphical techniques to ensure they are familiar with them.

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

Many candidates understood that recycling involved the reprocessing of waste material into something new and were able to give appropriate examples. However, candidates were less able to articulate the idea of reusing waste, as they often simply stated that it was waste that was 'reused'. There was no credit for using the words of the question as the focus of the answer. Candidates who were able to show that it was waste that was used for the same, or for a different purpose, often scored the mark. Overall candidates received one mark for each definition and one for an example.

### Question 5(a)(iii)

This question was well answered by the majority of candidates, who were able to identify differences between waste production in LICs and HICs. Common approaches focused on amounts of waste, or types of waste, with full marks gained through some explanation (outline) of one of the reasons. Candidates often focused on the consumer society in HICs or lack of affluence in LICs. Some candidates limited themselves by simply giving the opposite of a point, eg LICs produce less waste as they can afford fewer items, whereas HICs can afford more. Good answers made reference to packaging or reasons for differing amounts of types of waste.

(iii) Outline the differences in waste production between High Income Countries (HICs) and Low Income Countries (LICs).

(4)

HICs produce a lot more waste than LICs. For instance the packaging on products is much more on products from HICs than LICs. HICs waste is usually & mostly domestic waste such as household waste whereas a lot of LICs would have other types of waste such as vegetation from spoiled crops.



**ResultsPlus**  
examiner comment

Although this candidate clearly identifies three different points, none of them are developed. Therefore this answer is limited to three marks.



**ResultsPlus**  
examiner tip

Candidates who differentiated types of waste that were more common (eg more electrical waste (per person) in HICs) were often more effective in their answers than those who gave the generic approach of stating that HICs had more waste.

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

Many candidates recognised Australia as having over 11Kwh of energy.

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

Many candidates were able to identify India as having 2–5Kwh of energy.

## Question 5(b)(ii)

The task of describing the distribution across a map has always provided a challenge to some candidates and this was not an exception. There was clear evidence of centres practising this activity with candidates as the overall attempts were much improved. However, there is still a need to continue practising, as a large proportion of candidates simply described energy consumption values around the globe. Of those who recognised a trend, not all clearly identified an exception to it, which needs to be explicit to gain credit. There was more than one pattern on this map so candidates could gain from the general idea that northern hemisphere regions, with the exception of India, have higher consumption or that most countries south of the equator, except Australia, had low consumption. Some candidates also identified areas of highest or lowest energy consumption, which enabled them to gain credit. Continued practise by centres will further improve candidate performance in this style of question.

(ii) Describe the distribution of energy consumption shown in Figure 5b.

Use energy consumption data (kWh per person) in your answer.

(4)

The general pattern is that more energy is used in the Northern hemisphere. For ~~for~~ example, the USA is the biggest energy consumer, with most of Europe and the Middle East using 8.1 to 11 kWh of energy. ~~The~~ <sup>the</sup> exceptions to that are Australia and India. Australia is in the Southern hemisphere and uses over 11 kWh per person, and India is in the Northern hemisphere and uses between 2-5 kWh per person.



**ResultsPlus**  
examiner comment

This is a good answer as the candidate clearly identifies the overall trend, gives exceptions to the trend and uses evidence in support. The candidate also identifies the USA as the biggest energy consumer, which enables them to access full marks.



**ResultsPlus**  
examiner tip

When describing distribution on maps, candidates should look to identify the overall pattern, highest/lowest, exceptions to the overall pattern and data to support the description. Candidates should avoid the 'Cooks' tour' approach, which simply goes around the map giving the values, as this will often gain only two marks from a possible four.

## Question 5(c)

Candidates were able to recognise a variety of ways in which energy could be wasted. However, not all of them were specific to industry and specifically those focused on domestic use were not accepted. Many candidates were limited to two marks, as they outlined a point on 'leaving machines on', then another on 'leaving lights on'; the concept of 'leaving things on' was only accepted as one idea. A range of good points was raised, including wasted energy from transporting goods in unstreamlined vehicles, use of faulty machinery or use of normal instead of energy-saving light bulbs. This topic is not particularly well covered in textbooks but has cross-over with Unit 1 Sustainability, so has the potential for improvement. Some candidates had also studied local industry and therefore had interesting examples as part of their answer; this practice is to be encouraged.

(c) Explain how industry wastes energy.

(4)

Industry wastes energy through, heat loss, leaving lights and machines running when ~~unnecessary~~ unnecessary, vibrations from machines (not being efficient enough), and not having the buildings properly insulated with double glazing, cavity wall insulation and loft insulation.



**ResultsPlus**  
examiner comment

This candidate has a range of points, but is limited to two marks as none of the points is fully explained.



**ResultsPlus**  
examiner tip

Ensure that energy wastage from industry and domestic energy waste are clearly differentiated.

## Question 5(d)

The fact that this part of the specification has been examined in previous sessions meant that many candidates were better prepared than previously. However, there is still a sense of relying on domestic energy solutions rather than focusing on regional or national-scale projects. As such, candidates sometimes found it difficult to give specific details, in the form of examples or statistics, therefore limiting many to a top Level 2 answer. Good answers focused on CHP schemes around the country or on schemes set up by local companies or local authorities to conserve energy

waste. Answers that focused on managing solid waste or made reference to renewables were not deemed acceptable as neither of these helped manage energy waste.

With the introduction of spelling, punctuation and grammar on this item, it would be advisable for centres to practise this type of response, under timed conditions, focusing on the criteria set out for SPaG.

\*(d) Explain the solutions to energy wastage in the UK.

Use examples in your answer.

(6)

Solutions to energy wastage in the UK on a national scale include various government schemes that have been used for the purpose of increasing energy efficiency in the home. This includes an 80% reduction on the Green Charge levy for companies that reach their energy efficiency targets, thus providing an incentive for companies to maintain energy efficiency. Moreover, the Carbon Trust has been set up by the government to educate workers within various companies on energy efficiency, teaching these workers how to increase energy efficiency in the workplace. 'Smart' energy meters are also being used in companies as a part of this process, in order to allow companies to monitor their energy use, providing them with the opportunity to increase energy efficiency. In addition, Energy Performance Certificates have been supplied by the government to various companies, with £1.8 million of funding, in order to help companies in improving energy efficiency.

Also, the Warm Front scheme has been introduced by the government to improve energy efficiency in the home; this is because the Warm Front scheme supports homeowners with grants of up to £2,700 for the provision of insulation in homes with a sufficient amount of wall, loft and floor insulation and further grants of up to £4,500 for the provision of radiators and heating systems without it. Moreover, the government has formed partnerships with various companies, including British Gas, which has been formed for the purpose of providing customers with free cavity wall insulation to increase energy efficiency in the home and prevent energy wastage.

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





**ResultsPlus**  
examiner comment

This is an excellent response, which has a range of solutions to energy waste at different scales and scores full marks. There is evidence of explanation and use of specific detail to support the answer. Candidates should aim to include specific detail where possible to make their answers less generic.



**ResultsPlus**  
examiner tip

This candidate scores two (out of three) marks for SPaG as there are a range of specific terms and the answer is well structured. However, there are a few errors in the use of capitals and spelling.

Centres should practise looking at approaches to conserve energy waste at different scales, as opposed to focusing on one scale, especially as it is difficult to make domestic responses specific to a particular place.

### Question 6(a)(i)

Many candidates were able to score full marks on this item. However, some missed the question and others plotted the wrong answer in the wrong space. Those who attempted the question and plotted in the correct space often scored the maximum.

### Question 6 (a)(ii)

Many candidates struggled to describe the pattern of groundwater use comfortably. Some simply listed the different amounts from each water company, while others were hindered by not completing Q6(a)(i) correctly. Some of the better answers identified an overall pattern (eg that southern areas used greater amounts of groundwater) and then were able to pick the exception as the South West. Many were also able to identify Southern as having the highest groundwater use and support this with data for four marks. However, this is still a skill that clearly needs to be practised by candidates.

### Question 6(b)

Some candidates struggled with this question as they tended to describe the distribution of water and population rather than explain the disparity between high rainfall in the north and lower populations, and greater populations in the south and less rainfall. This pattern of disparity is not well understood by candidates.

(b) Suggest reasons for the imbalance of rainfall and population between the north and the south of the UK.

(4)

There is an imbalance of rainfall to where most of the population lives as most of the rainfall in the UK falls in the mountainous regions in Wales and Scotland where little people live as its hard to build settlements on high grounds such as mountains, the least rainfall in the UK is in the south east where the population is high as big cities such as London is in the South East where the demand for water is high but the rainfall is little.



**ResultsPlus**  
examiner comment

This candidate has a clear understanding of the disparity and offers some explanation for the north and the south. Although it could be more detailed, this answer still gains a mark of four.



Candidates must ensure that they explain the reasons for the imbalance of rainfall and population rather than just describe the distribution of rainfall and population.

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

Many candidates were able to differentiate between water use in HICs and LICs. Focus on access to water, the economy or the state of development of HICs and LICs were commonly used as reasons for the differences. Many candidates also identified the different uses, eg more agricultural use in LICs, while HICs had a greater emphasis on industry or domestic. The identification of the 'showering society' meant that HICs had an overall greater use.

### **Question 6(d)(i)**

Many candidates scored well on this question, as they correctly interpreted the graph. However, errors crept in where candidates did not clearly identify the scale on the y-axis.

### **Question 6(d)(ii)**

Although this answer was well attempted, many candidates limited their performance by simply repeating the idea of consuming contaminated water rather than focusing on issues such as lack of access, poor education or inability to medicate if unwell. Reference to vector-based illness (eg mosquitoes) was not accepted, as they do not directly contribute to the contamination of water but rather infect people in the vicinity of water.

(ii) Suggest reasons why people in LICs suffer from water-borne diseases.

(3)

LICs often don't have access to clean water and have limited sanitation systems. This means very often the water gets contaminated with either sewage or parasites from the ground but they can't afford to clean it and they have no other source so they have to drink that. Even water pumps like hand dug wells can become breeding sites for parasites and bacteria, yet poor communities don't have the money to make it safe.



**ResultsPlus**  
examiner comment

This candidate identifies a couple of factors relating to reasons why people in LICs suffer from water-borne diseases and there is also evidence of development. Access to clean water, sanitation and lack of alternative clean sources were viable reasons, and here the candidate makes the explicit link to the likelihood of contracting disease. The answer was awarded three marks.



**ResultsPlus**  
examiner tip

Websites such as Wateraid are helpful sources of information to find out about the issues surrounding water-borne disease. Candidates should make use of such resources to develop a range of reasons.

### **Question 6(e)**

This question presented a challenge to some candidates as it drew from a range of case studies rather than focusing on one specific example. Candidates could approach water management in a range of ways including large scale, such as dams, to agricultural, industrial (eg Walkers and Cadbury's) or local. Some candidates also focused on how tourist resorts managed water supply or on measures taken by authorities to control water use.

Answers that focused on the Three Gorges Dam or water transfer case studies tended to lose focus and were often restricted to Level 1 marks. Good answers often drew from a range of case studies and had clear explanation.

Candidates who gave inappropriate answers scoring zero unfortunately limited themselves to the same mark for SPaG.

With the new introduction of spelling, punctuation and grammar on this item, it would be advisable for candidates to practise these responses, under timed conditions, focusing on the criteria set out for SPaG.

\* (e) Explain how water usage can be managed in HICs.

// = <sup>new</sup> paragraph

Use examples in your answer.

(6)

Water in HICs can be managed by several ~~reasons~~ <sup>factors</sup> reasons. HICs try to manage their water so they can save water as much as they can. //

In ~~factories~~ Industries they try to manage their water by reusing it. Like Walkers Crisps they have reduced their water usage by 50% by reusing their water in more than one process. They installed 30 water meters around their factories to keep track of how much water they were using and also employees who saved the most water would receive 'Leak Buster' awards. //

As well as factories, water in HICs can be saved in domestic ~~other~~ ways. People are encouraged to fix ~~leaking pipes~~ <sup>leaking pipes</sup> pipes to reduce water wastage, turn off ~~taps~~ <sup>taps</sup> when not using them, use water butts when watering gardens or washing cars, taking showers instead of baths also reduces water usage and also installing water meters to check how much water being used.



**ResultsPlus**  
**examiner comment**

This candidate has a range of methods used to manage water use, however the lack of detailed examples restricts this to the bottom of Level 3. Greater detail on the Walkers Crisps factory or reference to other schemes would have improved this mark. This answer was awarded five marks and two marks for SPaG.



**ResultsPlus**  
**examiner tip**

Ensure that you do not just learn a case study for managing water supply and water transfer. You also need a range of examples for water use. Ensure that you have specific detail or locational detail to support your answer.

## Summary

It was pleasing to see an overall improvement in candidate performance in comparison to previous series. However, the following recommendations could help general performance across the Unit 2 paper.

- Understand the difference between describe changes and describe the pattern/trend from resources.
- Ensure that when asked for explanation you do not simply describe.
- Practise different graphical techniques (eg choropleth maps, stacked bars, line graphs and pie charts) so that you are familiar with them.
- Practise the six-mark questions under timed conditions to practise spelling, punctuation and grammar.
- When asked for map evidence, ensure that you quote place names, direction, scale or symbols from the map.
- When asked for examples, ensure that you refer to places and try to give more than simply the country/general area.

It is always pleasing to see candidates make improvements from previous series, which shows that centres/candidates are acting on the advice in previous examiners' reports. Congratulations to all candidates for their efforts in this examination.

## **Grade boundaries**

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