



Examiners' Report June 2014

GCSE Geography A 5GA2H 01

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#### Introduction

This, the Natural Environment paper took on a new format for the summer series. Candidates are now required to answer all topics in Section A, on the physical geography of Coasts, Rivers and Tectonic Landscapes, however at a reduced mark tariff (15). In Section B there is again a reduced mark tariff (20) however candidates still have the option of either Wasteful World or Watery World topics. The extended writing questions in Section B are also slightly different in that they now carry a SPaG mark of 4. SPaG at Higher Tier is judged on the same criteria as the Foundation Tier paper. Overall, this means that both Unit 2 examinations now have a total mark allocation of 69.

In addition to the new exam layout, the content of the specification had been strengthened and some of this was tested on this paper which meant there was a greater demand on the paper which overall produced a larger spread of marks. There were clearly some centres who had not fully appreciated some of the changes in content. We would therefore suggest centres carefully focus on these changes to inform future teaching or attend training provided by Pearson.

The paper was well received by all candidates and centres and although the paper had a greater demand, the mean mark was only slightly lower than in previous series. Historically Section A responses have not performed as well with the greater amount of technical content in the physical geography. However, this was not the case as Question 3 produced the highest mean, and Question 4 the lowest. Within Section A, as mentioned, performance was notably best on the Tectonic Landscapes part of the paper, followed by Coasts and then River Landscapes. In Section B, many more candidates attempted Question 4 than 5, though performance on the Wasteful World topic was notably lower than that on the Watery World topic.

The following report outlines candidate performance on the paper, highlighting areas of strength and weakness across the different questions, offering examples of performance and suggestions for improvements in future series.

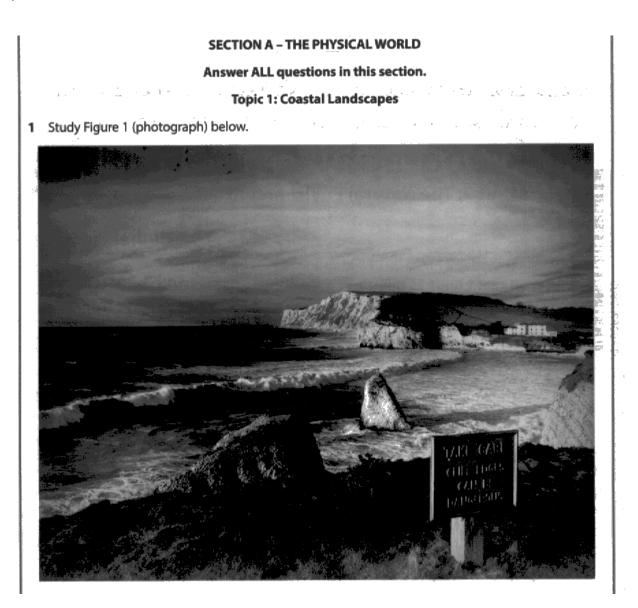
#### Question 1 (a)

Many candidates found this question accessible and were able to describe the characteristics of a destructive wave. In addition to describing the characteristics of the destructive wave, candidates were asked to use evidence from Figure 1. This was often not explicitly done by candidates, and was it not for the fact that candidates could reach full marks with an implied reference to the figure, i.e. mentioning something in the picture without direct reference, then they would have been held at 1 mark. Centres and candidates are encouraged to practice identifying and describing aspects of physical geography using both maps and images.

The most common answer to this question was to focus on the swash and backwash. It was clear that there was confusion over the correct order of swash and backwash for a destructive wave, as mistakes were common. The use of animations and video material in the classroom would help candidates visualise the characteristics and therefore improve their understanding.

Some candidates were able to give generic descriptors, such as tall or frequent. In this instance we required the candidates to be more specific, for example state waves over 1m in height. This would also be good practice for the future.

Overall many candidates were able to score at least 1 mark, with many scoring 2 marks on this question.



#### Figure 1 - Destructive waves at Freshwater Bay, Isle of Wight.

(a) Describe the characteristics of destructive waves.

Use evidence from Figure 1 (photograph) in your answer.

(2)

Destructive waves have a strong backwash and a weaker swash therefore erosion cantake place. It is tall incompanison to length and waves break prequently, up to more than 10 every one minute.



This is an example of a candidate who demonstrated a clear understanding of destructive wave processes. The candidate has enough for 2 marks in the first sentence with an understanding of both swash and backwash and the link to erosion. However this candidate shows a high level of understanding as they give the height in proportion to the length (tall on its own would not be credit worthy), and they also quantify the frequency. Although the candidate does not specifically relate to the figure (which would further improve the quality of this answer) the comments they have made could have been derived from the image therefore they scored 2 marks.



Be as specific as possible when describing the wave characteristics and, where possible, quantify your responses. If the question asks for evidence from the figure, ensure that you make clear links to the image with comments like 'as shown in Figure 1'.

#### Question 1 (b)

This question was well understood by many candidates as the majority managed to score 2 marks or more. Most candidates showed a good understanding of the process of longshore drift, although in some cases they did not relate the action to the movement of sediment, instead just the movement of water. It was pleasing to see that many responses showed a good grasp of how material moves along the beach. Some answers developed the process well to address the 'outline' command. Common developments included linking the movement of material to the action of waves in the direction of the prevailing wind, or briefly explaining the action of swash and backwash.

Although many of the candidates scored well on the process of longshore drift, a significant minority did not link this to the formation of a spit or indeed make any mention of material moving offshore and building up. Some candidates wasted time and the number of lines they had by writing everything they knew about spits, without having a clear link to longshore drift. This meant that they ran out of space and had to continue their answers at the bottom of the page. Candidates need to try and use the space they are given for the question. If they need to use extra space they should make a clear indication on the paper that their answer continues elsewhere.

(b) Outline how the process of longshore drift forms a spit.

(3)

Longshow doth in when the wave more into the beach at an angle which in the wind direction, then there their backward in at i go to the beach. When there is a curry in the beach, the wind will not doorge so bangeriax drift will combine to deposit knotional into the sea in a line with the beach, forming a spot. It may have a worked end it accordingly the wind direction changes.



This candidate scored 3 marks by showing a reasonably clear understanding of longshore drift and developing the process, linking it to the direction of prevailing winds and by briefly outlining the backwash process. They then clearly showed how a change in the direction of the coast leads to a build-up of material off the coastline. The final sentence which refers to the change in direction of the spit was not credited as it did not link the formation to longshore drift.



When asked to outline, ensure that you develop one of your points with a brief explanation. In relation to longshore drift, this can easily be done by developing the processes of swash and backwash.

#### Question 1 (c)

There were mixed responses to this question, as some candidates did not clearly follow the demands of the question. Candidates were required to compare the advantages of types of hard and soft engineering. Unfortunately this meant that those that did not include types were held at zero marks. Some candidates were limited by their use of language and geographical terminology.

For those who had the correct focus there were a range of responses. Many candidates referred to types of engineering (hard or soft) but gave generic responses such as 'cheap', or 'easy'. These were not credited as more specific responses such as 'groynes are cheaper in the long term than beach replenishment' were needed for credit. Many candidates were able to score 2-3 marks on this question and common responses related to the durability and effectiveness of types of hard engineering.

Some candidates were limited by focusing on disadvantages, even though advantages were emboldened in the question, and some simply described the method rather than suggesting why a given characteristic was an advantage. It would be advisable for centres/candidates to practice the use of comparative language, as this was not clear in some answers and consequently responses were held at 3 marks.

This response was awarded maximum marks.

(c) Compare the advantages of types of soft and hard engineering used on the coast.

(4)

Hard engineering such as riprap and sea walls which absorb and reflect wave energy are more effective.

Hhan soft engineering techniques such as cliff regarding which wort effective an its own and need further defences at the base of the cliff. Haverer soft engineering techniques which is useful for areas that attract taxnists as they do not create an eyesore. In the otherhand, though wore expensive hard engineering techniques such as retretiments are largerlassing and do not need constant managing like beath replinishment.

# Results Plus

#### **Examiner Comments**

This candidate has a clear focus on the question. They make direct reference to types of hard and soft engineering and the comparative points are well-developed. The candidate is able to find advantages of both hard and soft engineering methods which add a sense of balance to the answer. A series of points including effectiveness, aesthetics, cost and durability are covered in this response.



Ensure that the use of comparative words is clear, as used in this example. Try to compare types of engineering within the same sentence rather than separately.

#### Question 1 (d)

Of all of the 6 mark questions in Section A this question surprisingly returned the lowest mark. Many candidates understood the concept of coastal recession and related their answers to the human environment. Though it was common to see candidates describe the effect rather than develop an explanation. Any explanation offered was often partial and subsequently candidates were held at Level 2 marks. The most common case study material used was Dawlish, Happisburgh and Walton-on-the-Naze. Although these are the focus examples in the core texts it would be nice to see centres look towards other examples that they have researched. Often much of the case study material was described as a story and on too few occasions did the point made explain the effect on the human environment. On a few occasions candidates focused on the physical environment rather than the human, but this was often not significant.

Centres are encouraged to work on candidates' ability to develop their answers. So that instead of partial explanations like 'rapid erosion has led to homelessness' a candidate can develop their answer into a full explanation; 'the soft clays at place x has led to rapid erosion which has resulted in a series of properties being abandoned due to risk of cliff collapse. As a result people have been made homeless as they have been forced to move away'.

(d) Using examples, explain how coastal recession affects the human environment. (6) Chastal recession ellects reaple trausilling an a trains from partly along the Plymouth to Personne as it travels therework Dawish coastime which is the condition and the condition of delayed. On one occasion 160 passengers were stuck on a train jor 4 hours while the brauls electrics were down. Therefore coastal recession con make the human environment more dangered and slow down everyday journeys. The North Nodalk consture has adopted a half the line policy where they will no (anger depend the coastline which will some the council) £41 million. This could be viewed as a positive eject as they can invest this money in uniproving intrastructure and the quality of the human environment. However this has how a negative extent in the village (Total for Question 1 = 15 marks) where on Beach Road the houses did cost bout on the parton and the thought of the mon that 000 081 benia protected. Therefore people many lose their homes as they journ the secresimina to walton on the Naze where they may lose their grade 2 listed tower as the Northern End of their coastline isn't being protected.



This is an example of a candidate who easily reaches maximum marks. They are able to refer to a series of examples and each of them is supported with specific locational detail and a well-developed point. The candidate links subsequent sentences together to give a true depth of explanation.



Some parts of the specification require 'examples' rather than a case study. Centres are encouraged to teach a series of smaller examples which are relevant to the question rather than just one extended case study, where only some of the material is relevant. Candidates should try to include specific locational detail to support their points as this is often a requirement for top level marks.

(d) Using examples, explain how coastal recession affects the human environment. (6)Coastal recession affects houses, buildings or environment as homeless. Also to pay for certain could et Swanage Dorset the coast hower (Total for Question 1 = 15 marks)



This is an example of an answer with a series of generic effects on the human environment but they are only vaguely linked to the human environment. This candidate scored 4 marks, as although there is evidence of explanation it is only brief and therefore marks were held at the top of Level 2. The locational detail is also superficial and therefore does not meet the requirements of a Level 3 answer.



Ensure that you fully develop a point to get credit for full explanation. A point followed by a statement of reasoning is often not enough to get beyond Level 2 marks.

#### Question 2 (a) (i)

The vast majority of candidates were able to describe the changes to gradient and velocity without issue. Nearly 90% of candidates achieved full marks on this question.

# Question 2 (a) (ii)

This question presented a challenge to many of the candidates as they found it difficult to account for the reason why there was a change in discharge, instead focusing on the impact of changing discharge, i.e. an increase in channel size due to erosion.

Many candidates were able to achieve a mark for recognising that discharge increased downstream. However, few linked this increase to an increased amount of water in the channel as a consequence of tributaries or groundwater. Instead many candidates described what discharge was, or made the assumption that discharge had increased and then described the impact this had on the channel. There is only one main reason for a change in discharge and this is an increase in water into the channel.

A significant minority of candidates confused the term discharge with load and therefore failed to score marks as they described how load size and quantity changed downstream. This highlights the importance of candidates knowing the definitions of different terminologies associated with hydrology.

(ii) O	utline why disch	arge change	s downstr	eam. wwe	moment	nm behin	is it.
The	amo	unt	of	disc	horze	e in	reases
as	ym	yo		down	ne	rve	· /·
This	is be	eson	u	00	you	90 d	ion
the	rever	ma	•	treom	m	1 ru	47
join	ento	it.	This	ther	efac	neen	2
merc	wter	is est	erig	ne	rued	and -	Negre
mare	, .	noze					



This candidate gets straight to the point. They quickly identify the change in discharge and are able to identify the cause of this. They then develop the significance of this by linking it to an increase in the water in the channel. This is a simple but very effective answer. The candidate scores an easy 3 marks!



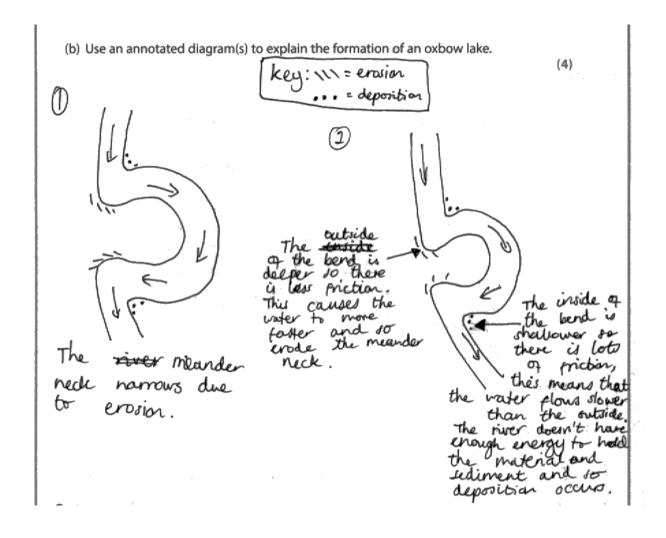
Candidates should be able to clearly define the different channel characteristics and know the reasons for their changes.

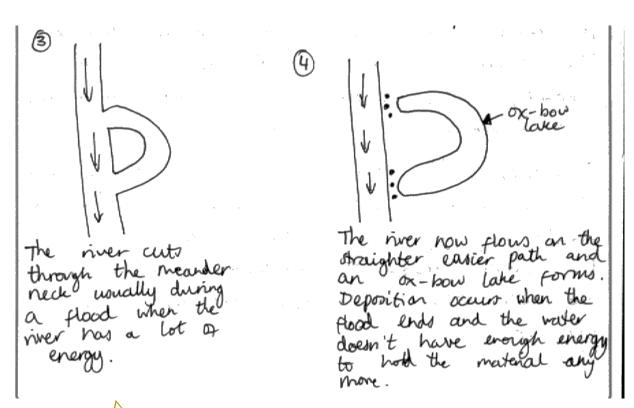
#### Question 2 (b)

The formation of an oxbow lake has historically been a challenge to many geography candidates, and that trend continued in this series as a series of mixed responses were produced. Many candidates were able to draw an effective diagram and show at least some of the sequence in formation. However, many of the responses were descriptive or only gave a partial explanation and therefore only scored 2 or 3 marks.

To achieve full marks candidates were required to describe the full sequence of oxbow development and offer a series of explanations which included some indication of process. Many candidates recognised the development of sinuosity of a meander to form a thinning meander neck as the outside bends drew closer together. Some candidates confused the erosion on the meander neck with deposition while others confused the reason for the silting up of the newly created oxbow. Most candidates made use of a diagram in an effective manner, but some were unaware that annotation means linked to the diagram and therefore separated the text from the diagram. Such answers were also limited in the marks awarded as they did not follow the demands of the question.

When attempting formation questions candidates need to show clear evidence of explanation. An easy way to do this is to explain process by either developing the specific type of erosion, or giving the reason for deposition in the context of the answer. Candidates must also ensure they address the whole sequence of formation, and an easy way to do this is to break down the answer into a series of stages. These stages should be linked between the diagrams and the text to give a logical and progressive answer.







This is a logical answer which has a series of stages to the formation; therefore sequence can easily be determined. The candidate clearly described each part of the sequence and in both the second and the fourth caption there is clear explanation which is linked to process and energy of the water. Although the type of erosion is not mentioned, the process of deposition to explain the blocking of the oxbow is clearly given in caption 4. This allows the response to score full marks. This is a good example of how to organise a response on formation.



When drawing diagrams to show the formation of landforms use a key, as in this response, to show exactly where the processes are acting. This will help your explanations as it is easier to visualise how processes are working at different parts of the landform.

#### Question 2 (c)

This question performed marginally better than Question 1(d), although it incurred many of the same problems. Many candidates were able to effectively identify a river and the management techniques employed, though few really explained how these methods helped manage the river. A large amount of partial explanation and brief locational detail held many candidates to a Level 2 response. To reach the top of Level 3 (6/6) candidates needed to show evidence of both good locational detail and full explanation of the methods employed in managing the river.

Common responses to this question included the river Nene and river Stour, and with the specific detail these often reached 4/6 marks. Those candidates who focused on more generic applications of management on the river Thames or Mississippi often found it difficult to clarify the choice of method used. Some candidates tried to apply their knowledge of the 3 Gorges Dam and this was often done without the desired effect as the focus was not on river management.

Candidates could improve their performance on this question by differentiating between a description of the method and what it does, to why it is useful as a management tool. In addition, they should try to use specific detail about the dimensions of the methods used, or the specific locations along the river of the techniques to help them develop their locational detail.

It would also be nice, in the future, to see evidence of management of local rivers which have more geographical relevance to the candidates, rather than just outdated examples from text books; especially considering the number of centres who complete river fieldwork as part of their Controlled Assessment task.

(c) For a river you have studied, explain the choice(s) of management used.	(6)
	(0)
Named river River Nene	1
The River Nene is Northampton has had a	£1.2
million flood warning scheme put in place +	o give
the residents a warning if the river is q	sing to
flood so they can prepare for this Also,	
new housing estate at Upton Square ha	8
been built above flood level so if the river	
the new houses will not be at take A 45	
clay flood embankment has been built alo	
the river to reduce the risk of the rive	<i>J.</i>
flooding and by increasing the tamount	医锥虫孢子 医防闭 人名
water it can hold. A 4m high flood was	U has
been built at Weedon, to prevent the ar	ea
behind it becoming flooded. These choices of	
management have been used help prevent	flooding

and also to make people aware of any potential fooding.



This candidate scores full marks with a series of management techniques all of which have development to different degrees of depth. The candidate uses very specific locational detail to give a real sense of place. This is a good example of a Level 3 answer that is achieved without writing excessive amounts in the exam.



For case study questions on river management try to look at different approaches along stretches of the river. This will avoid generic answers and build sound locational detail.

(6)

Named river Nene, NOTH COMPTON.

In week foot meadows Northampion flood walls have been put in place to protect rearby industry and housen from flooding the Near Kishingbury. It may there's a monitoring station which reasoned the height and discharge of a river, to predict it plooding will occur. Throughout Northampion. Warning systems are in place to warn residents of flooding gwing thintime to prepare and wave if they want to in Upton square a new housing entate wan fust built, so to protect that the area near the over han been left an a wash land. Also in weadon the thair tracks are on a bridge has blooding of ten occurs there and there's a 450m cong embankment to prevent blooding reaching the town.



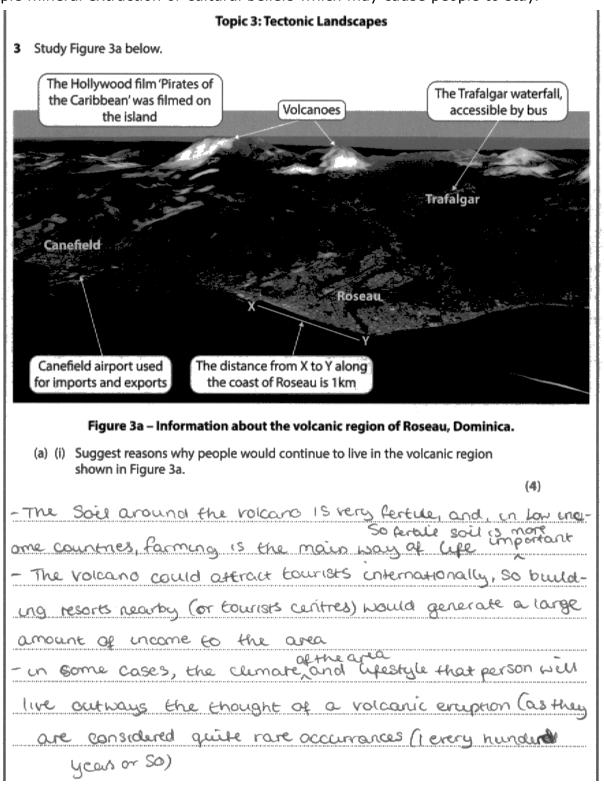
This is another example of an answer which focuses on the river Nene, and was fairly typical of many candidates' answers. There is clear evidence of locational detail, but although a range of methods are described there is limited depth to the explanation. It is mainly a series of detailed descriptions/partial explanations which tell one what the management methods do. Although the locational detail is good it is not enough to raise the answer into Level 3 and therefore this scores 4 marks.



Sometimes two or three management techniques with clear explanation are better than including a range of methods which are mainly described.

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

This was a well answered question by most candidates, with over three-quarters achieving 3 or 4 marks. Many candidates were able to successfully use material from the resource and develop it into a series of reasons to achieve full marks. Common errors made by candidates included a failure to make reference to the resource which held answers at 3 marks; lifting material straight from the resource without development and giving generic comments which did not necessarily apply to the context of the image; though these were in the minority. Many candidates developed the material on the resource to comment on the economic benefit of tourism or employment from the airport. Some candidates also developed material not included on the resource which could have been plausible, for example mineral extraction or cultural beliefs which may cause people to stay.





This is an example of a candidate who, although raising a series of valid points, did not make direct reference to Figure 3a and therefore scored only 3 marks. If the candidate had made a clearer link to the resource in respect to their comment on tourism, this would have scored 4 marks.



If a question asks you to refer to a Figure, ensure that you include information from it in your answer as this is normally necessary to achieve full marks.

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

The majority of candidates were able to understand the terminology 'convergent plate boundary' and therefore were able to make reference to relevant characteristics. Some candidates gave answers which were features of a divergent plate boundary, but these were in the minority. Some candidates also repeated the question and included reference to volcanic arcs, composite volcanoes or volcanic products which were not accepted. Common responses included earthquakes, tsunamis, fold mountains and movement of plates together.

On questions relating to characteristics of any of the plate boundaries candidates are able to mention tectonic setting (plate movements), landforms or tectonic products, e.g. pyroclastic flows.

# Question 3 (b)

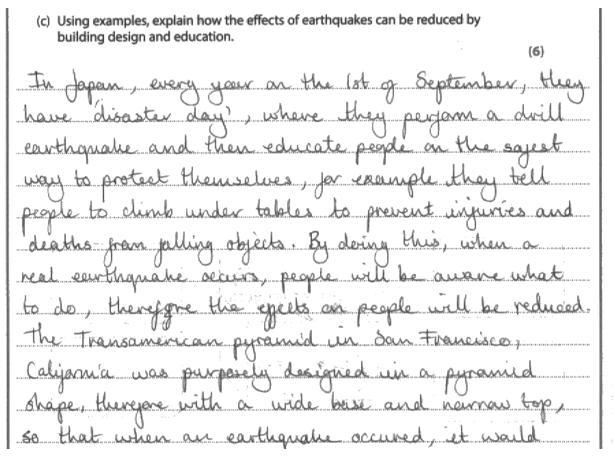
This was generally well understood with the majority of candidates either scoring 1 or 3 marks. The main reason for this was that many candidates confused epicentre and focus but often correctly identified seismic waves. Candidates should ensure that they are familiar with the various terminologies associated with earthquake characteristics and formation - remember that the focus is the point of the energy release, where the crust breaks, and the epicentre is the point on the surface above the focus where the earthquake is first felt. Nearly half of all candidates were able to correctly identify the three features.

#### Question 3 (c)

This was the best answered of the 6 mark questions in Section A, although it still produced a range of results. Candidates were required to explain how the effects of earthquakes can be reduced by building design and education. In general many of the candidates' answers focused more heavily on building design than education and it was common for candidates to describe what measures had been put in place rather than say how the measures (building design or education) actually reduced the effects of earthquakes.

Another common issue, as in the other 6 mark questions, was the inability of candidates to develop their points beyond partial explanation. It was common to see statements with partial explanation such as 'ball bearings have been placed under buildings to allow the building to move with the shaking from the earthquake'. However, this type of comment only allowed candidates to reach Level 2 marks of 3 or 4. Candidates should try to develop one or two points with full explanation as in the following comment: 'The San Francisco International Airport has been fitted with friction bearings under its major structural supports. These allow up to 50cm of lateral movement and the whole building can support 2.7 million kilograms of weight. This means that when the airport is hit by an earthquake it will move with the shaking and will be less likely to undergo structural failure resulting in a lower likelihood of passenger or employee injury or death'.

Common answers about building design included reference to cross bracing, shock absorbing foundations and shatter-proof glass. However, the best answers were often in reference to named buildings such as Taipei 101 or the Trans-America building. It was disappointing that the understanding of education was largely generic. Those candidates who used reference to education programmes almost entirely focused on Japan's Hazard Day. It would be nice to see other education schemes cited such as those employed by FEMA in the USA, or the post-earthquake education policies in Haiti or New Zealand. Although the methodology can be generic the implementation of the schemes allows for specific locational detail. However, focus must be on reducing the effects of the earthquake, not just a description of the scheme.



stay up firmly without the risk of it collapsing.

It was also built with a steel frame, meaning it
is a very strong structure, able to cope with swaying
from side to side, like it has by 13cm begone,
without collapsing, therefore reducing
the year of earth sides. (Total for Question 3 = 15 marks)



This candidate scores top Level 3 marks, 6, with clear focus on both education and building design. The answer is balanced in its approach and the points made go beyond links to what the method is, to how it can help reduce the effects of an earthquake. Instead of giving a range of points on building design and education the candidate has focused in detail, therefore fulfilling the requirement of full explanation for Level 3, on no more than two ideas for both parts of their answer. The answer is made more convincing through the use of a specific educational programme and named buildings. This is a good example of a 6 mark answer.



Do not just write about schemes of education and examples of building design; make sure you make links to how these reduce the impact of an earthquake. By doing this you will ensure that you have the correct focus on the question!

(c) Using examples, explain how the effects of earthquakes can be reduced by building design and education. (6)mon can reduce the expects of payous tower "laipen 101" ha to in it which woo ke to earthquake strikes. This reduces the AUDOTE which has (Total for Question 3 = 15 marks)

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This is another good example of a candidate scoring full marks. Here the candidate makes reference both to a range of specific building designs and to how they reduce earthquake impact. The education scheme is also well-developed and has a clear focus on the question.



Use of named schemes will help add credibility to your answer.

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

The majority of candidates were able to correctly interpret the cumulative bar charts and give the correct values for renewable and nuclear energy sources in North America and Africa. Some candidates did not correctly identify the scale as rising in increments of two and therefore gave answers which were one out from the real value. Candidates had to give the correct values for each country to score a mark.

# Question 4 (a) (ii)

Candidates were required to compare the energy mix of Europe and the Middle East from the figure and managed this with relative ease. Many candidates were able to score either 3 or 4 marks and achieved this with fairly systematic comparisons of the data, such as 'the Middle East has a greater amount of energy from fossil fuels compared to Europe, while Europe has a greater amount of energy from renewable sources'. Candidates were also able to effectively interpret the graph in Figure 4 to use the data as a comparative tool. Instead of just standard comparison e.g. 'Middle East used 98% fossil fuels whereas Europe has 81%', it was nice to see candidates looking at other differences, for example 'Europe has 8% more renewables' or looking at relative differences e.g. 'Europe has 10 times as much use of nuclear energy compared to the Middle East'.

Only a few candidates limited their marks by trying to explain or by not using data. Overall candidates coped well with the demands of this question.

(ii) Compare the energy mix of Europe and the Middle East shown on Figure 4.

Use data in your answer.

(4)

Ohthour

Thus both ware over 80% energy come grown goestiguest out brusboth houre
a mixture of all three sources thouserer, the Middle East uses a for more fossisk

(mels—these use 98% fossis fuell unareas Europe line only 81% gossishow

Europe use a for more ferenschess—these use 9% renewable resources lank

Middle East only use 1% in contract Europe use more nuclear source—

with an energy use of 10% inhereas the Middle East only use again 1%

gor renewables. Overall Europe has a under Variation and the Middle

East use hearty fore fossigness with a last less less nesses and renewable Journe.



This is typical of an answer which received 4 marks. It is clear that all types of energy have been compared and there is evidence of comparative language, such as 'they both' or 'in contrast' or 'whereas'. The candidate uses data throughout to complement their points and it is correct!



In comparison questions try to use comparative language and look at differences between areas in the same sentence as opposed to separate ones.

# Question 4 (b)

The question of how wealth affects energy consumption was generally well understood by the vast majority of candidates, as the modal marks were 2 or 3. The biggest discriminator in this question was whether candidates were able to fully explain their ideas, as they often only described, with statements like 'greater wealth leads to a larger consumption', or 'wealthy people have more electronic devices using more electricity'. Some candidates were also limited by the use of mirror-image statements as they described the fact that wealthier people used more and followed this with how less wealthy people use less. If candidates are to adopt the approach of looking at greater wealth and less wealth, they should have distinctive reasons for each.

Some good responses explained the idea that greater wealth leads to a disposable income, which in a consumer society leads to the purchase of energy hungry technological items, for example Apple iPhones, which when charged over-night can lead to a high personal energy demand. Other common approaches looked at the need for wealthy people to travel and therefore have an over-reliance on car or aeroplane use, leading to a high energy consumption of fuel! Some candidates became a little confused when they focused on the 'throw-away society' as this is more relevant to the creation of large amounts of solid waste, and the link to energy, for example incinerating the waste, was not made. Some candidates also became side-tracked through the use of Figure 4 as they focused on the use of different types of energy without clearly relating it to consumption.

(b) Explain how wealth can affect energy consumption.	
, , , , , , , , , , , , , , , , , , ,	(4)
Wealth can effect energy consumption in many	
As the country becomes richer , and people get the	new
technology. They want more energy so that they	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
can use it. Is they will spend more time or	n it.
For example, This happens with phones and game	



This is a good example of a fairly descriptive response. The candidate scored 1 mark for the link between energy consumption and wealth and a second mark for some development of the point in reference to technology.



On a 4 mark question requiring explanation ensure that you have at least 2 or 3 developed points to satisfy the marking criteria.

(b) Explain how wealth can affect energy consumption.

(4)

People in wealthir countries (HICs like Uk and USA) home more money to spend on electricity, so are not as careful when using its (e.g. learning things burned on). They also have more money to spend on blevices that use energy such as televisions and games consides. Walther countries also have the money to buy in feel or energy from other places and can make supply natch demand.



This candidate has two or three ideas linked to consumption, with some development shown in each. Although explanation is not very detailed there is evidence of it throughout. The candidate does not explicitly identify the relationship between wealth and consumption, but it is fairly implicit in the comments made. This candidate scored 4 marks.



Ensure that each point clearly links back to the question and that you link together ideas to generate explanation.

#### Question 4 (c)

This question touched upon a new part of the strengthened specification for Geography A. The fact that so many candidates found it difficult to achieve more than 2 marks suggests that this new part of the specification had not been particularly well covered.

Many candidates adopted a fairly generic approach and common responses included 'cheap', 'quicker' or 'easier to use'. Often these comments did not have a true grasp of the workings of a landfill site and were therefore oversimplified; some candidates even confused the landfill site with local recycling centres. Many of these simplified points were not worthy of credit. Candidates could have improved their responses by making comparisons to other methods of waste disposal, for example 'landfill sites are cheaper to run in the long term than incineration'. It was also surprising to see that candidates did not take advantage of links to Global Challenges, i.e. harnessing methane waste production, or making reference to the Germany waste management case study which focuses on the benefits of using landfills.

Some higher scoring candidates focused on points such as the reclamation of land after the landfill process, the removal of organic matter to be recycled from landfills, or the economic benefit of methane gas extraction. Unfortunately these comments were in the minority.

Overall there is room for improvement in the learning of the advantages and disadvantages of managing solid waste.

(c) Explain the advantages of using landfill to dispose of waste.

(4)

Landfill has some advantages for disposing of waste. If is

relatively cheap compared with other methods such as recycling and incineration. It is also other used in ord quarries so the cand is other nor being used for ease anything useful. Building a landfill side doesn't involve any major comptruction and so this conserves raw materials and doesn't need a lot of energy. If concealed by woodland, the landfill side also sincularly be too visually popularly compared with something like an in cineration plant. Londfill has other advantages of incineration as it doesn't involve burning so or fissill finds are needed and no tooks.



This candidate has clearly understood the question and offers a wide range of relevant points. Although not all the points are fully developed, many have clear attempts at explanation and are focused on advantages. The candidate avoids over-generalisation and is often able to compare the advantages of landfill in the context of other types of waste management. This is a good example of a 4 mark response.



Try to contextualise your points on landfills by comparing them to other waste management techniques to highlight the advantage.

#### Question 4 (d)

This was another question which drew on new content from the strengthened specification. Again, it was apparent from the range of responses that candidates were not universally prepared for the possibility of the question. This question required candidates to apply their understanding of solutions to energy waste (from the old version of the specification) to the views that different groups (in this case individuals, organisations and the government) have on the value of these solutions.

The answers produced by candidates can be summarised into those who (i) described waste solutions (solid/energy) therefore scoring Level 1 marks; (ii) those who gave an implied or descriptive view point tied to fairly detailed descriptions of energy wastage solutions; and (iii) the minority who went beyond saying what the energy solutions were and offered an attempt to explain the viewpoint - in some cases of all different groups - these answers achieved Level 3 marks.

Although the question itself was perhaps a little challenging, it was legitimate as it came straight from the specification's detailed content. Common mistakes included references to solid waste rather than solutions to energy waste. Such answers were held at Level 1 as long as they had viewpoints. Candidates who had the correct focus often introduced their answer with 'there are many viewpoints on the solutions to energy waste' before giving a detailed account of the solutions rather than the viewpoints. Therefore a link between the solution and the actual viewpoint would have improved answers. There was also a large focus on alternative methods of production of energy e.g. renewables. Candidates need to understand that these are not solutions to energy waste, instead they are alternative methods of producing waste, and while they are sustainable they are not changing the amount of energy used.

Good answers focused on specific groups and specific causes. At a government level some candidates focused on the need to meet Kyoto requirements and therefore a need to implement change in attitude towards energy use, resulting in the introduction of a variety of energy saving measures. There was a great potential for cross-over with Unit 1 here. Some candidates focused on campaigns by groups such as Greenpeace or Friends of the Earth, with reference to schemes like Earth Hour which promotes energy saving. On an individual scale some candidates made reference to groups like 'Manchester is my planet' or even promoted schemes undertaken at a local school. With this focus the very highest scoring candidates were then able to offer comment for and against the schemes to generate a viewpoint. This practise should be encouraged by centres to ensure that answers are more discursive than descriptive.

Overall this question, which was designed to discriminate across the marking levels, achieved its aim. However, the discrimination would be fairer to candidates if it was clear that they had been fully prepared for this topic and had clearly covered the material, despite the fact that it is not given extensive coverage in the course texts.

Up to 4 SPaG marks were available on this question, though the majority of candidates scored between 2-3 marks. To improve their chances of a higher mark candidates should look to include a range of specialist geographical terms in their answer and check thoroughly for correct spelling. They should also avoid the use of very long sentences and, where possible, ensure the correct use of capital letters.

\*(d) In the UK, explain why groups (e.g. individuals, organisations and the government) may have different views on the value of solutions to energy waste.

(6)

Individuals may feel that a system is needed in their local & area to manage energy washage, Such CHP (combined heat and power) system. However, the government may feel that it is too expensive to install and would prefer to go about reducing energy wastage in another way by, for example, theren providing checip or free energy-Saving light bulbs. This would Save ten money, but would still show they are trying to cut energy wastage Organisation may feel that homeowness should by to reduce their danestic energy wastage by, for example, installing covity wall insulation to prevent heat enough excaping. The homeowness may feel that it would be too expenies to install and also could think they are not they aid have it installed, it would not make much difference to the National energy maxturese levels so reject the ideas. ground source heating Whereas Some people consider the Systems to not be

# (Total for spelling, punctuation and grammar = 4 marks) (Total for Question 4 = 24 marks)

Perwith which supplies fourteen bungalows with hot water. The individuals living there have found the system to be very cost effective and Root has helped them is be able to pay their bills. The government may say that it should be produced on a longer scale as only fourteen homes were supplied.



This is a fairly rare example of a response to this question which scored full marks. The answer is well-structured, uses a range of specialist terms and is near perfect in the use of grammar and punctuation.

The answer is clearly focused on the question with reference to energy waste solutions, specific schemes are noted and there is a clear attempt to explain the viewpoints of all three groups. The answer goes beyond a simple description of the energy waste solutions used and clearly attempts to discuss the approaches. Well done to this candidate for the quality of this answer in the time-frame given.



When giving viewpoints think of why some people may be in favour and why others may be against. This means that your answer will adopt a more discursive approach and therefore is more likely to achieve a higher level mark.

\*(d) In the UK, explain why groups (e.g. individuals, organisations and the government) may have different views on the value of solutions to energy waste.

(6)

Individuals such as parents may think that the solution to energy waste is to use renewable energy, however same groups may not want this as it can cause visual pollution e.g. wind turbines in same areas. Also the government may not want to fund this due to its expense however, if the government did find it they would only part fund it and use money from tables, seeme individuals who do not take particular interest in energy may be against using tox payers many to fund this project.



This is an example of a response from a candidate who attempts to focus on the viewpoints of different groups, but is largely descriptive in their approach. Although they do represent some fairly generic views, they are not clearly focused on solutions to energy waste and therefore this answer is awarded 4 marks (Level 2). The candidate uses punctuation and grammar with reasonable accuracy but could include more specialist terminology. Therefore this candidate scores 2 marks for SPaG.



Ensure that you are able to give detail on more than one solution to energy waste, and if possible relate this to a known scheme.

# Question 5 (a) (i)

The majority of candidates were able to correctly interpret the cumulative bar charts and give the correct values for the percentage water use in Spain and Sweden which is pleasing. Over three-quarters of candidates managed to score 2 marks on this question.

# Question 5 (a) (ii)

As in Question 4(a)(ii), candidates achieved relative success on this question. The question required candidates to compare the waste use percentages for the UK and Turkey and many candidates successfully achieved this scoring 3-4 marks.

It was pleasing to see that many candidates were able to effectively use data to support their comparative statements. Consequently many candidates systematically achieved full marks by simply comparing the different water uses, for example 'the UK uses 35% water for energy use whereas Turkey uses only 5%'. Candidates were also able to achieve marks by comparing relative amounts within countries, for example 'the highest usage in Turkey was agriculture, while the smallest was energy water use'.

A minority of candidates made the mistake of not using data or compared the wrong countries, however these responses were uncommon and generally this was well attempted by the majority of candidates, with nearly two-thirds scoring full marks - well done.

(ii) Compare the water use in the UK and Turkey.

Use data in your answer.

(4)

The UK USOD loss water than Turkey bor agriculture. It was 101 while Turkey be 75%. The UK uses more for domestic was UK has 30% bogge while Turkey only was 13% for domestic. The UK was more water for industry at 25% while Turkey only was 67.

The UK was more for energy at 35% whereas

Torkey only uses 5% for energy.



This response was fairly typical of many from candidates who simply went through each water use percentage and made direct comparisons. This candidate also uses data throughout, and has the correct values. 4 marks were awarded.



When making water use comparisons ensure you use comparative language rather than describing the water uses separately. Support your points with data to make the answer more effective.

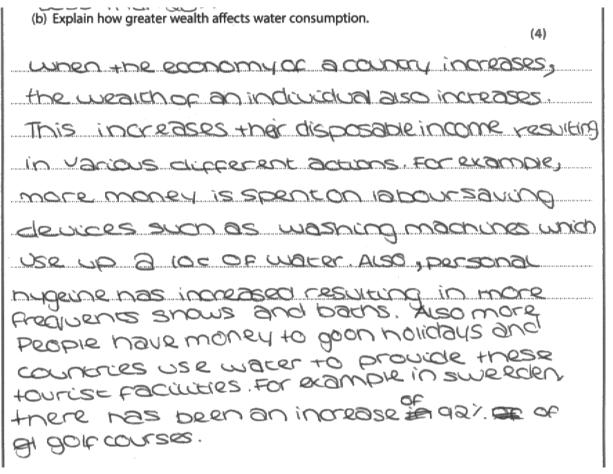
#### Question 5 (b)

This question performed in a very similar way to its corresponding item in Question 4, with the majority of candidates scoring either 2 or 3 marks. Many candidates were able to pick up marks for description and it was common for candidates to recognise the pattern that greater wealth led to greater water consumption. However, candidates could improve the quality of their explanations to ensure they get credit for the points made and score more than 2 marks.

Higher scoring candidates tended to focus on the concept of showering societies as a reason for greater water use in HICs. Such candidates often developed answers beyond the simple description e.g. 'people have more showers in HICs therefore use more water'. Higher scoring candidates more commonly gave answers such as: 'A higher income results in a greater amount of disposable income. This enables people to buy devices which use large amounts of water such as power showers. In addition, the fact that people shower at least once or twice per day, and for 10 minutes at a time on average, means that a larger amount of water is used.'

Common mistakes, other than simple descriptions, included using mirror-image statements, for example 'people in HICs use greater amounts of water as they have bought more water hungry devices, whereas people in LICs cannot afford them therefore use less water'. This was a fairly common practice amongst candidates who scored low to mid marks on this question. If candidates are going to make reference to both HICs and LICs they should ensure that the focus of each point is different.

There were also misconceptions in some answers, such as that all LICs are in hot climates, therefore have less water available, or that less water is used in agriculture in HICs due to drip irrigation. The fact that HICs use a large amount of water to mass produce cash-crops was often overlooked.





This is an example of a fairly typical response which scored full marks. The candidate quickly recognises the pattern of greater wealth and greater consumption and follows this with 2-3 fairly well-explained points, one of which has an example. This candidate does not use mirrorimage statements and all points relate back to the question.



When attempting an answer on this question, focus on one or two points and develop each of them with full explanation. If you are going to comment on opposite contexts e.g. greater and less wealthy people, ensure that the point raised for each is different and not just a mirror-image statement.

#### Question 5 (c)

This was a question which produced a full range of responses, although it still produced a generally high standard of answers with many candidates able to offer some explanation and score 3 marks.

The question required candidates to explain the factors leading to a higher risk of water-borne disease. Some candidates wasted valuable writing space giving unnecessary detail on the water-borne disease rather than focusing on the factors leading to a higher risk. Common answers included unsafe drinking water, poor hygiene and poor sanitation and contextualised these points through actions such as pollution due to resource extraction, lack of water treatment facilities, poor water supply infrastructure or water shortages placing demands on available water. Some higher scoring candidates also focused on the lack of healthcare or medical treatments meaning that the prevalence of water-borne diseases was greater than need be.

Some candidates found it difficult to express or articulate their ideas and therefore became repetitive. There was also a tendency to assume that all dirty water would lead to contamination. Candidates need to be clearer in their differentiation of 'dirty' and unsafe water, especially as some water which is dirty could simply have sediments in them and not pose a risk of water-borne disease.

It was nice to see some candidates clarify their points with reference to named examples, such as contaminated hand-dug wells in Kenya, as this helped avoid generalisation and also tied into the LIC reference in the question.

Overall, this is a topic in which understanding has improved, yet through improved articulation many candidates could turn 2 marks into 4.

(c) Explain the factors that can lead to a higher risk of water-borne diseases in Low Income Countries (LICs).

(4)

LIC'2 cannot afford efficient systems to disinfect water meaning a directly undean water is consumed by drinking. Water in LIC's is wally located anothered near watering places like shums or modely areas where germs can enter or even strong primals. Water pollution from small small industries can pollute the river with microbes industrial looks. In LIC's they have no choice weally but to drink it.



This is an example of a candidate who just scored 4 marks. They have a range of points and all are related to an increased risk of water-borne disease. Some of the points have development and attempted explanation, however, with further development linking back to the question this candidate would be a very solid 4 marks.



When asked to explain factors, it is sometimes better to pick 2 or 3 points and give extended points rather than statements. An example of a well-developed point is given here: 'A lack of water treatment facility means that water is not processed before it is consumed. Therefore, there is a greater chance that bacteria can develop in the water supply and therefore when extracted it could pose a risk to the drinker'. When providing an explanation try to link a series of points together.

#### Question 5 (d)

As for Question 4(d), this question drew on new material from the strengthened specification. Although centres may not be familiar with this angle on water management schemes the question was legitimate as it is based on the detailed content in the specification. When comparing Question 4(d) and Question 5(d) it would appear that Question 5(d) was more conducive to a question about views, yet they both returned similar mean marks, so there was little variation in the overall performance between the two, although candidates answering Question 5(d) did perform very slightly better.

The question required candidates to use their knowledge and understanding of their case study on a water management scheme and apply it to the views that different groups (individuals, organisations and government) have on the value of the scheme. Answers fell into three categories: (i) those that simply described the water management scheme without offering much on views, (ii) those who gave detailed descriptions of the schemes and may even have offered some explanation of the advantages and disadvantages of the scheme while offering little but implicit views, and (iii) those that gave detail on the scheme and were able to not only offer views, but also offer some explanation of them. Few candidates actually focused on the question which asked about the value of the schemes.

Common mistakes included candidates simply describing the scheme and, instead of focusing on the views of the different interest groups, giving detailed accounts of the advantages and disadvantages of the scheme. This perhaps implies that centres have not really focused on the new additions to the specification as the majority of answers were focused on the content from the older version of the specification rather than this new updated content.

There were some examples of good answers, with many candidates focusing on large-scale schemes such as the 3 Gorges Dam, the Sydney Olympic park water management scheme, management along the river Colorado, and the Tigris Euphrates. Some candidates focused effectively on smaller scale schemes like hose pipe bans, appropriate technology schemes or schemes set up by NGOs in water deprived areas. Higher scoring candidates were often able to make a positive and negative comment from the point of view of the group about the scheme, and therefore offer overall discussion and comment. It is recommended that centres adopt this approach after teaching the water management schemes, therefore enabling candidates to appreciate the relative worth of schemes to different groups; this will help develop their analytical skills.

While this question proved to be a good discriminator it did highlight a need to look beyond what is written in course texts to ensure that all aspects of the specification are appropriately addressed.

Up to 4 SPaG marks were available on this question, though the majority of candidates scored 2 or 3 marks. To improve their chances of scoring a higher mark candidates should look to include a range of specialist geographical terms in their answer, and should check thoroughly for correct spelling. They should also avoid the use of very long sentencing and, where possible, ensure capital letters are correctly used.

\*(d) For a named water management scheme, explain why groups (e.g. individuals, organisations and the government) may have different views about the value of the scheme.

Pen

OC > COST (6)

Named scheme Three Googel Ram, chira.

All was depending an their interest.

The government finds the scheme extremply valuable because it has usually the economy are more mere in such subtent. This is because the standard the scheme is the scheme that rachan which they create the standard of the scheme is the scheme that scheme they create the standard of the scheme is the scheme that the scheme that they create the standard of the scheme is the scheme that the scheme is the scheme that the scheme is the scheme that they can be scheme that they will be glad for motional and resources (eyear) in adder to grow businesses as prende people with jobs which they will be glad for heart with a scheme for a supervision of the scheme that they are supervised for the scheme that they are supervised to the scheme that they are supervised to the scheme that they gree in one supervised to the scheme they gree in the scheme they green the scheme they green as the scheme they green the scheme they green as the scheme they green the scheme they green the scheme they green as the scheme they green the scheme they green as the scheme they green the scheme they green the scheme they are scheme they are scheme they are scheme to the scheme they are scheme



This is a good example of a candidate who was able to score a full 6 marks for their answer to the guestion and 3 out of 4 for SPaG. The focus of the answer was unlike the approach of many candidates in that this candidate started to answer the question immediately rather than giving a detailed account of the scheme first. Here there is clear focus on the views of different groups and the candidate is able to use the facts of the case study to cement their view points. It is also good to see that the candidate is able to give a balance of opinion regarding the views of each group. This is a good example of a candidate's ability to apply their knowledge and provide an analytical answer. An overall summary of viewpoints would be one way of making minor improvements to the answer, though considering the time allowance this is a great effort.



When asked to focus on the view of different groups, organise your answer to focus on the views rather than just giving details on the scheme. Many candidates started their answer with '.....water management scheme has many views', before going on to simply describe the scheme. Take advice from this candidate and use the facts of the case study to support your answer on viewpoints.

# **Paper Summary**

The performance across the paper was pleasing considering the changes in requirement across the specification and the fact that this represented the first outing of the linear setting of this specification. Outlined below are a few general suggestions which may improve performance across the paper:

- Ensure that new content in the specification is covered and understood by candidates so that they are prepared for new content.
- Show candidates the difference between partial and full explanation so that they are able to access Level 3 marks on the case study or extended writing questions.
- Where a question asks for evidence from a figure ensure that the candidate is explicit in their reference to ensure that they pick up the full range of marks.
- When answering a question with the command 'compare', ensure that candidates use comparative language such as 'whereas', 'however' or 'this is similar to' so that they are able to meet the demands of the question.
- Learn terminology, particularly from the Section A topics, to improve question interpretation.
- In case study questions, use located detail from examples to develop your points. This approach can often enable a candidate to reach the top of a level.
- Practice interpreting landforms from images and maps not just learning how they are formed.
- Ensure candidates develop their answers in outline questions, not just describe remember an outline is a brief/partial explanation.

The examining team offer their congratulations to the many candidates who attempted this paper and hope that centres and future candidates can learn from it.

# **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





