

Mark Scheme (Results)

Summer 2013

GCSE Geography (5GA2H) Paper 01
Natural Environment - Higher

Edexcel and BTEC Qualifications

Edexcel and BTEC qualifications come from Pearson, the world's leading learning company. We provide a wide range of qualifications including academic, vocational, occupational and specific programmes for employers. For further information visit our qualifications websites at www.edexcel.com or www.btec.co.uk for our BTEC qualifications.

Alternatively, you can get in touch with us using the details on our contact us page at www.edexcel.com/contactus.

If you have any subject specific questions about this specification that require the help of a subject specialist, you can speak directly to the subject team at Pearson. Their contact details can be found on this link: www.edexcel.com/teachingservices.

You can also use our online Ask the Expert service at www.edexcel.com/ask. You will need an Edexcel username and password to access this service.

Pearson: helping people progress, everywhere

Our aim is to help everyone progress in their lives through education. We believe in every kind of learning, for all kinds of people, wherever they are in the world. We've been involved in education for over 150 years, and by working across 70 countries, in 100 languages, we have built an international reputation for our commitment to high standards and raising achievement through innovation in education. Find out more about how we can help you and your students at: www.pearson.com/uk

Summer 2013

Publications Code UG037169

All the material in this publication is copyright

© Pearson Education Ltd 2013

General Marking Guidance

- All candidates must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Mark schemes should be applied positively. Candidates must be rewarded for what they have shown they can do rather than penalised for omissions.
- Examiners should mark according to the mark scheme not according to their perception of where the grade boundaries may lie.
- There is no ceiling on achievement. All marks on the mark scheme should be used appropriately.
- All the marks on the mark scheme are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the mark scheme. Examiners should also be prepared to award zero marks if the candidate's response is not worthy of credit according to the mark scheme.
- Where some judgement is required, mark schemes will provide the principles by which marks will be awarded and exemplification may be limited.
- When examiners are in doubt regarding the application of the mark scheme to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked UNLESS the candidate has replaced it with an alternative response.

Placing a mark within a level mark band

- The instructions below tell you how to reward responses within a level. Follow these unless there is an instruction given within a level. However, where a level has specific guidance about how to place an answer within a level, **always** follow that guidance.
- **2 mark bands**
Start with the presumption that the mark will be the higher of the two.
An answer which is poorly supported gets the lower mark.
- **3 mark bands**
Start with a presumption that the mark will be the middle of the three.
An answer which is poorly supported gets the lower mark.
An answer which is well supported gets the higher mark.
- **4 mark bands**
Start with a presumption that the mark will be the upper middle mark of the four.
An answer which is poorly supported gets a lower mark.
An answer which is well supported and shows depth or breadth of coverage gets the higher mark.

- Mark schemes will indicate within the table where, and which strands of QWC, are being assessed. The strands are as follows:

i) ensure that text is legible and that spelling, punctuation and grammar are accurate so that meaning is clear

ii) select and use a form and style of writing appropriate to purpose and to complex subject matter

iii) organise information clearly and coherently, using specialist vocabulary when appropriate.

Spelling, Punctuation and Grammar Marking Guidance

- The spelling, punctuation and grammar assessment criteria are common to GCSE English Literature, GCSE History, GCSE Geography and GCSE Religious Studies.
- All candidates, whichever subject they are being assessed on, must receive the same treatment. Examiners must mark the first candidate in exactly the same way as they mark the last.
- Spelling, punctuation and grammar marking criteria should be applied positively. Candidates must be rewarded for what they have demonstrated rather than penalised for errors.
- Examiners should mark according to the marking criteria. All marks on the marking criteria should be used appropriately.
- All the marks on the marking criteria are designed to be awarded. Examiners should always award full marks if deserved, i.e. if the answer matches the marking criteria.
- Examiners should be prepared to award zero marks if the candidate's response is not worthy of credit according to the marking criteria.
- When examiners are in doubt regarding the application of the marking criteria to a candidate's response, the team leader must be consulted.
- Crossed out work should be marked unless the candidate has replaced it with an alternative response.
- Handwriting may make it difficult to see if spelling, punctuation and grammar are correct. Examiners must make every effort to assess spelling, punctuation and grammar fairly and if they genuinely cannot make an assessment, the team leader must be consulted.
- Specialist terms do not always require the use of complex terminology but the vocabulary used should be appropriate to the subject and the question.
- Work by candidates with an amanuensis, scribe or typed script should be assessed for spelling, punctuation and grammar.
- Examiners are advised to consider the marking criteria in the following way:
 - How well does the response communicate the meaning?
 - What range of specialist terms is used?
 - How accurate is the spelling, punctuation and grammar?

Question Number	Acceptable Answers	Reject	Mark
1 (a) (i)	Less than 1m in height (1) The swash is greater than the backwash (1)		1
ii	Larger wavelength (1) Strong(er) swash (1) Weak(er) backwash (1) Build beaches (1) Low energy waves (1) Low frequency waves (5-10 per min) (1) Note if 3x characteristics are provided, them credit the best two.		2 1+1
bi	Max 3 without explicit evidence, e.g. heights, rock type etc. from Figure 1a. The cliffs have a wave-cut platform in front of them (1) Cliff overhangs the wave-cut notch The cliffs are 30m high (1) The cliffs are vertical (1) Cliff / wave-cut platform made of chalk (1) Debris / rocks / on the wave-cut platform (1) Notch separates cliff from platform (1) Cliff is jointed (1) The wave cut platform extends 20m from coast (1). It is made of rock (1)	Explanation for how features develop. Coastal management.	4 1+1+1+1 (1+1)+1+1 (1+1+1)+1

<p>bii</p>	<p>Maximum 2 marks for a simple description. For 3-4 marks expect relevant explanation, and some indication of change over time.</p> <p>Credit points on diagram, but note diagram is optional. Don't double credit.</p> <p>Headlands and bays – a number of linked processes:</p> <p>Headlands and bays are formed due to differential erosion (1). The harder rock on the headland erodes at a slower rate compared to the bay (1), due to (perpendicular orientation of) the geology (1). Softer rocks in the bay are subject to hydraulic action and abrasion (1), leading a faster rate of erosion (1). The bay can stabilise with a beach (1) which offers natural protection (1) while the headland can become eroded due to wave refraction (1), which can lead to the formation of caves, arches stacks and stumps (1).</p>		<p>4</p> <p>(1+1)+(1+1)</p> <p>(1+1+1)+1</p>
<p>c</p>	<p>Wave action/sea/rain can cause the cliffs to become saturated (1), if made of clay (1). Over time the material in the cliff becomes weakened and subject to gravity (1) cliff material slides down thereby removing material (1). Landslides can cause rapid removal of coastal material / loss of land (1). Soil creep causes slow removal of soil from coastal slopes (1); ridges / ripples are left (1). Slumping causes a downward moment of material (1) this leaves a curved shape (1).</p>		<p>3</p> <p>(1+1+1)</p> <p>(1+1)+1</p>
<p>di</p>	<p>Groynes, Sea Wall or Rip Rap (Rock Armour)</p>		<p>1</p>

<p>dii</p>	<p>Max 2 if descriptive only Max 2 if not annotated. Has to include an element of explanation. Note: only one annotation needed for max.</p> <p>Should refer to either sea wall, groyne or rock armour.</p> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>The groynes help build beaches (1). They achieve this through preventing longshore drift (1). The bigger beaches then absorb energy from breaking waves (1) This reduces recession as less waves reach the area behind the beach(1).</p> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>The sea wall is strong and durable (1) this means it will be able to withstand the impacts of waves for a prolonged period. Sea wall deflects the energy of waves (1) which means energy is not focused on the coast (1)</p> </div> <div style="border: 1px solid black; padding: 5px; margin: 5px 0;"> <p>Rip Rap helps break the waves (1) and this causes the energy of the waves to be absorbed (1). The rocks used are durable/ a long-term solution (1) resulting in less maintenance or replacing (1).</p> </div> <p>Note: only 1 method should be credited. Credit the best ideas if more than one method.</p>	<p>Advantages and disadvantages of a particular technique.</p>	<p>4</p> <p>(1+1)+(1+1)</p> <p>(1+1+1)+1</p>
-------------------	--	--	---

Question Number	Indicative content	
1(e)	<p>Focus must be on impact on people and environment, e.g. Effects on people: loss property, loss of life (in some instances, e.g. cliff falls in Dorset), inconvenience, evacuation, loss of income for businesses etc</p> <p>Effects on environment: loss of habitats / land-take, damage / stress to ecosystems, etc.</p> <p>Note people and environment are not mutually exclusive. Note examples can be located, i.e. places OR examples of effects (on people and the environment)</p>	
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-2	A short list of ideas with one or two briefly described. May only be partially linked to affects of coastal recession. Examples either not appropriate, unclear or absent. Tends to be very basic use of geographical terminology.
Level 2	3-4	An answer which has some details of location OR partial explanation. Response likely to refer to either people and / or environment. At top of band, there is either good location details(s) OR development through one explanation. Generally clearly communicated but with limited use of geographical terminology.
Level 3	5-6	Explanations of at least two effects of coastal recession linked to both people and the environment. Examples will be well supported by factual information (and/or location). For top of level expect development by either range or depth. Well communicated with good use of geographical terminology.

Question Number	Acceptable Answers	Reject	Mark
2 (a) (i)	Watershed		1
ii	Source (1) Confluence (1) Tributary (1) Main Channel (1) Flood plains (1) Meanders (1) Accept reasonable features relevant to drainage basin	Watershed	2 1+1 (1+1)
bi	Max 3 without evidence. The cliffs are vertical near the top (1) The cliffs are approx 100m high (1) There are rapids in the foreground (1) with large rounded boulders (1) reference to load (1) Some interlocking spurs can be seen (1) between the waterfall and the rapids (1) Waterfall drops approx 100m (1) River bends (1) Allow reference to V-shaped valley, or overhang. Note: only credit landforms which are on the resource.	Landforms not on resource, e.g. plunge-pool	4 1+1+1+1 (1+1+1)+1 (1+1)+(1+1)

<p>bii</p>	<p>Maximum 2 marks for a simple description. For 3-4 marks expect relevant explanation, and some indication of change over time.</p> <p>Credit points on diagram, but note diagram is optional. Don't double credit.</p> <p>Waterfalls – a number of linked ideas:</p> <p>Waterfalls form where a tectonic fault has changed the height of the land (1), or where due to sea level change, which has exposed both soft and hard rock (1)</p> <p>Waterfalls are formed in areas where hard rock overlies softer rock.</p> <p>Soft rock is eroded as water cascades down (1) due to hydraulic action (the impact of water (1) and abrasion (where sediments are thrown against the softer rock (1)). This leads to an over-deepening of the bedrock forming a plunge pool (1). The erosive action also cuts into the softer rock and over time an overhang of harder rock is created. When the overhang becomes top heavy and unstable it breaks off and collapses (1) into the plunge pool, as a consequence of gravity (1). Repetition of this process led to the migration of the waterfall upstream leading to a gorge formation (1).</p>		<p>4</p> <p>(1+1)+(1+1)</p> <p>(1+1+1)+1</p>
<p>c</p>	<p>Mass movement causes river banks to be washed into the river (1).</p> <p>Slumping, due to saturation of banks (1), leads to the rotational movement of river banks into the channel (1) which can block the river (1) leading to flooding.</p> <p>Soil creep causes soil to slowly slide into the river (1) create a rippled effect (1).</p> <p>Landslides cause the rapid removal of river banks (1).</p>		<p>3</p> <p>(1+1+1)</p> <p>(1+1)+1</p>
<p>di</p>	<p>Flood relief channel (1)</p> <p>Channelisation (1)</p>		<p>1</p>

<p>dii</p>	<p>Max 2 if descriptive only Max 2 if not annotated. Has to include an element of explanation. Note: only one annotation needed for max.</p> <p>E.g. Channelisation leads to river bank/bed covered in concrete (1) therefore reducing the ability of the river to erode (1). Land use planning around river (1) means that fewer people are exposed to the impacts of possible flooding (1).</p> <p>Allow reference to vegetation (1) as a river management method.</p> <p>Note: can credit more than one management method.</p>		<p>4</p> <p>(1+1)+(1+1)</p> <p>(1+1+1)+1</p>
-------------------	--	--	---

Question Number	Indicative content	
2(e)	<p>Focus must be on impact on people and environment, e.g. Effects on people: loss property, loss of life (in some instances), inconvenience, evacuation, loss of income for businesses etc Effects on environment: loss of habitats, damage to ecosystems, spread of diseases etc. Note people and environment are not mutually exclusive.</p>	
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-2	A short list of ideas with one or two briefly described. May only be partially linked to affects of flooding. Examples either not appropriate, unclear or absent. Tends to be very basic use of geographical terminology.
Level 2	3-4	An answer which has some details of location OR partial explanation. Response likely to refer to either people and / or environment. At top of band, there is either good location details(s) OR development through one explanation. Generally clearly communicated but with limited use of geographical terminology.
Level 3	5-6	Explanations of at least two effects of flooding linked to both people and the environment. Examples will be well supported by factual information (and/or location). For top of level expect development by either range or depth. Well communicated with good use of geographical terminology.

Question Number	Acceptable Answers	Reject	Mark
3 (a) (i)	Rock Lip /Threshold		1
ii	Sediment within / carried by the ice / glacier (1) which scrapes / erodes / scours (against) the side/floor of the valley as it moves (1).		2 1+1
bi	There are 5 hanging valleys (1). There are a series (could give number for extra mark) of rivers which run in the hanging valleys (1) into the large glacial trough (1) which is approx 200m wide (1). The glacial trough (1) is home to a large ribbon lake (1). An answer which clearly has no linkage to Fig 3b (implicit or explicit) should be given max 2.		3 1+1+1 (1+1)+1
bii	Maximum 2 marks for a simple description. For 3-4 marks expect relevant explanation, and some indication of change over time. Credit points on diagram, but note diagram is optional. Don't double credit. Ribbon lake formation – a number of linked processes: These are large elongated lakes formed in a glacial trough (1). When a glacier recedes it deposits lots of moraine across a valley (1). This can dam water moving through the glacial trough as water builds up behind the moraine (1). Over time this will form an elongated lake to match the contours of valley (1) Over deepening of the valley (1) due to an increased weight of ice from the glacier (1) can cut into the underlying geology (1) creating a depression which fills with water (1). Softer geology means that the glacier can erode into the bed (1). Therefore the glacier deepens the valley (1). Meltwater infills the valley and forms a ribbon lake (1).		4 (1+1)+(1+1) (1+1+1)+1

<p>c</p>	<p>Each idea credited at one mark. Max 2 for each use.</p> <p>Hydroelectric energy generation (1) is found in upland glaciated environments, for example in Iceland where valley glaciers have eroded steep sided valleys (1). Skiing is a popular tourist activity in glacial valleys (1) for example in the Alps at Montroc where there are lots of tourist runs (1). Hiking is popular along glacial features such as arêtes and pyramidal peaks (1). Many people walk the Snowdon horseshoe (1) and they spend on average £80 per person per night (1).</p> <p>Development could come through the use of an example.</p> <p>List of single statement points, e.g. use for electricity. Use for walking = max 1 in total.</p>		<p>4</p> <p>(1+1)+(1+1)</p>
<p>di</p>	<p>Snow fences (1) Afforestation (1)</p>		<p>1</p>
<p>dii</p>	<p>Max 2 if descriptive only Max 2 if not annotated. Has to include an element of explanation. Note: only one annotation needed for max.</p> <p>Should refer to either afforestation / tree planting or snow fences.</p> <p>Snow fences act as a barrier to the avalanche (1) and stop the snow from progressing further downhill (1) whereas trees also act as a barrier (1) but slow down the speed of the avalanche (1). Trees alone do not stop the avalanche but break its energy (1). These methods are put on the steep slopes (1) which are most susceptible to the avalanche (1).</p> <p>Note: only 1 method should be credited. Credit the best ideas if more than one method. For max 4 candidates must make explicit reference as to how the method reduces the effects of the avalanche, e.g. fences reduce energy of avalanche (1) therefore impact on houses down-slope is much reduced (1).</p>		<p>4</p> <p>(1+1)+(1+1)</p> <p>(1+1+1)+1</p>

Question Number	Indicative content	
3 (e)	Candidates focus on the causes of the avalanche, which include wet snow, weather patterns (including wind directions), sequencing of snow deposits, temperature, land-use and deforestation, trigger events such as formation of melt-crust etc. Details should be in context of chosen example.	
Level 1	1-2	A short list of ideas with one or two briefly described. May only be partially linked to causes of avalanche. Example either not appropriate, unclear or absent. Tends to be very basic use of geographical terminology.
Level 2	3-4	An answer which has some details of location OR partial explanation. Response likely to refer to either people and / or environment. At top of band, there is either good location details(s) OR development through one explanation. Generally clearly communicated but with limited use of geographical terminology.
Level 3	5-6	Explanations of at least two causes linked to chosen avalanche. Well supported by factual information (linked to chosen avalanche). For top of level expect development by either range or depth of causes. Well communicated with good use of geographical terminology.

Question Number	Acceptable Answers	Reject	Mark
4 (a) (i)	Taranaki		1
ii	Conservative = Alpine Convergent = Hikurangi/Puysegur		2
bi	There are 3 main volcanic cones (1) With a lava flow extending from one of them (1) Two of the volcanic cones are billowing steam/smoke (1) The main volcano is approximately 700-800m in height (1) and is very steep sided (1) An answer which clearly has no linkage to Fig 4b (implicit or explicit) should be given max 2.	No credit for identifying volcanoes No credit for stating volcano in ocean (as stated in title for Fig 4b)	3 1+1+1 (1+1)+1
ii	Maximum 2 marks for description. Explanations credited at 1 mark each. Max 3 marks without a process and a full sequence. Credit points on diagram, but no additional credit for a diagram. Hotspot volcanoes – a number of linked ideas: Hot spot volcanoes are associated with magma rising to the surface (in a mantle plume) (1). They are found mid-plate (intra-plate) (1). This occurs as the material is less dense than that around it in the mantle (1). When the plume reaches the crust it causes the crust to dome (and crack) (1), which allows magma a route to the surface. Over time eruptions will build up on the surface and this may lead to the formation of a volcano above sea level. As the plate moves the volcano will progressively become dormant and extinct and the volcano will be eroded by the sea.		4 (1+1)+(1+1) (1+1+1)+1

c	<p>Max 3 if only one economic reason is developed.</p> <p>People live near volcanic slopes due to the fertile soil (1). This is a result of the ash which has been broken down (1) leaving the slope with high amount of nutrients (1). Minerals are found near volcanoes, such as tin, diamonds (1), therefore industry locate here to profit from the extraction of these (1). People may have jobs such as tour guides (1), which they would not have if they moved elsewhere (1) therefore leaving them relatively poor (1).</p> <p>Development could come through the use of an example.</p> <p>List of single statement points, e.g. use for electricity. Use for walking = max 1 in total.</p>		<p>4</p> <p>$(1+1)+(1+1)$</p>
di	Seismometers/Seismographs		1
ii	<p>Max 2 if descriptive Max 2 if not annotated Only one annotation needed for max.</p> <p>By hiding under desks (1) students will protect themselves from falling masonry/objects (1). By holding on the table it will not move (1) therefore you will not expose your position and be hit by falling objects (1). The furniture has protective guards on it (1) therefore this will stop items falling off the shelf (1).</p> <p>For max 4 candidates must make explicit reference as to how the method reduces the effects of an earthquake, e.g. students hide under the table (1) which will protect them from falling masonry or rubble (1).</p>		<p>4</p> <p>$(1+1)+(1+1)$</p> <p>$(1+1+1)+1$</p>

Question Number	Indicative content	
4(e)	<p>Candidates should focus on causes of either volcanic eruption or an earthquake.</p> <p>Causes to include plate names, plate boundaries (e.g. process of subduction or convection, or pressure build up on a fault), an explanation of the process leading to event (e.g. formation of melt in a subduction zone or build-up of pressure on a fault line), the processes leading to the event (e.g. processes leading to formation of an explosive eruption e.g. andesitic lava).</p> <p>Specific means something like the name of a place, a date or a number.</p>	
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-2	A short list of ideas with one or two briefly described. May only be partially linked to causes of an earthquake or a volcanic eruption. Example either not appropriate, unclear or absent. Tends to be very basic use of geographical terminology.
Level 2	3-4	An answer which has some details of location OR partial explanation. Specific reference to cause. At top of band, there is either good location details(s) OR development through one explanation. Generally clearly communicated but with limited use of geographical terminology.
Level 3	5-6	Explanations of at least two causes linked to chosen earthquake or volcanic eruption. Well supported by factual information (linked to chosen earthquake or volcanic eruption). For top of level expect development by either range or depth of causes. Well communicated with good use of geographical terminology.

Question Number	Acceptable Answers	Reject	Mark
5 (a) (i)	<p>1 mark for correctly drawn bar chart for UK 1 mark for correctly drawn bar chart for Germany Both lines per bar have to be correct. Shading needs to reflect the key (or max 1).</p> <p>Candidates do not need to present in the correct order.</p>		<p>2</p> <p>1+1</p>
ii	Bangladesh		1
iii	<p>Point mark One mark reserved for use of data Differences can be between the countries or within a country.</p> <p>Can give overviews of waste production e.g. Industrial waste is the highest in all HICs (1). France has most Industrial waste (1). Both Germany and the UK have the same percentage of agricultural waste (1). Use of data (1)</p>	<p>Comments about Bangladesh</p> <p>No credit for explanation.</p>	<p>4</p> <p>1+1+1+1</p>
iv	<p>Descriptive points up to 2 marks One mark per explanation Candidates must clearly explain to get beyond 2.</p> <p>e.g. People in HICs have greater wealth therefore they can afford to purchase more products (1). These products often come with packaging (1) which is often disposed of and non recyclable (1) therefore it can end up in landfill (1). People in HICs are materialistic (consumer society) (1), therefore will replace products rather than fix them (1), which generates greater amounts of waste as broken items are sent to landfill (1). Many people have not developed a culture of recycling (1) therefore due to laziness they send more to landfill (1)</p> <p>Note – question states people in HICs are wealthier therefore do not credit this point.</p>		<p>4</p> <p>(1+1)+(1+1)</p> <p>(1+1+1)+1</p>
Bi	Highest – toilet roll, large coffee, water of bottle, banana – lowest		1
ii	500(g CO ₂)		1

<p>iii</p>	<p>Carbon footprint – defined as ‘total amount of GHG emissions caused by an organisation, event, and product over a period of time.’</p> <p>Is the amount of GHG (CO₂) released (1) for a product purchased or an activity undertaken by people (1), in the day-to-day or annual activities, or a period of time(1).</p>	<p>Reject reference to carbon on its own.</p>	<p>2</p>
<p>iv</p>	<p>Can point mark Maximum 2 marks for description. 1 mark per explanation</p> <p>Candidates can refer to anything from transport, to energy efficiency measures – mark each on their own merit.</p> <p>e.g. People can reduce energy consumption through installing double glazed windows as they will reduce heat loss (1). Installing loft insulation will reduce heat loss (1), this would result in lower heating bills (1) as the thermostat will not have to be used as much or as long (1). Switch lights off when you are not in the room (1). This means that carbon footprint will be reduced as less energy is taken from the National Grid (1). People could cycle to work instead of driving (1). This will result in less petrol emissions therefore reducing carbon output (1)</p>		<p>4</p> <p>(1+1)+(1+1)</p> <p>(1+1+1)+1</p>

Question Number	Indicative content	
5(c)	<p>Must focus on managing waste (not energy) at a national scale. Candidate is likely to focus on recycling schemes, incineration plants, landfill sites or waste transfer to other countries.</p> <p>Examples of different types of waste include:</p> <ul style="list-style-type: none"> i) Classifications of waste e.g. municipal, hazardous, toxic ii) Types within a classification e.g. glass, paper, garden, food. <p>Local scale examples (e.g. recycling in Bracknell) = max level 1.</p> <p>Marks will be awarded based on QWC – see beginning of mark scheme. Specific means something like the name of a place, a date or a number.</p>	
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-2	A short list of ideas with one or two briefly described. May only be partially linked to waste management. Example either not appropriate, unclear or absent. Tends to be very basic use of geographical terminology.
Level 2	3-4	An answer which has some details of location OR partial explanation. Specific reference to one type of waste management in a HIC. At top of band, there is either good location details(s) OR development through one explanation. Generally clearly communicated but with limited use of geographical terminology.
Level 3	5-6	Explanations of at least two types of waste managed by a HIC. Well supported by factual information. For top of level expect development by either range or depth of the management of types of waste in a HIC. Well communicated with good use of geographical terminology.

Question Number	Acceptable Answers	Reject	Mark
6 (a) (i)	<p>1 mark for correctly drawn bar chart for UK 1 mark for correctly drawn bar chart for Germany Both lines per bar have to be correct. Shading needs to reflect the key (or max 1).</p> <p>Candidates do not need to present in the correct order.</p>		<p>2</p> <p>1+1</p>
ii	Bangladesh		1
iii	<p>Point mark One mark reserved for use of data (within 1%) Differences can be between the countries or within a country.</p> <p>e.g. HICs use more water for industrial purposes (1) often over 60% (1) Water use in all HICs is lowest in agricultural sector (1). UK is lowest on 5%. France has the highest domestic water use (1) Use of data (1)</p>	<p>Reference to Bangladesh</p> <p>Explanation</p>	<p>4</p> <p>1+1+1+1</p>
iv	<p>Descriptive points up to 2 marks One mark per explanation Must be clear explanation to get beyond 2.</p> <p>e.g. This is because they can afford the infrastructure such as piping to homes (1) which therefore gives people a better supply (1). People can also afford labour saving devices such as washing machines (1), these consume large amounts of water which increase usage (1). People in HICs are more obsessed with hygiene (1) therefore have two to three showers a day (1).</p> <p>Note – question states that people in HICs are wealthier – do not credit this point.</p>		<p>4</p> <p>(1+1+1)+1</p> <p>(1+1)+(1+1)</p>
Bi	<p>Highest Transferring water Water piped down a slope Pumping water by hand from a well Lowest Protecting clean spring water</p>		1
ii	£10 500		1

iii	<p>Point mark. Do not credit examples.</p> <p>Appropriate technology relates to small scale community projects (1) which are able to be maintained by the local community (1) on a local scale or in a sustainable way (1).</p>		2
iv	<p>Descriptive points max 2 Credit each description at one mark Max 3 without examples. Examples can be both place and method.</p> <p>e.g. the use of water metering to restrict use (1) which makes you aware of how much water a household is using and could incur a cost (1); the use of drip irrigation to restrict water to agriculture (1) so that only the correct amount of water is fed to the plants and none wasted (1) therefore reduces the impacts of evaporation (1). Water recycling in industrial plants for use with machinery (1) therefore clean water is not taken out of river systems unnecessarily (1). For example Walkers Crisps installed 30 water meters at their production plants (1) therefore it has reduced its water use by 50% saving 700 million litres of water (1).</p>		4 (1+1+1)+1 (1+1)+(1+1)

Question Number	Indicative content	
6(c)	<p>Can refer to any example of water conflict between different areas such as River Colorado/Tigris-Euphrates which were examples of dam building leading to reduced supply Conflicts based on resource/land access/politics Emphasis should be on conflict not the scheme Max level 1 if not a water transfer scheme which causes conflict between areas or emphasis is on scheme. Marks will be awarded based on QWC. Specific means something like the name of a place, a date or a number. Max level 1 for incorrect case studies.</p>	
Level	Mark	Descriptor
	0	No rewardable material
Level 1	1-2	A short list of ideas with one or two briefly described. May only be partially linked to water transfer. Example either not appropriate, unclear or absent. Tends to be very basic use of geographical terminology.
Level 2	3-4	An answer which has some details of location OR partial explanation of one area. Specific reference to conflict associated with water transfer. At top of band, there is either good location details(s) OR development through one explanation. Generally clearly communicated but with limited use of geographical terminology.
Level 3	5-6	Explanations of points in relation to conflict associated with water transfer between two countries. Well supported by factual information. For top of level expect a clear link between the causes of conflict and the conflict associated with water transfer between two countries. Well communicated with good use of geographical terminology.

Further copies of this publication are available from
Edexcel Publications, Adamsway, Mansfield, Notts, NG18 4FN

Telephone 01623 467467

Fax 01623 450481

Email publication.orders@edexcel.com

Order Code UG037169 Summer 2013

For more information on Edexcel qualifications, please visit our website
www.edexcel.com

Pearson Education Limited. Registered company number 872828
with its registered office at Edinburgh Gate, Harlow, Essex CM20 2JE

Ofqual




Llywodraeth Cynulliad Cymru
Welsh Assembly Government

