

Student Bounty.com

**General Certificate of Secondary Education** 2010

# Geography

Unit 1: **Understanding Our Natural World** 

**Higher Tier** 

[GGG12]

**MONDAY 14 JUNE, MORNING** 



TIME

1 hour 30 minutes.

### **INSTRUCTIONS TO CANDIDATES**

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

Write your answers in the spaces provided in this question paper. Answer **all** questions.

## **INFORMATION FOR CANDIDATES**

The total mark for this paper is 100.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question. Quality of written communication will be assessed in questions requiring extended answers.

For Examiner's use only				
Question Number	Marks			
1				
2				
3				

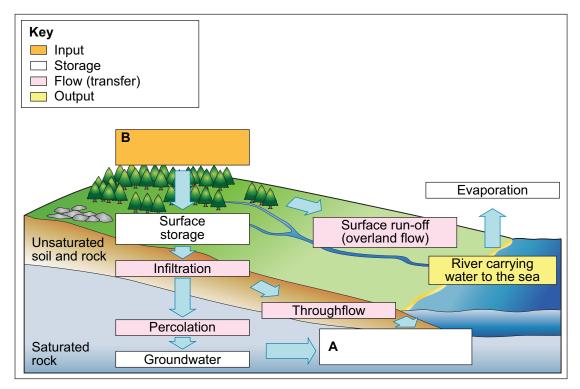
Total Marks	



6265

#### Theme A: The Dynamic Landscape

**1 (a)** Study **Fig. 1** which shows how water moves within the drainage basin system. Answer the questions which follow.



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Fig. 1

(i) Complete Fig. 1 by labelling the transfers at **A** and **B**. Choose your answers from the list below.

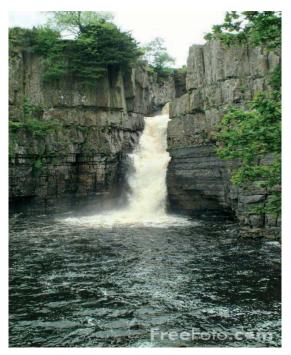
groundwater flow watershed precipitation discharge

[2]

State the meaning of the term interception.	_	Exami Marks
	_ [2]	
Explain how heavy rainfall on wet ground might affect surface un-off.		
	[3]	

(b) Study Fig. 2, which shows a photograph of a waterfall in England.

Examiner Only					
Marks	Remark				



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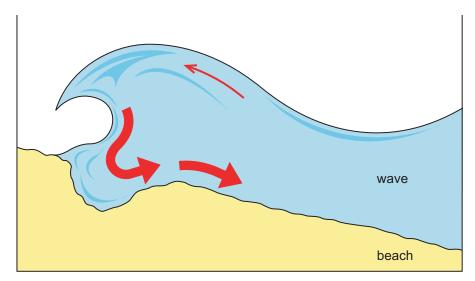
Fig. 2

otograph in <b>Fig. 2</b> .	

For a river within the British Isles, describe and explain the physical and human reasons why it flooded.  Name of river	[3]  For a river within the British Isles, describe and explain the physical and human reasons why it flooded.  Name of river	risk posed by a river.		Marks	er Only Rema
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and human reasons why it flooded.  Name of river	and human reasons why it flooded.  Name of river				
Name of river	Name of river				
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[8]		<del> </del>			
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	[8]				
	[8]				
[8]	[8]				
	[8]		_		
[8]	[8]		_		
			[8]		

(e) Study Fig. 3 which shows a destructive wave. Answer the questions which follow.

**Examiner Only** 



Source: Principal Examiner

Fig. 3

[3]
DW .
_

1	Attrition	2	Abrasion	3 Hydraulic pressure
Ch	osen process			
_				
_				
_				[2]

**(f)** Study **Fig. 4**, a photograph of a spit in Devon. Answer the questions which follow.



© Dawlish Warren Tourism

Fig. 4

Explain how a spit such as the one shown in <b>Fig. 4</b> was formed.				ed.		
				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	

(g)	(i) E	xplain how groynes protect a beach.		Examin	er Only
				Marks	Remark
			_		
			_		
			[4]		
	(ii)	Suggest a possible conflict which might arise between tourism and industrial landuse in the coastal zone.			
			[2]		
(h)		one area in the British Isles, describe and evaluate the ainability of its coastal management strategy.			
	Nam	e of coastal area in British Isles			

		ner Only
	Marks	Remark
 [9]		

## Theme B: Our Changing Weather and Climate

Examiner Only

Marks Remark

**2 (a)** Study **Table 1** which shows two weather recording instruments. Answer the question which follows.

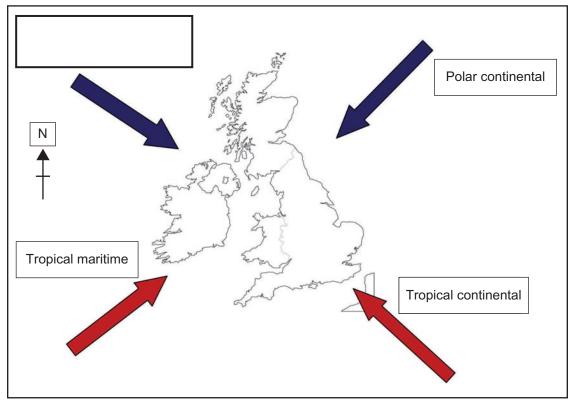
Table 1

IMAGE OF INSTRUMENT	NAME OF INSTRUMENT	ELEMENT OF WEATHER RECORDED	UNIT OF MEASUREMENT
© CCEA		AIR PRESSURE	
© CCEA	ANEMOMETER		KNOTS

Complete **Table 1** by writing the correct answers in the blank boxes

[3]

**(b)** Study **Fig. 5** which shows the different air masses that affect the British Isles. Answer the questions which follow.

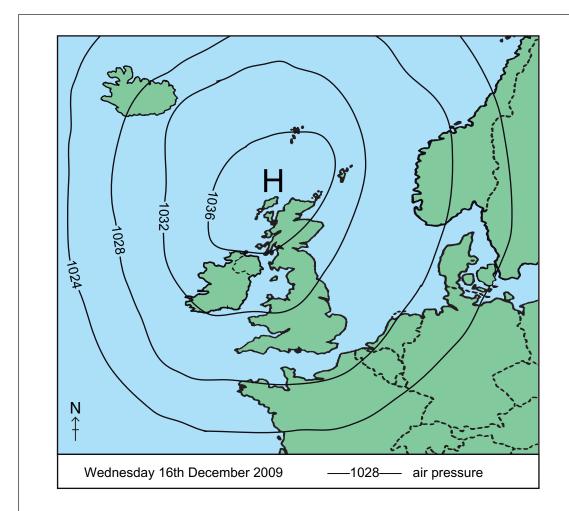


Source: Principal Examiner

Fig. 5

- (i) Complete Fig. 5 by inserting the name of the correct air mass. [1]
- (ii) Describe and explain the temperature and moisture characteristics of a Tropical continental air mass.

[4]



Forecasters have warned that the weather in Britain is set to turn cold this weekend.

Temperatures will fall to as low as -5°C in London and -2°C in Edinburgh by Sunday.

Over the next few days the country will experience dry, calm and cold conditions.

Fig. 6

(i) State the type of weather system over the British Isles on Wednesday 16th December 2009.

[1]

LOW	CALM	DRY
TEMPERATURES	CONDITIONS	CONDITIONS
		[6]
State the meaning of th	e term <b>global warm</b>	ing.
		[2]

(ii)	Explain <b>one</b> natural cause of climate change.		Examin	er Only
` '			Marks	Remark
		_		
		_		
		_		
		_		
		_		
		[3]		
		[-]		
/:::\	Evaluate the quatainability of using alternative courses of anomal	,		
(111)	Evaluate the sustainability of using alternative sources of energy	/		
	as a strategy to deal with climate change. (You should make			
	reference to a place in your answer.)			
		_		
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		_		
		1		
		[5]		

**3 (a)** Study **Fig. 7** which shows the structure of the Earth. Answer the questions which follow.

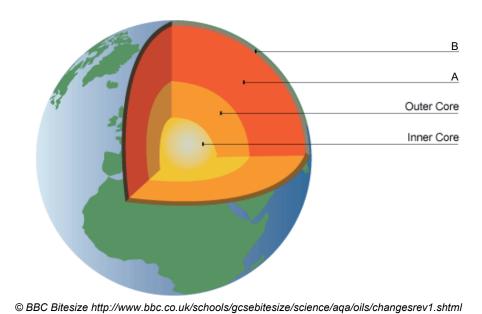


Fig. 7

(i) Write the labels for A and B in the lines below.

A	[1]
В	[1]

(ii) Explain why plates move.

			13

**(b)** Study **Fig. 8** which shows the Giant's Causeway, an area of basalt columns. Answer the questions which follow.



Source: Principal examiner

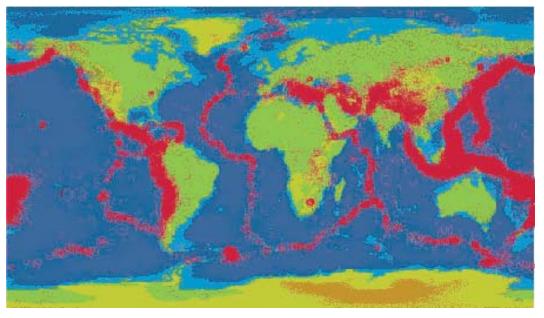
Fig. 8

(i) State the rock type to which basalt belongs.

All rocks can be placed into one of three types.

(ii) Explain the formation of basalt columns.

(c) Study **Fig. 9** which shows the global distribution of earthquakes. Each red dot is the epicentre of an earthquake. Answer the questions which follow.



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Fig. 9

	[
Describe the global distribution of earthquakes shown on	Fig.
	Describe the global distribution of earthquakes shown on

(d) (i)	Explain the cause of an earthquake you have studied in a LE Location of earthquake	Marks Remark
	Explanation	
(ii)	Describe three impacts the earthquake had.	
		[6]
TH	IS IS THE END OF THE QUESTION PAPER	_
		_



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