GCSE

Rewarding Learning

CCEA GCSE Specimen Assessment Materials for Geography

For first teaching from September 2017
For first assessment in Summer 2018
For first award in Summer 2019
Subject Code:3910

Foreword

CCEA has developed new specifications which comply with criteria for GCSE qualifications. The specimen assessment materials accompanying new specifications are provided to give centres guidance on the structure and character of the planned assessments in advance of the first assessment. It is intended that the specimen assessment materials contained in this booklet will help teachers and students to understand, as fully as possible, the markers' expectations of candidates' responses to the types of tasks and questions set at GCSE level. These specimen assessment materials should be used in conjunction with CCEA's GCSE Geography specification.

BLANK PAGE

GCSE Geography
Specimen Assessment Materials

Contents

Subject Code	3910
QAN	603/1080/7

SPECIMEN PAPERS

DIVIDER FRONT

SPECIMEN PAPERS

DIVIDER BACK

Rewarding Learning

Centre Number

Candidate Number

General Certificate of Secondary Education
2018

Geography

Unit 1

Understanding Our Natural World

[CODE]

SPECIMEN PAPER

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** four questions.

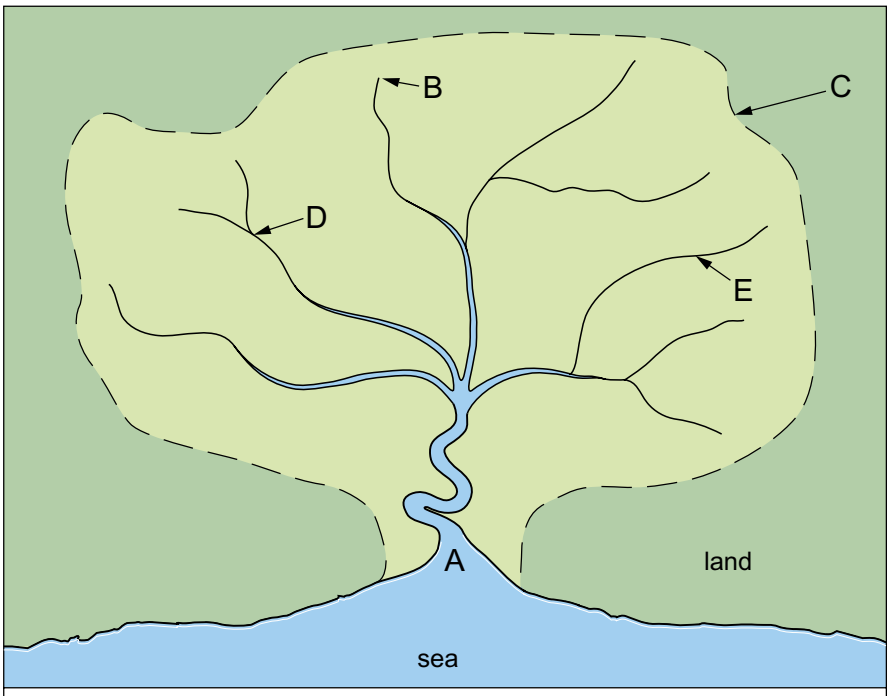
INFORMATION FOR CANDIDATES

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 **1(e)**, **2(f)** and **3(f)**.

For Examiner's use only	
Question Number	**Marks**
1	
2	
3	
4	
Total Marks	

Examiner Only	
Marks	Re-mark

1 (a) Study **Fig. 1** below which shows a drainage basin. Answer the questions which follow.



Key

A = _____ = Where the river enters the sea.

B = _____ = The start of a river.

C = _____ = High ground which separates one drainage basin from another.

D = _____ = Where two rivers meet.

E = tributary = A small river which joins the main river.

Fig. 1

(i) Complete the key for **Fig. 1** by labelling features A-D. Choose your answers from the list below. One has been completed for you.

flooding confluence watershed mouth source [4]

(ii) State the meaning of the term **infiltration**.

_____

_____

_____

_____ [2]

Examiner Only	
Marks	Re-mark

(b) Study **Fig. 2** below which shows how load size varies with distance from the source of the Colin River in Belfast. Answer the question which follows.

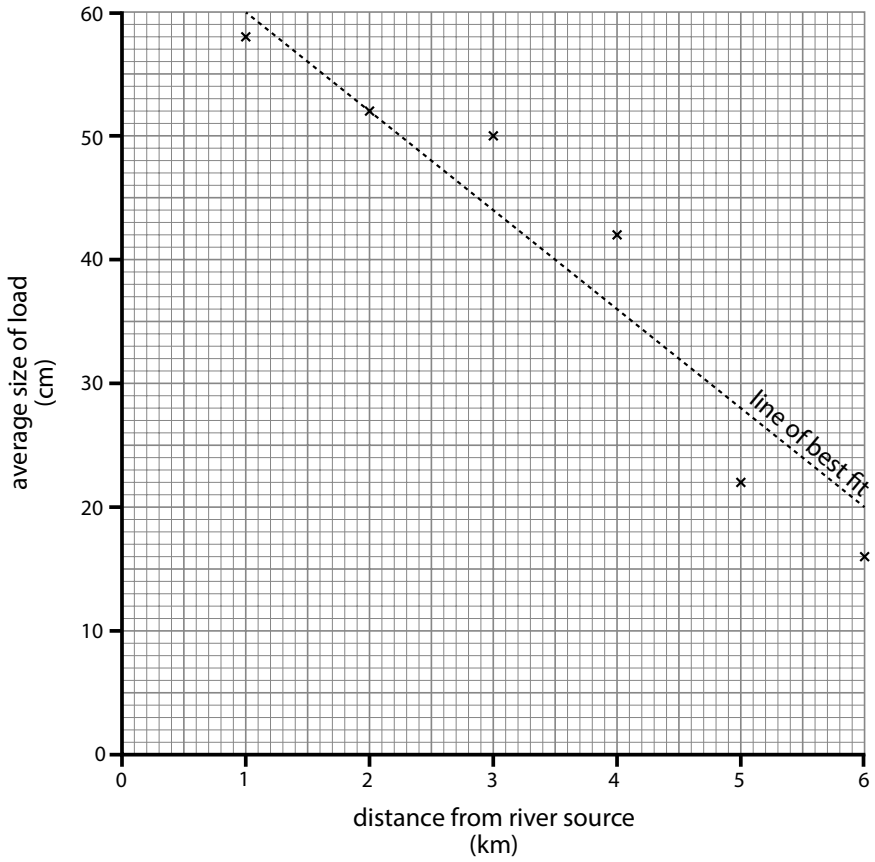


Fig. 2

Describe how load size varies with distance from the source of the Colin River.

[4]

Examiner Only	
Marks	Re-mark

(c) Study **Fig. 3** below which shows a river meander. Answer the question which follows.

Fig. 3

Explain how a **meander** is formed.

[5]

DO NOT WRITE ON THIS PAGE
(Questions continue overleaf)

(d) Study **Fig. 4** below which shows three flood prevention methods. Answer the question which follows.

Examiner Only	
Marks	Re-mark

© U.S Department of the Interior – Bureau of Reclamation
http://www.usbr.gov/uc/rm/crsp/

Dam

By permission of © Forest Service NI , an Agency of the Department of Agriculture, Environment and Rural Affairs

Afforestation

© CCEA

Embankment

Fig. 4

Choose **one** of the flood prevention methods shown in **Fig. 4** on the previous page, and explain **one** way in which it might help to reduce the flood risk on a river.

Chosen flood prevention strategy _____

_____

_____

_____

_____

_____

_____ [3]

Examiner Only	
Marks	Re-mark

(e) With reference to a river in the British Isles, explain the physical **and** human causes of a flood on your named river.

Examiner Only	
Marks	Re-mark

Name of river: _____

Causes of the flood:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____ [7]

Extra space

_____

_____

_____

_____

_____

_____

Examiner Only	
Marks	Re-mark

2 **(a)** Study **Fig. 5** below which shows a stretch of coastline in Greece. Answer the question which follows.

© siete_vidas / iStock / Thinkstock

Fig. 5

Name **two** coastal landforms shown in **Fig. 5**.

1. _____

2. _____ [2]

(b) Coastlines can be shaped by constructive and destructive waves.

Complete the following sentences to compare constructive and destructive waves. Choose your answers from the list below.

constructive	**destructive**	**erode**
build up	**less**	**more**

1. In _____ waves the backwash is stronger than the swash.
2. _____ waves are low and far apart.
3. Destructive waves are _____ frequent than constructive waves.
4. Constructive waves _____ the beach. [4]

(c) Explain how **hydraulic action** causes erosion at the coast.

_____

_____

_____

_____

_____

_____ [3]

(d) State **three** reasons why a coastline may need to be defended.

1. _____
2. _____
3. _____ [3]

Examiner Only	
Marks	Re-mark

(e) Study **Fig. 6** below which shows a spit. Answer the question which follows.

© Jupiterimages / Stockbyte / Thinkstock

Fig. 6

Explain how a spit is formed.

_____

_____

_____

_____

_____

_____

_____

_____

_____ [5]

Examiner Only	
Marks	Re-mark

(f) With reference to a case study from the British Isles, evaluate the sustainability of a coastal management strategy you have studied.

[8]

Extra space

Examiner Only	
Marks	Re-mark

Examiner Only	
Marks	Re-mark

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

Table 1

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

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

[3]

(b) Study **Table 2** below which shows the main air masses that affect the British Isles.

Complete **Table 2** by drawing an arrow to match up each air mass with its correct description. One has been completed for you.

[3]

Table 2

Air Mass	Description
• Tropical Maritime	• Most common air mass affecting the British Isles. The air mass travels over the Atlantic Ocean bringing cold and wet conditions.
• Tropical Continental	• Least common air mass affecting the British Isles. The air mass usually only occurs during summer when it brings hot and dry conditions.
• Polar Maritime	• This air mass originates over Northern Europe. It brings cold and dry conditions.
• Polar Continental	• This air mass travels from the south-west bringing warm and wet weather in summer.

Examiner Only	
Marks	Re-mark

Examiner Only	
Marks	Re-mark

(c) The Met Office uses images from satellites, such as the one shown in **Fig. 7** below to help create weather forecasts. Answer the questions which follow.

© 3DSculptor / iStock / Thinkstock

Fig. 7

(i) State the type of satellite which is fixed in the same location in space.

_____ [1]

(ii) Explain how satellites help to create a weather forecast.

_____

_____

_____

_____

_____

_____ [3]

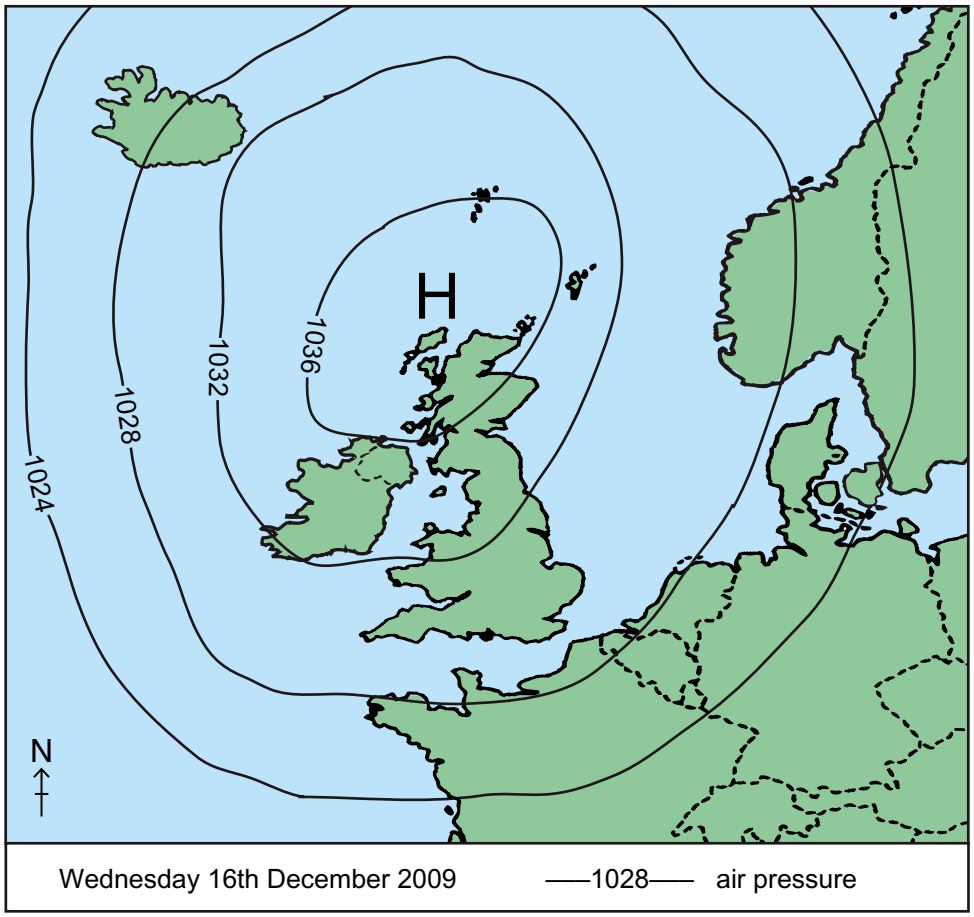
(d) State **two** factors that affect climate.

1. _____

2. _____ [2]

Examiner Only	
Marks	Re-mark

(e) Study **Fig. 8** below which shows a weather map and information about a weather system over the British Isles on Wednesday 16th December 2009. Answer the questions which follow.



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. 8

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

_____ [1]

(ii) Explain why the British Isles experienced dry **and** calm conditions on Wednesday 16th of December 2009.

Dry conditions:

Calm conditions:

[6]

Examiner Only	
Marks	Re-mark

(f) With reference to a case study from **outside** the British Isles, describe the impacts of an extreme weather event on people **and** property.

[6]

Extra space

Examiner Only	
Marks	Re-mark

Examiner Only	
Marks	Re-mark

4 **(a)** Study **Fig. 9** which shows the structure of the earth. Answer the question which follows.

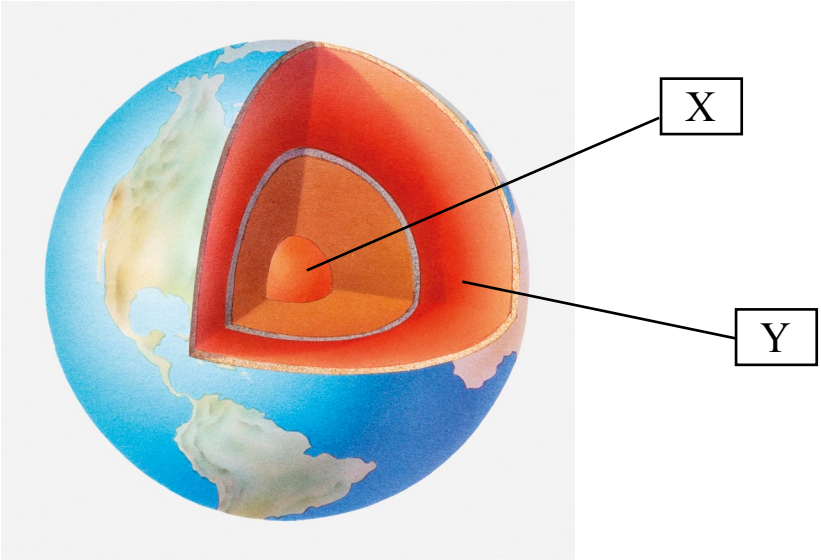


Fig. 9

Name the layers of the earth labelled **X** and **Y**

X = _____

Y = _____ [2]

(b) Plates are continually moving.

Complete **Table 3** below by putting the statements in the correct order to show how plates move. One has been completed for you.

Table 3

The molten material cools and sinks back down dragging the plates along.	
Convection currents in the mantle move magma upwards.	
Plates float on the surface of the mantle.	1
These currents spread out at the surface underneath the plates.	

[3]

Examiner Only	
Marks	Re-mark

Examiner Only	
Marks	Re-mark

(c) The earth's crust is made up of many different types of rock. Answer the questions which follow.

(i) Complete **Table 4** below by stating one other example of both an igneous and a sedimentary rock.

Table 4

Igneous	Sedimentary
Granite	Sandstone

[2]

(ii) Explain how sedimentary rocks are formed.

_____

_____

_____

_____

_____

_____ [3]

Examiner Only	
Marks	Re-mark

(d) An earthquake is a sudden movement within the earth's crust. Study **Fig. 10** below which shows damage caused by an earthquake. Answer the questions which follow.

© Naypong / iStock / Thinkstock

Fig. 10

(i) Using **Fig. 10**, outline **one** short term impact this damage could have on the economy of the area.

_____

_____

_____

_____ [2]

(ii) Describe **one** long term strategy which could improve safety in an earthquake prone area.

_____

_____

_____

_____

_____

_____ [3]

Examiner Only	
Marks	Re-mark

(e) (i) Different types of volcanoes have different characteristics. Complete **Table 5** below using a tick (✓) to match each characteristic with the correct type of volcano.

Table 5

Characteristic	**Shield Volcano**	**Composite Volcano**
The volcano has steep slopes and a narrow base.		
Eruptions are frequent and non-violent.		
The peak is low and rounded.		
Occurs at destructive plate boundaries.		

[4]

(ii) Discuss the potential global impact on people and the environment of a supervolcano eruption.

[6]

Extra space

Examiner Only	
Marks	Re-mark

THIS IS THE END OF THE QUESTION PAPER

BLANK PAGE

Rewarding Learning

Centre Number

Candidate Number

General Certificate of Secondary Education
2018

Geography

Unit 2

Living in Our World

[CODE]

SPECIMEN PAPER

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** four questions.
You are provided with an OS map for use with Question 2.
Do not write your answers on this map.

INFORMATION FOR CANDIDATES

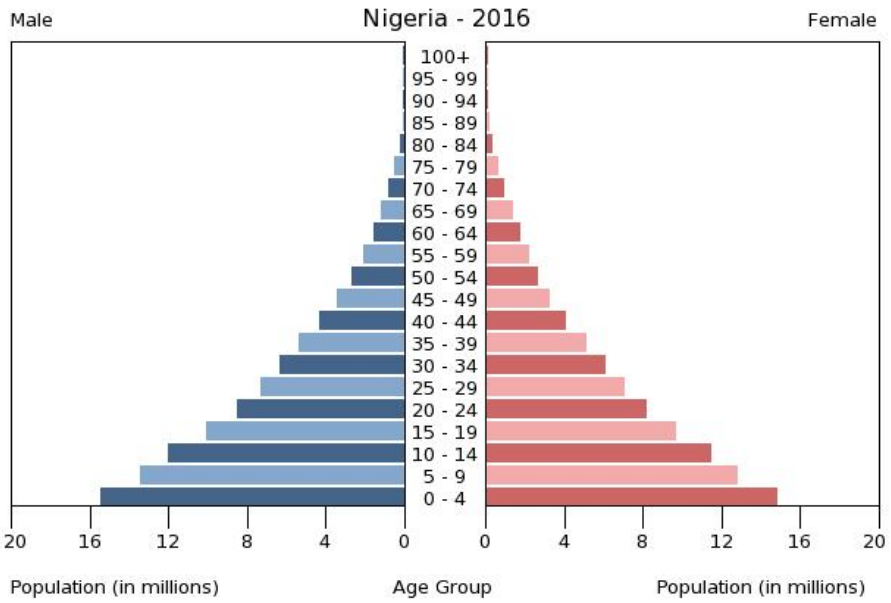
The total mark for this paper is 100.
Figures in brackets printed down the right hand side of pages indicate the marks awarded to each question or part question.
Quality of written communication will be assessed in questions **1(c)**, **2(e)(ii)** and **3(d)**.

For Examiner's use only	
Question Number	**Marks**
1	
2	
3	
4	
Total Marks	

Theme A : Population and Migration

Examiner Only	
Marks	Re-mark

1 **(a)** Study **Fig. 1** below which shows a population pyramid for Nigeria in 2015. Answer the questions which follow.



Source: https://www.cia.gov/library/publications/the-world-factbook/geos/ni.html

Fig. 1

(i) State the meaning of the term **population structure.**

_____

_____

_____

_____ [2]

(ii) Underline the population (in millions) in the age group 0–4 in Nigeria in 2015.

15 million **24 million** **29 million**

[1]

(b) Study **Table 1** below which shows information about the population of the UK by age group from 1991–2050 (estimated). Answer the questions which follow.

Examiner Only	
Marks	Re-mark

Table 1

Age Groups			
UK Population (millions in each age group)			
	Under 19	**20-64**	**65+**
1991	14.8	33.8	9.1
2005	14.7	36.2	9.5
2031 (estimated)	13.3	36.3	14.7
2050 (estimated)	12.5	35.0	16.4

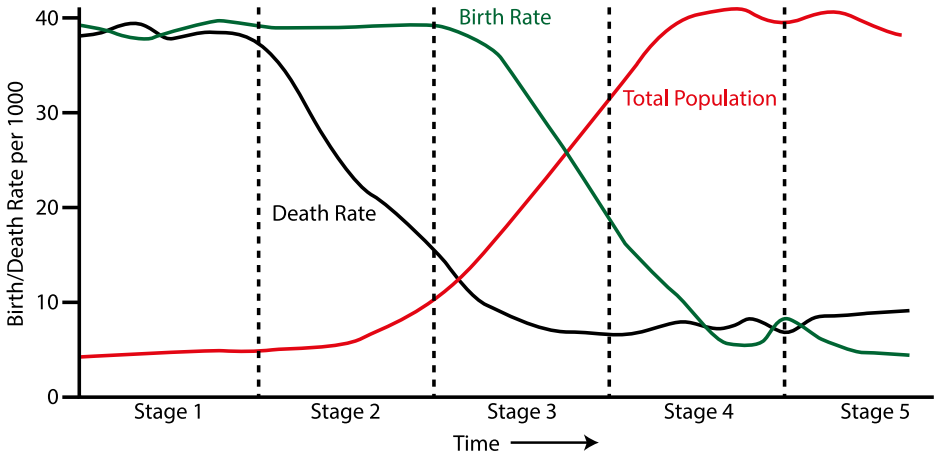
(i) Describe the changes in the structure of the population of the UK by age groups as shown in **Table 1** above.

[3]

(ii) Explain **one** impact that a large aged dependent population may have on a country.

[3]

(c) Study **Fig. 2** below which shows the Demographic Transition Model (DTM). The model shows how birth and death rates change with time. Answer the question which follows.



Geography for CCEA GCSE Level by Tim Manson © Colourpoint Educational 2013

Fig. 2

Explain why death rates started to fall at the beginning of Stage 2. You should refer to **two** reasons in your answer.

[6]

Examiner Only	
Marks	Re-mark

(d) State the meaning of the term **economic migrant.**

_____

_____

_____

_____ [2]

Examiner Only	
Marks	Re-mark

(e) There has been an increase across the world in the movement of refugees.

With reference to your case study, discuss the challenges faced by **both** the refugees **and** the destination country.

Refugees:

[4]

Destination country:

[4]

Extra space

Examiner Only	
Marks	Re-mark

Theme B: Changing Urban Areas

Examiner Only	
Marks	Re-mark

2 **(a)** Some characteristics of urban zones are listed in **Table 2** below.

Complete **Table 2** below by drawing arrows to show which characteristics are part of the inner city and which are part of the rural–urban fringe.
One has been completed for you.

Table 2

Inner City	Characteristic	Rural Urban Fringe
←	Terraced housing	
	Large back gardens	
	Narrow streets	
	Modern factories	

[3]

(b) Study the Ordnance Survey extract of Durham, England (**A3 Insert**) and answer the questions which follow.

(i) The Central Business District (CBD) of Durham can be found in grid square GR 2742. Outline evidence from the map that supports this statement.

_____

_____

_____

_____

_____

_____ [3]

(ii) State the straight line distance from the park and ride terminus at GR 307446 to the bus and coach station at GR 269426.

_____ km [2]

Examiner Only	
Marks	Re-mark

(iii) Complete **Table 3** below by arranging the following settlements in order of size beginning with the largest. One has been completed for you.

- Durham (GR 2742)
- Sherburn (GR 3142)
- Edmondsley (GR 2349)
- Sacriston (GR 2447)

Table 3

Rank Order	Settlement
1	Durham
2	
3	
4	

[3]

(c) (i) State the meaning of the term **urban regeneration.**

[2]

(ii) For a named **MEDC** inner city area you have studied, explain how an urban planning scheme has provided employment opportunities.

Name of MEDC inner city area _____

[3]

(d) State **one** challenge which a cultural mix can bring to a city.

[1]

(e) Rapid urbanisation in LEDCs has resulted in the development of shanty towns.

Examiner Only	
Marks	Re-mark

(i) State the meaning of the term **shanty town.**

[2]

(ii) Describe and explain the location of shanty town areas in a named LEDC city you have studied.

Name of LEDC city

[6]

Extra space

Examiner Only

Marks	Re-mark

3 (a) Study **Table 4** below which shows development indicators for four countries. Answer the questions which follow.

Table 4

	Indicator of Development			
Name of Country	**GNI per capita $US**	**Mean years of schooling**	**Life Expectancy at birth (years)**	**LEDC/ MEDC**
Bangladesh	3 191	5.1	71.6	LEDC
Mali	1 583	2.0	58.0	LEDC
Norway	64 992	12.6	81.6	MEDC
UK	39 267	13.1	80.7	MEDC

Data adapted from Human Development Report 2015 - http://hdr.undp.org/sites/default/files/2015_human_development_report_1.pdf

(i) State one social indicator of development listed in **Table 4.**

_____ [1]

(ii) Using evidence from **Table 4,** explain why Mali is considered to be an LEDC.

_____

_____

_____

_____

_____

_____ [3]

(iii) State the full name of the development indicator that combines all the indicators shown in **Table 4.**

_____ [2]

DO NOT WRITE ON THIS PAGE
(Questions continue overleaf)

Examiner Only	
Marks	Re-mark

(b) Study **Fig. 3** which shows trade figures for Venezuela, a country in South America. Answer the questions which follow.

Trade Figures for Venezuela

Product	% of export earnings
Oil	95
Aluminium, steel and iron ore	5

Value of Venezuela's Trade ($billion)	
Exports	Imports
61	39

Fig. 3

Using **Fig. 3** above to help you, underline the correct word(s) in each sentence below. One has been completed for you.

- Exports are goods and services that **<u>leave</u> / come into** a country.
- Venezuela earns more money from its **aluminium / oil** exports.
- The value of Venezuela's exports is **greater / less** than its imports.
- Venezuela is situated on the **north coast / west coast** of South America. [3]

(c) The Sustainable Development Goals (Global Goals) were launched in 2015.

Describe **two** Sustainable Development Goals (Global Goals)and explain how each goal attempts to reduce the development gap between MEDCs and LEDCs.

Goal One:

[4]

Goal Two:

[4]

Examiner Only	
Marks	Re-mark

(d) Discuss how globalisation can **both** help **and** hinder development. Refer to **one** case study of a BRICS country in your answer.

[8]

Extra space

Examiner Only	
Marks	Re-mark

Examiner Only	
Marks	Re-mark

4 (a) Study **Fig. 4** below which shows a carbon footprint logo. Answer the question which follows.

© simmosimosa / iStock / Thinkstock

Fig. 4

What does carbon footprint measure?

_____

_____

_____

_____ [2]

(b) Using renewable energy is becoming increasingly popular.

Describe **one** benefit and **one** disadvantage of using a renewable energy source.

Renewable energy source: _____

Benefit: _____

_____

_____

_____

Disadvantage: _____

_____

_____

_____ [4]

(c) Evaluate the effects of climate change. You should make reference to places in your answer.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____ [6]

Examiner Only	
Marks	Re-mark

Extra space:

Examiner Only	
Marks	Re-mark

(d) Study **Table 5** below which shows some cultural, economic and environmental impacts of mass tourism.

Complete **Table 6** below by placing the letters A-F into the correct box to show whether the impact is positive or negative. **One** has been completed for you.

Table 5

Impacts of Mass Tourism	
A	Tourists can learn about the local people's way of life.
B	Tourists can leave litter behind.
C	Local people are paid low wages to work in the tourist hotels.
D	Tourists spend money in local shops and restaurants.
E	Tourist towns may change over time to suit the tourists rather than the locals.
F	Tourism can help fund projects to improve the area.

Table 6

	Positive impact	Negative impact
Cultural	A	
Economic		
Environmental		

[5]

(e) Ecotourism holidays are becoming more popular. Answer the questions which follow.

(i) State the meaning of the term **ecotourism**.

_____

_____

_____

_____ [2]

Examiner Only

Marks	Re-mark

(ii) With reference to a named case study, describe and explain how ecotourism can protect the environment.

Examiner Only

Marks	Re-mark

Name of case study: _____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____ [6]

Extra space

_____

_____

_____

_____

_____

_____

THIS IS THE END OF THE QUESTION PAPER

Rewarding Learning

General Certificate of Secondary Education
2018

Geography

Unit 2

Living in Our World

[CODE]

SPECIMEN INSERT

*This document is available as a separate A3 Insert

4

A3 Ordnance Survey Map: Durham

Ordnance Survey

1:50 000 Scale
Landranger Series

Extract No 1843/88

Four colours should appear above; if not then please return to the invigilator.
Four colours should appear above; if not then please return to the invigilator.

ROADS AND PATHS

Not necessarily rights of way

Junction number
Service area (S) 1 Elevated
M1
Motorway (dual carriageway)

Motorway under construction

Unfenced Footbridge
Primary Route

A 470 Dual carriageway
Main road

A 493
Primary Route / Main road under construction

Secondary road

B 4518
Narrow road with passing places

A 855 Bridge B 885
Road generally more than 4m wide

Road generally less than 4m wide

Path / Other road, drive or track

Gradient: 20% (1 in 5) and steeper, 14% (1 in 7) to 20% (1 in 5)

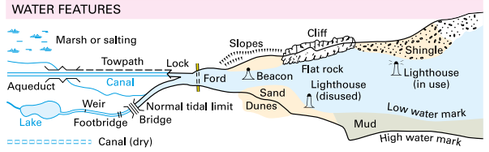
Gates / Road Tunnel

Ferry P Ferry V
Ferry (passenger) / Ferry (vehicle)

RAILWAYS

- Track multiple or single
- Track under construction
- Siding
- Tunnel
- Light rapid transit system, narrow gauge or tramway
- Bridges / Footbridge
- Level crossing (LC)
- Viaduct
- Station, (a) principal
- Light rapid transit system station

WATER FEATURES



HEIGHTS

1 metre = 3·2808 feet

50 Contours are at 10 metres vertical interval

·144 Heights are to the nearest metre above mean sea level

Where two heights are shown near to a triangulation pillar, the first height is to its base and the second (in brackets) to the highest natural point of the hill

ROCK FEATURES

PUBLIC RIGHTS OF WAY

Not shown on maps of Scotland

- Footpath
- Road used as a public path
- Bridleway
- Byway open to all traffic

The symbols show the defined route so far as the scale of mapping will allow.

The representation on this map of any other road, track or path is no evidence of the existence of a right of way

Danger Area — Firing and Test Ranges in the area. Danger! Observe warning notices.

OTHER PUBLIC ACCESS

- Other route with public access (not normally shown in urban areas). Alignments are based on the best information available. These routes are not shown on maps of Scotland.
- National/Regional Cycle Network
- Surfaced cycle route
- 4 National Cycle Network number
- 8 Regional Cycle Network number
- National Trail, European Long Distance Route, Long Distance Route, selected Recreational Routes

BOUNDARIES

- National
- District
- County, Unitary Authority, Metropolitan District or London Borough
- National Park

ANTIQUITIES

- Site of monument
- Stone monument
- Battlefield (with date)
- Visible earthwork
- VILLA Roman
- Castle Non-Roman

LAND FEATURES

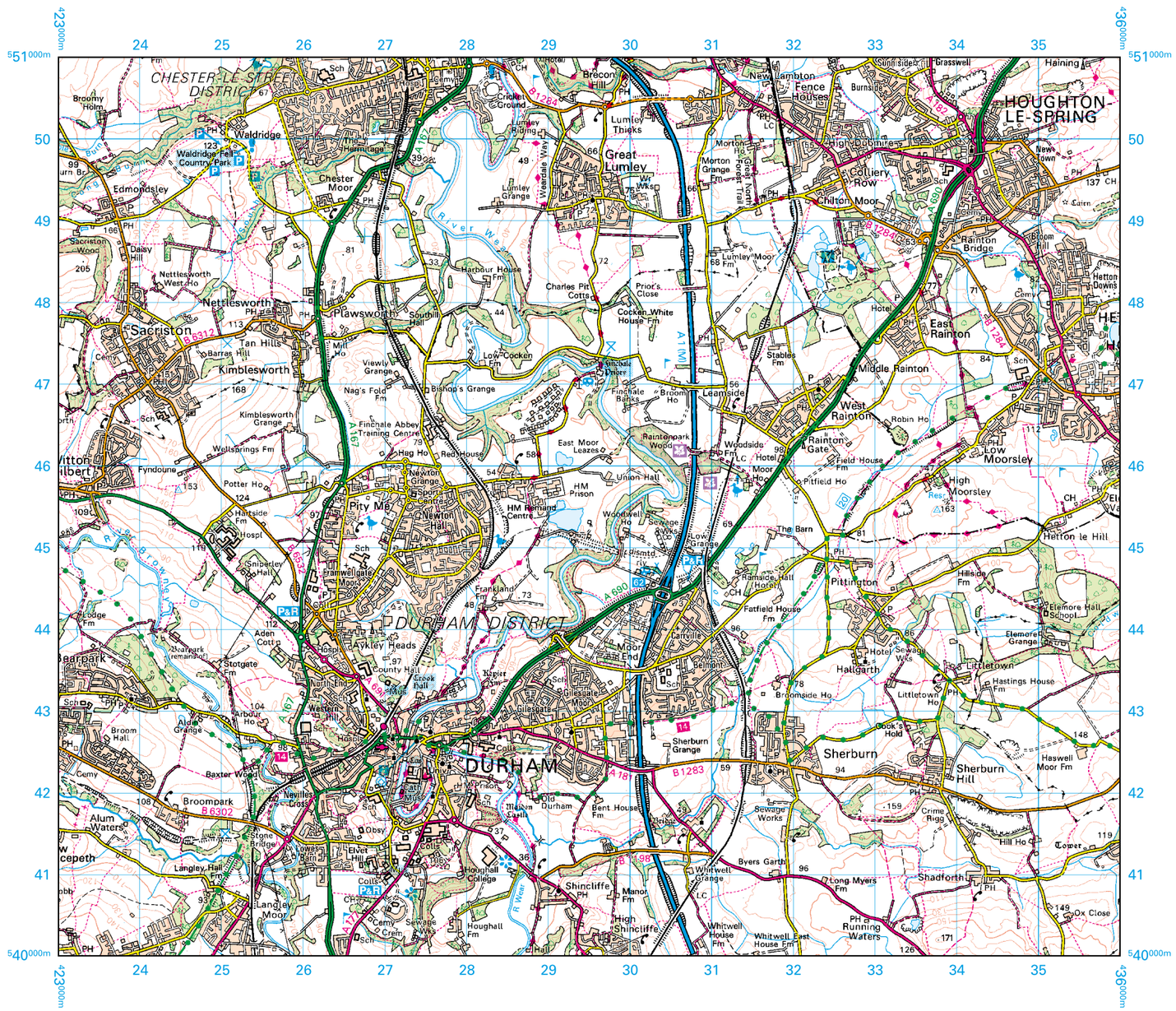
- Electricity transmission line (pylons shown at standard spacing)
- Pipe line (arrow indicates direction of flow)
- Buildings (ruin)
- Public building (selected)
- Bus or coach station
- Place of worship: with tower; with spire, minaret or dome; without such additions
- Chimney or tower
- Glass structure
- Heliport
- Triangulation pillar
- Mast
- Wind pump / wind generator
- Windmill with or without sails
- Graticule intersection at 5' intervals
- Cutting / embankment
- Quarry
- Spoil heap, refuse tip or dump
- Coniferous wood
- Non-coniferous wood
- Mixed wood
- Orchard
- Park or ornamental ground
- Forestry Commission access land
- National Trust-always open
- National Trust-limited access, observe local signs
- National Trust for Scotland

TOURIST INFORMATION

- Camp site
- Caravan site
- Garden
- Golf course or links
- Information centre, all year / seasonal
- Nature reserve
- P&R Parking, Park and ride, all year / seasonal
- Picnic site
- Selected places of tourist interest
- Telephone, public / motoring organisation
- Viewpoint
- V Visitor centre
- Walks / Trails
- Youth hostel

ABBREVIATIONS

CG	Cattle grid	P	Post office
CH	Clubhouse	PC	Public convenience (in rural areas)
MP	Milepost	PH	Public house
MS	Milestone	TH	Town Hall, Guildhall or equivalent



Scale 1: 50 000
2 centimetres to 1 kilometre (one grid square)

2 1 0 Kilometres 1 2 3
1 0 Miles 1 2

1 kilometre = 0·6214 mile
1 mile = 1·6093 kilometres

True North
Grid North
Magnetic North
Diagrammatic only

Rewarding Learning

General Certificate of Secondary Education
2019

Centre Number

Candidate Number

Geography

Unit 3

Fieldwork

[CODE]

SPECIMEN PAPER

TIME

1 hour.

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.
Complete in blue or black ink only. You may use an HB pencil for graphs and diagrams. **Do not write with a gel pen.**
Answer **all** questions.

INFORMATION FOR CANDIDATES

The total mark for this paper is 40.
Figures in brackets printed down the right hand side of pages indicate the marks awarded to each question.
Quality of written communication will be assessed in questions 7 and 8.

For Examiner's use only	
Question Number	**Marks**
1	
2	
3	
4	
5	
6	
7	
8	
Total Marks	

Answer **all** questions

Statement of fieldwork aims and hypotheses and table of data

At the end of the examination you must attach these securely to this paper using the treasury tag supplied.

Examiner Only	
Marks	Re-mark

1 State **two** specific fieldwork risks that you identified during the planning for your fieldwork investigation.

_____

_____

_____

_____ [2]

2 During planning for your fieldwork you set out hypotheses. Choose **one** of your hypotheses and explain how it helped meet the aim of your fieldwork study.

Chosen hypothesis:

_____

_____

How it helped to meet the aim of your fieldwork study:

_____

_____

_____

_____

_____

_____

_____

_____ [4]

Examiner Only	
Marks	Re-mark

3 Name **one** specific secondary source you used in your fieldwork investigation. Describe how you used this secondary source as part of your fieldwork investigation.

Secondary source: _____ [1]

How you used this secondary source:

_____

_____

_____

_____

_____

_____ [3]

4 Describe and explain the choice of location(s) used for your fieldwork.

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

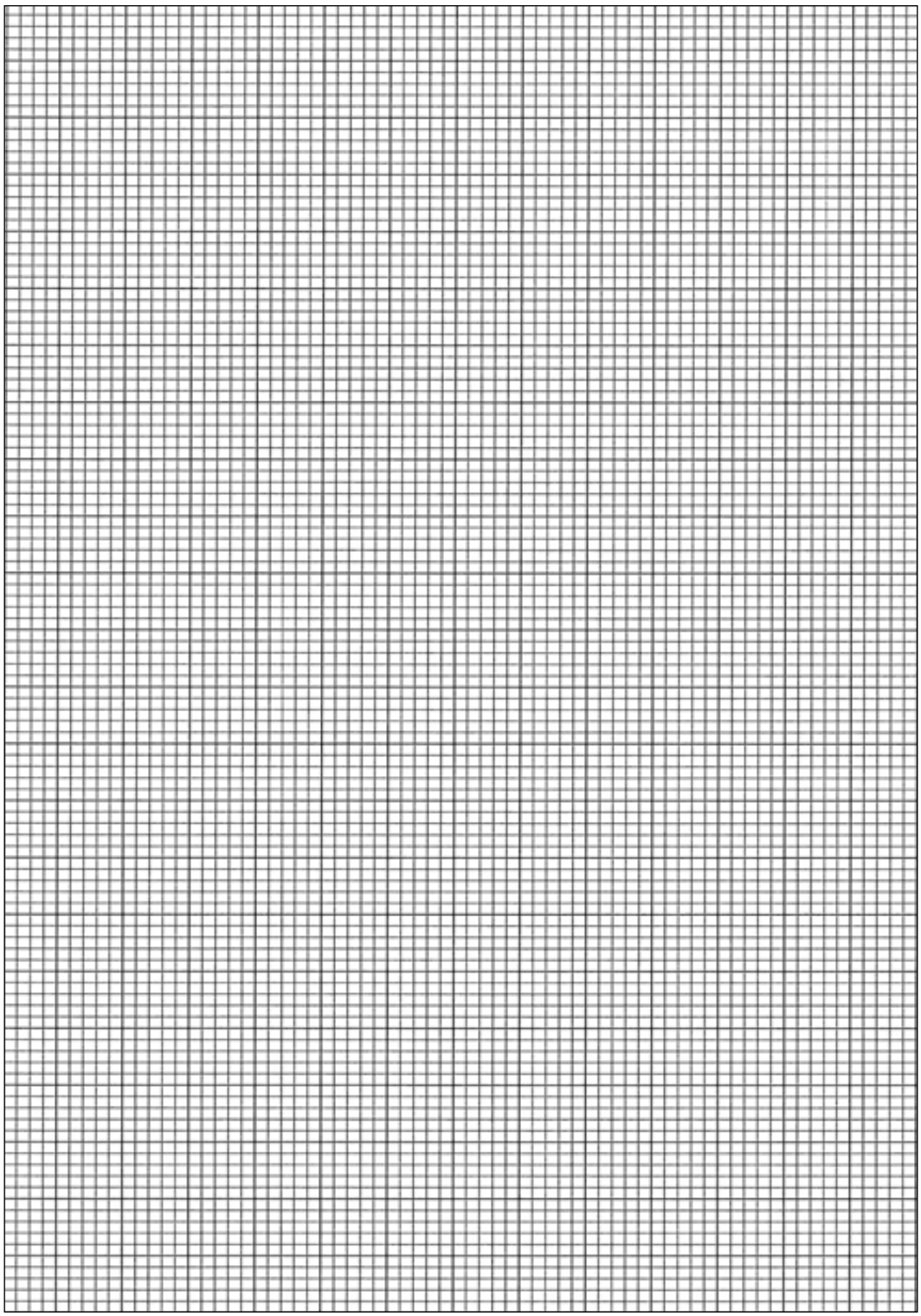
_____ [6]

5 Choose a different hypothesis from the one you wrote about in Question 2. Use the graph paper below to present data for this hypothesis. The data for your graph must be taken from your table of data. [8]

Hypothesis: _____

_____

Title of graph: _____



Examiner Only	
Marks	Re-mark

6 Describe what your graph shows about your chosen hypothesis.

[4]

7 Explain what your graph shows using your knowledge of geographical theory.

[6]

Examiner Only	
Marks	Re-mark

8 Choose **one** variable from your table of data. Describe and evaluate the method used to collect the data.

Name of variable: _____

Description and evaluation of data collection method:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____ [6]

Examiner Only	
Marks	Re-mark

THIS IS THE END OF THE QUESTION PAPER

BLANK PAGE

MARK SCHEMES
DIVIDER FRONT

MARK SCHEMES
DIVIDER BACK

Rewarding Learning

General Certificate of Secondary Education

Geography

GENERAL MARKING INSTRUCTIONS

General Marking Instructions

Introduction
Mark schemes are intended to ensure that the GCSE examinations are marked consistently and fairly. The mark schemes provide markers with an indication of the nature and range of candidates' responses likely to be worthy of credit. They also set out the criteria which they should apply in allocating marks to candidates' responses.

Assessment objectives
Below are the assessment objectives for Geography.

Candidates must:

AO1 Demonstrate geographical knowledge and understanding of:

- Places, environments, processes and concepts; and
- The inter-relationships between places, environments and processes;

AO2 Apply knowledge and understanding to analyse, interpret and evaluate geographical information and issues and to make judgements; and

AO3 Select, adapt and use a variety of skills and techniques to investigate questions and issues and communicate findings.

Quality of candidates' responses
In marking the examination papers, examiners should be looking for a quality of response reflecting the level of maturity which may reasonably be expected of a 16-year-old which is the age at which the majority of candidates sit their GCSE examinations.

Flexibility in marking
Mark schemes are not intended to be totally prescriptive. No mark scheme can cover all the responses which candidates may produce. In the event of unanticipated answers, examiners are expected to use their professional judgement to assess the validity of answers. If an answer is particularly problematic, then examiners should seek the guidance of the Supervising Examiner.

Positive marking
Examiners are encouraged to be positive in their marking, giving appropriate credit for what candidates know, understand and can do rather than penalising candidates for errors or omissions. Examiners should make use of the whole of the available mark range for any particular question and be prepared to award full marks for a response which is as good as might reasonably be expected of a 16-year-old GCSE candidate.

Awarding zero marks
Marks should only be awarded for valid responses and no marks should be awarded for an answer which is completely incorrect or inappropriate.

Marking Calculations
In marking answers involving calculations, examiners should apply the 'own figure rule' so that candidates are not penalised more than once for a computational error.

Types of mark schemes
Mark schemes for tasks or questions which require candidates to respond in extended written form are marked on the basis of levels of response which take account of the quality of written communication.

Other questions which require only short answers are marked on a point for point basis with marks awarded for each valid piece of information provided.

Levels of response
Tasks and questions requiring candidates to respond in extended writing are marked in terms of levels of response. In deciding which level of response to award, examiners should look for the 'best fit' bearing in mind that weakness in one area may be compensated for by strength in another. In deciding which mark within a particular level to award to any response, examiners are expected to use their professional judgement. The following guidance is provided to assist examiners.

- **Threshold performance**: Response which just merits inclusion in the level and should be awarded a mark at or near the bottom of the range.
- **Intermediate performance**: Response which clearly merits inclusion in the level and should be awarded a mark at or near the middle of the range.
- **High performance**: Response which fully satisfies the level description and should be awarded a mark at or near the top of the range.

Quality of written communication
Quality of written communication is taken into account in assessing candidates' responses to all tasks and questions that require them to respond in extended written form. These tasks and questions are marked on the basis of levels of response. The description for each level of response includes reference to the quality of written communication.

For conciseness, quality of written communication is distinguished within levels of response as follows:

Level 1: Quality of written communication is basic.
Level 2: Quality of written communication is good.
Level 3: Quality of written communication is excellent.

In interpreting these level descriptions, examiners should refer to the more detailed guidance provided below:

Level 1

Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. A limited range of specialist terms is used appropriately.

Level 2

Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. A good range of specialist terms is used appropriately.

Level 3

Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. Candidates present and organise effectively relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. A wide range of specialist terms is used skilfully and with precision.

Rewarding Learning

General Certificate of Secondary Education
2018

Geography

Unit 1

Understanding Our Natural World

[CODE]

SPECIMEN

MARK SCHEME

Theme A: River Environments

AVAILABLE MARKS

1 (a) (i) Complete the key for **Fig. 1** by labelling features A-D.

A	Mouth
B	Source
C	Watershed
D	Confluence
E	Tributary (given)

Do not accept tributary for D.
(4 x [1]) [4]

(ii) State the meaning of the term infiltration.

Award [1] for a partial definition:
e.g. Water soaking away.

Award [2] for a full definition:
e.g. The movement of water from the surface into the soil.
e.g. Water soaking into the soil during a period of rainfall. [2]

(b) Describe how load size varies with distance from the source of the Colin River.

Award [0] for an answer not worthy of credit.

Level 1 ([1])
A simple correct statement regarding the graph or bed load change in general:
e.g. The load gets smaller.

Level 2 ([2]–[3])
A sound statement and elaboration supported by evidence from the graph:
e.g. The load gets smaller, it starts large at 58 cm and gets smaller [2].
e.g. The load gets smaller; it starts large at 58 cm and then reduces in size to 16 cm [3].

Level 3 ([4])
A detailed statement regarding trend and which recognises that there is a steep drop in load size between 4 and 5 km:
e.g. The load gets smaller, at 1 km from the source it is large at 58 cm and by 6 km from the source it is only 16 cm. This trend is not continuous; between 4 and 5 km from the source there is a significant drop in load size.

[4]

(c) Explain how a meander is formed.

AVAILABLE MARKS

Award [0] for an answer not worthy of credit.

Level 1 ([1])
A basic statement:
e.g. A meander is a bend in the river formed by erosion [1].

Level 2 ([2]–[3])
A sound explanation that acknowledges the role of both erosion and deposition in the formation of a meander. At this level the answer may be unbalanced with one process covered in more detail than the other. Both erosion and deposition are needed to access top Level 2:
e.g. Water flows fastest on the outside of the bend/ meander where the channel is deeper and there is less friction. This causes greater erosion which deepens the channel [2].
e.g. Water flows fastest on the outside of the bend (meander) where the channel is deeper and there is less friction. This causes erosion which deepens the channel. On the inside of the bend (meander) the water is shallower, therefore there is more friction so the water is slow-flowing and deposition occurs [3].

Level 3 ([4]–[5])
A detailed explanation detailing how a meander forms, making reference to both erosion and deposition and which includes relevant features such as a river cliff, point bar (slip off slope):
e.g. Water flows fastest on the outside of the river bend (meander) where the channel is deeper and there is less friction. This is due to water being directed towards the outside of the bend as it flows around the meander. This causes erosion which deepens the channel. This erosion results in the formation of a steep-sided river cliff. In contrast, on the inside of the bend (meander), water is shallower and is slow-flowing due to greater friction. This causes deposition to occur. Over time material builds up on the inside of the bend (meander); this is called a slip-off slope. [5]

(d) Choose **one** of the flood prevention strategies shown in **Fig. 4** and explain **one** way in which it might help to reduce the flood risk on a river.

Flood prevention: the answer must be based on one of the following flood prevention methods:
- Dam
- Afforestation
- Embankment

If the candidate chooses a method which is not shown in **Fig. 4** award maximum [1].

Award [1] for a basic statement which may be descriptive only:
e.g. A dam is like a wall built across a river that stores water.
e.g. An embankment is a steep bank to stop flooding.
e.g. Afforestation is the planting of trees to reduce flooding.

AVAILABLE MARKS

Award [2] for a statement with limited detail on how the chosen flood prevention methods might prevent flooding:
e.g. A dam is built on a river to store water and reduce the risk of flooding.
e.g. An embankment is a steep bank along both sides of a river which reduces the risk of a river flooding nearby land.
e.g. Afforestation is the planting of trees, these take up water through roots and this can help to reduce the flood risk.

Award [3] for a statement and detailed explanation related to the chosen flood prevention methods:
e.g. A dam is built on a river and allows a lake to build up behind it, the lake stores rainwater and reduces the risk of flooding during a storm. Water can be released downstream when the risk of flooding has been reduced.
e.g. An embankment is a steep bank along both sides of a river; they allow the level of the river to rise safely without the risk of land alongside the river being flooded.
e.g. Afforestation is the planting of trees, these intercept rainwater and this slows the rate by which rainwater reaches the river after a storm which helps to reduce the risk of flooding. [3]

(e) With reference to a river in the British Isles, explain the physical and human causes of a flood on your named river.

Award [0] for a response not worthy of credit.

Note: no mark for name of river in the British Isles.

Award maximum Level 1 if the answer is based on a river from outside British Isles; or alternatively if there is no named river.

Award [0] for an answer not worthy of credit.

Level 1 ([1]–[2])
Causes of a river flooding are stated or described, with basic explanation:
e.g. There was flooding in England due to heavy rain, building of houses and peat extraction.

Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. A limited range of specialist terms is used appropriately.

Level 2 ([3]–[5])
The causes of flooding are described and there is limited explanation relating to a river in the British Isles:
e.g. In March 1999 there was flooding along the River Derwent. There were several physical causes such as heavy rainfall. There was also a lack of infiltration as this rainfall fell onto ground that was

almost saturated from previous rainfall events. Human factors also played a part. Areas of the floodplain were being urbanised and this reduced infiltration and increased surface run-off.

Award maximum [4] marks if only physical or human factors are used.

Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. A good range of specialist terms is used appropriately.

Level 3 ([6]–[7])
The physical and human causes of flooding are explained in detail for a river within the British Isles:
e.g. In March 1999 people living near the River Derwent experienced severe flooding. There were both physical and human causes for this flooding. The area had experienced heavy rainfall; at the time of the flood over 250 mm of rain fell on the North York Moors. There was a lack of infiltration as this rainfall fell onto ground that was almost saturated from previous rainfall events and this meant that the water from the storm reached the river quickly causing it to flood. Human factors also played a part. Areas of the flood plain were being urbanised, such as the new housing estate built at Malton. This reduced infiltration and increased surface run-off meaning that rainfall from the storm reached the river quickly causing it to flood.

Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. Candidates present and organise effectively relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. A wide range of specialist terms is used skilfully and with precision. [7]

AVAILABLE MARKS

25

AVAILABLE MARKS

2 (a) Name **two** coastal landforms shown in **Fig. 5.**

Acceptable features:
- Cliff
- Cave
- Arch
- Headland

Award [1] for each correct coastal feature.
(2 x [1]) [2]

(b) Complete the following sentences to compare constructive and destructive waves.

1 In **destructive** waves the backwash is much stronger than the swash.
2 **Constructive** waves are low and far apart.
3 Destructive waves are **more** frequent than constructive waves.
4 Constructive waves **build up** the beach.

Award [1] for each correct answer
(4 x [1]) [4]

(c) Explain how **hydraulic action** causes erosion at the coasts.

Award [0] for a response not worthy of credit.

Award [1] for a basic statement:
e.g. The waves attack the cliffs.

Award [2] for a statement and consequence:
e.g. The waves attack the cliffs. Over time this causes erosion as pieces of rock break off the cliff.

Award [3] for a statement and consequence with elaboration on air in cracks:
e.g. As waves break at the base of a cliff they force air into cracks in the rock. This increases the pressure of the air in the cracks and over time this causes fragments of rock forming the cliff to break off and be eroded. [3]

(d) State **three** reasons why a coastline may need to be defended.

Acceptable responses:
- To protect housing
- To protect industry e.g. factories
- To protect the coastline from rising sea level
- To maintain a beach
- To stop the cliffs eroding/ being washing away

Award [1] for each valid reason.
(3 x [1]) [3]

(e) Explain how a spit is formed.

AVAILABLE MARKS

Award [0] for a response not worthy of credit.

Level 1 ([1])
Candidates make basic reference to the movement of sand:
e.g. A spit is formed when sand moves along a beach.

Level 2 ([2]–[3])
Candidates make limited reference to the process of longshore drift:
e.g. Sand is moved along the beach by longshore drift, this sand or shingle builds up to form a ridge in shallow water [2].
e.g. Where waves hit the coast at an angle, sand is moved along the beach by longshore drift. This sand or shingle builds up to form a ridge in shallow water. A constant supply of sand or shingle is essential for the spit to form in shallow water [3].

Note: If the answer refers to only one condition for formation, award bottom Level 2. The answer must refer to two conditions to achieve top Level 2.

Level 3 (4]–[5])
Candidates make detailed reference to both the processes and conditions required for longshore drift:
e.g. Prevailing winds cause waves to hit the coastline at an angle leading to the process of longshore drift which causes sand to be moved along a beach. Where there is a constant supply of sand or other material such as boulder clay from erosion further up the coast the process will continue until the coastline changes direction, e.g. a bay. The sand is deposited forming a spit which will continue to grow out into the bay. [5]

(f) With reference to a case study from the British Isles, evaluate the sustainability of a coastal management strategy you have studied.

Award [0] for a response not worthy of credit.

Level 1 ([1]–[2])
A simple description or basic evaluation of a valid coastal management strategy; the response may not include a named case study:
e.g. Groynes were built to protect the beach at Newcastle.

Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. A limited range of specialist terms is used appropriately.

Level 2 ([3]–[5])
A valid coastal management strategy is described with some detail and a limited evaluation:
e.g. At Newcastle, Co Down, groynes were put in place along

the beach to stop sand being moved northwards along the coast. However, these groynes were made of wood and have been eroded themselves so they no longer trap sand and they no longer protect the beach. Gabions were used to protect the recreation grounds and they also trap sand but cut off access to the beach and are not very environmentally-friendly. A sea wall and promenade were built more recently and this sea wall protects homes and businesses from high waves in winter along the sea-front at Newcastle.

Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. A good range of specialist terms is used appropriately.

Level 3 ([6]–[8])
A valid coastal management strategy is described in detail with sound evaluation. Some judgment or conclusion is needed to achieve top Level 3:

e.g. The aim of the coastal management strategy at Newcastle, Co. Down, is to protect the beach as well as homes and businesses on the sea front. Groynes were put in place in the 1980s to stop the sand being moved northwards along the coast towards Murlough Bay. They were expensive to build at £1250 per metre and only lasted about 20 years so were not very sustainable. Groynes can reduce the amount of sand carried further along the coast and this could lead to the beach being eroded further north towards Dundrum Bay.

Gabions were used to protect the recreation grounds in Newcastle. They also trapped sand and protected the recreation land at the mouth of the River Shimna; however, they cut off access to the beach and were not very environmentally-friendly.

Following a severe storm in 2002, a sea wall and promenade were built to protect homes and businesses along the sea-front at Newcastle from high waves in winter. The sea wall has a re-curved 'wave-return' design to prevent waves from splashing over onto the promenade, but a wall is not very visually attractive for tourists, restricts access to the beach and it cost over £4 million. It will need to be replaced eventually and so it is not very sustainable in the long term [7].

In conclusion, this coastal management strategy is expensive and requires a lot of maintenance to be successful at protecting the beach at Newcastle and helping to keep it attractive to tourists as well as protecting businesses [8].

Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. Candidates present and organise effectively relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. A wide range of specialist terms is used skilfully and with precision. [8]

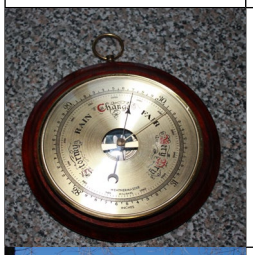
AVAILABLE MARKS

25

AVAILABLE MARKS

3 (a) Complete **Table 1** by inserting the correct answers in the blank boxes.

Table 1

IMAGE OF INSTRUMENT	NAME OF INSTRUMENT	ELEMENT RECORDED	UNIT OF MEASUREMENT
	BAROMETER	GIVEN	MILLIBARS/MB
	GIVEN	WIND SPEED	GIVEN

(3 x [1]) [3]

(b) Complete **Table 2** by drawing a line to match up each air mass with its correct description.

AVAILABLE MARKS

Table 2

Air Mass	Description
• Tropical Maritime	• Most common air mass affecting the British Isles. The air mass travels over the Atlantic Ocean bringing cold and wet conditions.
• Tropical Continental	• Least common air mass affecting the British Isles. The air mass usually only occurs during the summer when it brings hot and dry conditions during this season.
• Polar Maritime	• This air mass originates over Northern Europe. It brings cold and dry conditions. **(given)**
• Polar Continental	• This air mass travels from the south-west bringing warm and wet weather in summer.

(3 x [1]) [3]

(c) **(i)** State the type of satellite which is fixed in the same location in space.

Stationary or Geostationary/static [1]

(ii) Explain how satellites help to create a weather forecast.

Award [0] for a response not worthy of credit.

Award [1] for a basic statement:
e.g. It takes a picture of the weather from above/from space.

Award [2] for a statement and consequence:
e.g. It takes pictures of cloud patterns which help us determine the type of weather we will have.

Award [3] for a statement, consequence and elaboration:
e.g. It is a small spacecraft which carries weather instruments. It takes pictures of cloud patterns and records wind speeds which helps us determine the type of weather we will have. [3]

(d) State **two** factors that affect climate.

AVAILABLE MARKS

Accept any appropriate answer, e.g.
- latitude
- prevailing winds
- distance from the sea (continentality)
- altitude

(2 x [1]) [2]

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

Accept high pressure system or anticyclone [1]

(ii) Explain why the British Isles experienced dry and calm conditions on Wednesday 16th of December 2009.

Award [0] for an answer not worthy of credit.

Dry conditions:
Award [1] for a basic statement:
e.g. It is dry because there is no rain.

Award [2] for a statement and elaboration:
e.g. It is dry because there are no clouds and this means there is no rain.

Award [3] for a statement, consequence and elaboration:
e.g. There is no rain as air is sinking in an anticyclone. As it sinks the air warms up so condensation cannot occur. This means that clouds cannot develop so rain does not occur.

Calm conditions:
Award [1] for a basic statement:
e.g. It is calm because there is no wind.

Award [2] for a statement and elaboration:
e.g. It is calm because the isobars are spaced far apart in the anticyclone.

Award [3] for a statement, consequence and elaboration:
e.g. There is no wind as isobars are spaced far apart in the anticyclone. There is a gentle pressure gradient so air moves slowly from high to low pressure resulting in calm conditions. [6]

(f) With reference to a case study from outside the British Isles, describe the impacts of an extreme weather event on people and property.

The extreme weather event can be a case study relating to any one of the following:
- drought
- tornado
- hurricane

Do not credit answers which outline a flooding event.
Award maximum Level 1 if no case study is named or if the case study is in the British Isles.

AVAILABLE MARKS

Level 1 ([1]–[2])
A basic description which addresses only impacts on either people or property:
e.g. Hurricanes have strong winds which destroy homes [1].

Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. A limited range of specialist terms is used appropriately.

Level 2 ([3]–[4])
A limited description with some elaboration addressing impacts on both people and property:
e.g. In 2012, Hurricane Sandy affected many countries including Jamaica and USA. In Jamaica, a total of 15,000 homes were destroyed with many of these being in shanty town areas. This caused widespread social disruption and homelessness. In New York widespread flooding meant roads, subways and public schools were closed costing the government a lot of money to repair.

Spelling punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. A good range of specialist terms is used appropriately.

Level 3 ([5]–[6])
A detailed description which covers impacts on both people and property:
e.g. In 2012, Hurricane Sandy affected eight countries including Jamaica and USA killing 233 people in total. In Jamaica, 70% of homes were left without electricity as many homes had their roof blown off due to the hurricane force winds. A total of 15,000 homes were destroyed with many of these being in shanty town areas. This caused widespread social disruption and homelessness. In New York a storm surge caused widespread flooding leading to a state-wide state of emergency. Roads, subways and public schools were closed and many people were evacuated to one of the 76 evacuation centres created. This cost the US a total of $74.1 billion.

Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. Candidates present and organise effectively relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. A wide range of specialist terms is used skilfully and with precision. [6]

25

AVAILABLE MARKS

4 **(a)** Name the layers of the earth labelled X and Y.

X= inner core (do not accept core) [1]
Y= mantle [1]
(2 x [1]) [2]

(b) Complete **Table 3** by putting the statements in the correct order to show how plates move. One has been completed for you.

Table 3

The molten material cools and sinks back down dragging the plates along.	**4**
Convection currents in the mantle move magma upwards.	**2**
Plates float on the surface of the mantle.	**1 (given)**
These currents spread out at the surface underneath the plates.	**3**

(3 x [1]) [3]

(c) **(i)** Complete **Table 4** by stating **one** other example of both an igneous and a sedimentary rock.

Table 4

Igneous	**Sedimentary**
Granite **(given)**	Sandstone **(given)**
Basalt	Limestone

Accept valid alternative rock types.
(2 × [1]) [2]

(ii) Explain how sedimentary rocks are formed.

Award [0] for a response not worthy of credit.

Award [1] for a basic statement:
e.g. erosion of rocks creates small fragments of rock or sediments.

Award [2] for a statement with a consequence:
e.g. erosion of rocks creates small fragments which build up in layers on the sea bed over a long period of time forming rock.

Award [3] for a statement with a consequence and elaboration which uses appropriate geographical terminology:
e.g. sediment which comes from eroded rocks build up in layers on the sea bed; compression of the layers squeezes out air and water over a long period of time to create new rock. This new rock is known as a sedimentary rock. [3]

AVAILABLE MARKS

(d) (i) Using **Fig. 10** outline one short term impact this damage could have on the economy of the area.

Award [0] for an answer not worthy of credit.

Note: answer must relate to a short term impact on the economy.

Accept valid alternative answers.

Award [1] for a basic statement:
e.g. delivery of goods interrupted.

Award [2] for a statement with a consequence:
e.g. delivery of goods will be badly interrupted so local shops will lose trade. [2]

(ii) Describe one long term strategy which could improve safety in an earthquake prone area.

Accept valid alternatives as long as the focus is on a 'long term' strategy.

Award [0] for a response not worthy of credit.

Award [1] for a basic statement:
e.g. A long term strategy to improve safety could be to build stronger buildings.

Award [2] for a statement with a consequence:
e.g. A long term strategy to improve safety in an earthquake prone area could be to build stronger buildings so they don't fall down easily.

Award [3] for a statement with a consequence with elaboration:
e.g. Creating buildings that are earthquake proof due to a well designed structure. These buildings will be better able to withstand shaking and this will improve safety as the building will remain intact reducing loss of life. [3]

(e) (i) Complete **Table 5** using a tick (✓) to match each characteristic with the correct type of volcano.

Table 5

Characteristic	Shield Volcano	Composite Volcano
The volcano has steep slopes and a narrow base.		✓
Eruptions are frequent and non-violent.	✓	
The peak is low and rounded.	✓	
Occurs at destructive plate boundaries		✓

(4 x [1])

[4]

(ii) Discuss the potential global impact of a supervolcano eruption on people and the environment.

Award [0] for a response not worthy of credit.

Level 1 ([1]–[2])
A basic description of a potential impact resulting from the eruption of a supervolcano:
e.g. Lots of ash emitted[1].

Level 2 ([3]–[4])
A brief discussion with some elaboration addressing the potential global impact on both people and the environment:
e.g. A supervolcano eruption would emit lots of ash into the atmosphere. The ash cloud would travel around the globe and would block out the sunlight. This would lead to climate change and famine.

Level 3 ([5]–[6])
A detailed discussion of potential global impacts on both people and the environment:
e.g. When a supervolcano erupts at least 1000km^3 of ash will be emitted into the atmosphere. This will turn day to night as the ash blocks out the sun's radiation. If Yellowstone supervolcano was to erupt it is estimated that at least 87,000 people would die as 15cm of ash would cover buildings within a 1000km radius of Yellowstone. It might take five days for the ash cloud to reach UK. The ash will eventually circle the globe causing climate change and impacting on agricultural production, human health and wildlife. [6]

25

Total **100**

AVAILABLE MARKS

BLANK PAGE

Rewarding Learning

General Certificate of Secondary Education
2018

Geography

Unit 2

Living in Our World

[CODE]

SPECIMEN

MARK SCHEME

Theme A: Population and Migration

AVAILABLE MARKS

1 (a) (i) State the meaning of the term **population structure.**

Award [0] for a response not worthy of credit.

Award [1] for a valid statement which refers to one aspect only:
e.g. How the population is made up.
e.g. The ages of the people.

Award [2] for a valid statement which refers to both aspects of structure: gender and age:
e.g. The way the population is made up of young and old, male and female. [2]

(ii) Underline the population in millions in the age group 0–4 years in Nigeria in 2015.

15 million **24 million** **<u>29 million</u>** [1]

(b) (i) Describe the changes in the structure of the population of the UK by age groups as shown in **Table 1**.

Award [0] for a response not worthy of credit.

Award [1] for a basic description that refers to one age group only:
e.g. The number of people over 65 has increased the most.

Award [2] for a limited description which makes reference to two age groups or a response that describes one age group using figures from Table 1:
e.g. The number of over 65 year olds has increased the most and is expected to be 16.4 million by 2050.

Award [3] for a detailed description which includes reference to at least two age groups and shows the trend by quoting a minimum of two figures from Table 1:
e.g. The UK population had a large number of under 19 year olds in 1991 (14.8 million) which is expected to decrease to 12.5 million by 2050. In contrast the population aged over 65 years is expected to increase from 9.1 million in 1991 to 16.4 million by 2050. [3]

AVAILABLE MARKS

(ii) Explain **one** impact that a large aged dependent population may have on a country.

Award [0] for a response not worthy of credit.

Accept any valid impact that a large aged dependent population has on a country e.g. cost of residential care, medical care, pensions, increased taxes, shortage of labour leading to economic decline and reduction in quality of life.

Award [1] for a basic statement:
e.g. A country with a large aged population would need lots of residential homes.
e.g. A large aged population will mean that the costs of medical care will increase.

Award [2] for a statement and a consequence:
e.g. A country with a large aged population would need lots of residential homes and medical care which is expensive to provide.
e.g. As the proportion of older people increases there may not be enough people of working age to support the dependants.

Award [3] for a statement, consequence and elaboration:
e.g. A country with a large aged population would need a lot of care homes and specialised medical care which is expensive to provide and the government will have to raise taxes to pay for them.
e.g. As the proportion of older people increases there may not be enough people who are economically active and paying taxes to support them. [3]

(c) Explain why death rates started to fall at the beginning of Stage 2.

Candidates should refer to **two** reasons in their answer.

Award [0] for a response not worthy of credit.

It is expected that candidates will discuss medical advances, better sanitation and/or more reliable food supplies.

Level 1 ([1]–[2])
A basic answer relating to one or two reasons why a death rate may change:
e.g. There were more hospitals [1].
e.g. There were more hospitals and more doctors to treat people who were sick [2].

AVAILABLE MARKS

Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. A limited range of specialist terms is used appropriately.

Level 2 ([3]–[4])
An answer based on one valid reason fully explained, or which partially explains two factors that could lower the death rate:
e.g. There were more hospitals and so people who were sick received proper care and did not die, also people were being educated about using clean drinking water.

Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. A good range of specialist terms is used appropriately.

Level 3 ([5]–[6])
A detailed explanation based on two factors that lower death rates:
e.g. Vaccinations had been discovered and so programmes were introduced to inoculate babies against diseases such as smallpox. The inoculations protected the babies from diseases as they grew up and this reduced the death rate. Also people were being educated about the need to use clean drinking water and proper sanitation which were being installed in many cities, so diseases like cholera claimed fewer victims, again lowering the death rate.

Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. Candidates present and organise effectively relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. A wide range of specialist terms is used skilfully and with precision. [6]

(d) State the meaning of the term **economic migrant**.

Award [0] for a response not worthy of credit.

Award [1] for a partial definition of the term economic migrant:
e.g. a person who moves to improve their standard of living.

Award [2] for a full definition of the term economic migrant:
e.g. a person who leaves their country due to bad economic conditions and moves to a new country to improve their standard of living by gaining a better paid job. [2]

(e) With reference to your case study, discuss the challenges faced by both the refugees and the destination country.

AVAILABLE MARKS

Award [0] for a response not worthy of credit.

Level 1 ([1]–[2])
This may be an unbalanced answer, looking at only the challenges faced by the refugee or by the destination country. Alternatively it may be a superficial answer that simply makes statements which could apply to any place:
e.g. The destination country may not be able to provide enough houses for refugees.
e.g. There are many challenges which face refugees when they enter a different country such as language barriers, access to housing, securing work and cultural barriers.

Level 2 ([3]–[5])
An answer that looks at the challenges faced by both the refugees and the destination country, but which lacks specific case study detail or may be unbalanced.

Refugees
There are a number of challenges which face Syrian asylum seekers when they enter Greece such as language barriers, access to housing, securing work and cultural barriers. Upon arrival many Syrians live in refugee camps or host communities in neighbouring countries, but without jobs or education. Most refugees don't carry any registration, so there is a risk that they may fall victim to a smuggler's network or even human trafficking. There are protection issues for children especially; some of them travel alone or in groups and they might be tricked or manipulated during their trip.

Destination country
So far more than 17,000 Syrians have arrived in Greece since 2011. Greece has also become a gateway for other asylum seekers from Africa and Asia. The volume of asylum seekers entering Greece on a daily basis is putting serious pressure on services and the economy of Greece as it enters its 7th year of a recession. This has resulted in tensions developing in Greece with the result that asylum seekers are often being attacked.

Level 3 ([6]–[8])
This is a balanced response which looks in detail at the challenges facing both the refugees and the destination country.

Refugees
Most of the Syrian refugee families are desperately fleeing across the Mediterranean Sea to Greece, escaping a brutal war that is now (2016) more than four years long. They are hoping to find a more promising future in Europe. Upon arrival, many Syrians live in refugee camps or host communities in neighbouring countries, but without jobs or education. Along the way, there are also many

dangers. Most refugees don't carry any registration, so there is a risk that they may fall victim to a smuggler's network or even human trafficking. There are protection issues for children especially, some of them travel alone or in groups and they might be tricked or manipulated during their trip. When they arrive in Greece, the refugees are often dehydrated, tired, hungry, sick and suffering from sunstroke. Some of the European countries are closing their borders. As Greece enters its seventh year of recession, xenophobia (dislike of or prejudice against people from other countries) is running high, with immigrants being attacked. Some refugees say they are often afraid of even walking in the street.

Destination country

Around 600 refugees arrive on the Greek islands in rubber dinghies and wooden boats, mainly from Syria, Afghanistan and Iraq, on a daily basis. Half of these are coming ashore in Lesvos. Arrivals in Lesvos grew from 737 in January to over 7,200 in May 2015. So far (May 2016), more than 17,000 Syrians have crossed, according to Greek police statistics from 2011 until 2015. It has also become a gateway for other asylum seekers from Africa and Asia. This is straining the island's capacity, services and resources.

The volume of asylum seekers entering Greece on a daily basis is also putting serious pressure on services and the economy of Greece as it enters its 7th year of a recession. This is resulting in tensions in Greece and asylum seekers are often being attacked. [8]

AVAILABLE MARKS

25

AVAILABLE MARKS

2 (a) Complete **Table 2** by drawing arrows to show which characteristics are part of the inner city and which are part of the rural-urban fringe.

Table 2

Inner City	Characteristic	Rural Urban Fringe
(given) ←	Terraced housing	
	Large back gardens	→
←	Narrow streets	
	Modern factories	→

(3 × [1]) [3]

(b) (i) The Central Business District (CBD) of Durham can be found in grid square GR 2742. Outline evidence from the map that supports this statement.

Award [0] for a response not worthy of credit.

Award [1] for valid statement relating to the map:
e.g. roads surround the area/ converge on the area
e.g. railway station
e.g. cathedral
e.g. density of land use
e.g. Information Centre (open all year round)
e.g. university
e.g. bus or coach station.

Award [2] for evidence that is elaborated:
e.g. The high density of the land use in this area suggests that it is the Central Business District.

Award [3] for a detailed outline of map evidence:
e.g. Transport is focused on this area, roads converge on the area, there is a railway station and a bus or coach station suggesting that this is the Central Business District. [3]

(ii) State the straight line distance from the park and ride terminus at GR 307446 to the bus and coach station at GR 269426.

Answer: 4.3 km.

Award [1] for answers in the range 4.1 to 4.19 km or 4.41 to 4.5 km.

Award [2] for answers in the range 4.2 to 4.4 km. [2]

AVAILABLE MARKS

(iii) Complete **Table 3** by arranging the following settlements in order of size beginning with the largest.

Award [1] for each settlement ranked correctly.

Table 3

Rank Order	Settlement
1	Durham **(given)**
2	Sacriston
3	Sherburn
4	Edmondsley

(3 × [1]) [3]

(c) (i) State the meaning of the term **urban regeneration.**

Award [0] for a response not worthy of credit.

Award [1] for a partial definition:
e.g. when parts of the city are improved.

Award [2] for a full definition:
e.g. when a run-down area of a city is improved through investment. [2]

(ii) For a named **MEDC** inner city area, explain how an urban planning scheme has improved employment opportunities.

Award [0] for a response not worthy of credit.

If there is no named MEDC city, award maximum [1].

Accept other valid alternative answers for suitable urban planning schemes.

Award [1] for a basic statement identifying the scheme and the fact that employment opportunities have been created:
e.g. New jobs have been created in the Titanic Quarter Belfast.

Award [2] for a statement with limited detail relating to employment:
e.g. In Belfast's Titanic Quarter at least 25 000 jobs are expected to be created over a 15-year period. At first the jobs were mainly in construction and now they are mostly office jobs.

AVAILABLE MARKS

Award [3] for a valid, detailed statement, with good detail relating to employment:
e.g. In Belfast's Titanic Quarter at least 25 000 jobs are expected to be created over a 15-year period. At first the jobs were mainly in construction. Now jobs are being generated in IT and Financial Services with companies such as Citibank setting up in the area. Other jobs have been created in education as the Belfast Metropolitan College opened its new site in the Titanic Quarter and in tourism with hotels such as Premier Inn and the Titanic Signature Project. [3]

(d) State **one** challenge which a cultural mix can bring to a city.

Any valid challenge:
e.g. language barriers.
e.g. religious/ethnic tensions. [1]

(e) (i) State the meaning of the term **shanty town**.

Award [1] for a partial definition:
e.g. An area of badly built housing in a city.

Award [2] for a full definition:
e.g. This is a characteristic area of housing in LEDC cities, made of unplanned poor quality housing which often lacks basic services. [2]

(ii) Describe and explain the location of shanty town areas in a named LEDC city you have studied.

Award [0] for a response not worthy of credit.

If there is no named LEDC city award maximum Level 1.

Level 1 ([1]–[2])
A basic answer that describes the location of shanty towns in general terms; alternatively a response which does not include a named city:
e.g. Shanty towns are built in swampy areas and near railway lines.

Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. A limited range of specialist terms is used appropriately.

Level 2 ([3]–[4])
An answer that describes the location of the shanty towns in a named LEDC city with limited explanation:
e.g. Rio de Janeiro in Brazil has many shanty towns, called favelas. The favelas are often built on steep ground which is not suitable for anything else. The majority of the favelas are near the bay to be close to the CBD for jobs.

One location well explained [3].

Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. A good range of specialist terms is used appropriately.

Level 3 ([5]–[6])
An answer that describes and explains in detail the location of shanty town areas in a named LEDC city:
e.g. In Rio de Janeiro in Brazil the majority of the shanty towns, known as favelas, are located within the old inner suburbs of the city, to the west of Guanabara Bay. This means that they are on the same side of the bay as the CBD and the main areas of luxury apartments, and these are the areas where work is most likely to be available. The favelas are built on steep ground called morros, as the land is considered too steep for legal housing. This marginal land is not wanted by developers, as housing can be washed away in landslides following storms.

Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. Candidates present and organise effectively relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. A wide range of specialist terms is used skilfully and with precision. [6]

AVAILABLE MARKS

25

AVAILABLE MARKS

3 (a) (i) State one social indicator of development listed in **Table 4**.

Either:
- mean years of schooling; or
- life expectancy at birth (years).

Award [0] if social indicator is not on the table. [1]

(ii) Using evidence from **Table 4**, explain why Mali is considered to be an LEDC.

Award [1] for a basic statement which refers to any possible relevant indicator from **Table 4**:
e.g. Mali is an LEDC because life expectancy is low.

Award [2] for a statement that refers to an indicator in **Table 4** with some explanation to its relevance to measuring development:
e.g. Mali is an LEDC because people don't live long in Mali compared to Norway.

Award [3] for an answer which compares Mali with either UK or Norway including data from **Table 4** to illustrate the answer:
e.g. In Mali people have a life expectancy of 58 years compared to 81.6 years in the Norway. This suggests Mali is an LEDC.

Accept valid alternatives based on GNI per capita ($US) or Mean Years of Schooling. [3]

(iii) State the full name of the development indicator that combines all the indicators shown in **Table 4**.

Award [1] for a partially correct answer:
e.g. uses the abbreviation HDI only or gives a partial answer such as Human Development.

Award [2] for a correct answer:
e.g. Human Development Index.

[2]

(b) Using **Fig. 3** to help you, underline the correct word/s in each sentence below.

AVAILABLE MARKS

- Exports are goods and services that **leave**/come into a country. **(GIVEN)**
- Venezuela earns more money from its aluminium/**oil** exports.
- The value of Venezuela's exports is **greater**/less than its imports
- Venezuela is situated on the **north coast**/west coast of South America.

(3 × [1]) [3]

(c) Describe **two** Sustainable Development Goals and explain how each goal attempts to reduce the development gap between MEDCs and LEDCs.

There are 17 goals in total. Candidates can base their answer on **any** two goals.

Level 1 ([1])
A basic statement which may simply identify a global goal:
e.g. Goal 3 is Good Health and Well-being.

Level 2 ([2]–[3])
A statement and elaboration; however, the response may not fully address how the chosen global goal can reduce the global development gap between MEDCs and LEDCs:
e.g. Goal 3 is Good Health and Well-being which aims to end the epidemic of aids and malaria. Through research and development and improved access to medicines, life expectancy and infant mortality rates will improve in many LEDCs.

Level 3 ([4])
A detailed statement, consequence and elaboration which clearly explains how the chosen global goal will attempt to reduce the development gap between MEDCs and LEDCs:
e.g. Goal 3 is Good Health and Well-being. By 2030, this goal aims to end the epidemic of aids, malaria and other neglected tropical diseases. Through research and development and improved accessibility to medicines, healthcare in many LEDCs particularly countries such in Sub-Saharan Africa will improve. This will result in life expectancy improving and infant mortality rates decreasing which will reduce the gap between MEDCs and LEDCs.

(2 x [4]) [8]

(d) Discuss how globalisation can **both** help **and** hinder development.

AVAILABLE MARKS

Candidates should use their case study material to help illustrate how globalisation has helped or hindered a **BRICS** country. Thus the answer **must** be based on Brazil, Russia, India, China or South Africa.

Award [0] for a response not worthy of credit.

If there is no reference to one of the BRICS countries then award maximum Level 1 for a general answer about globalisation.

An unbalanced answer that discusses how globalisation helps **or** hinders development can achieve low Level 2.

Award [1] if the response is in the form of a definition only.

Level 1 ([1]–[2])
A basic answer which discusses globalisation in general. An answer at this level may not be based on a BRICS country:
e.g. Globalisation is how places are becoming increasingly linked by trade and ideas [1].
e.g. Globalisation has affected many countries, for example foreign investors have been encouraged. This has helped people living in LEDCs to become richer and they can buy more things [2].

Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. A limited range of specialist terms is used appropriately.

Level 2 ([3]–[5])
A sound answer which discusses how globalisation can both help and hinder development and which makes limited reference to a BRICS country:
e.g. Globalisation is how places are becoming increasingly linked by trade, commerce and ideas. India has opened up to foreign investors helping their economy grow and living standards to increase. However, the development gap has widened and is particularly noted between the rich city dwellers in cities such as Bangalore and those who live in the countryside.

Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. A good range of specialist terms is used appropriately.

Level 3 ([6]–[8])

A valid answer which shows clear understanding of globalisation as it applies it to a named BRICS country. The answer will address how globalisation has both helped and hindered the named country's development:

e.g. Globalisation refers to the process by which countries become increasingly linked by trade, commerce and ideas. India is one of the BRICS countries that has removed barriers to trade and has welcomed foreign investors. This helped the Indian economy to grow by 7% in 2009–10 and it is expected to become the world's third largest economy. This has enabled living standards in India to increase, for example life expectancy has risen from 59 to 63 years. However, globalisation has led to an uneven increase in wealth. The gap between rich urban dwellers in cities such as Bangalore contrasts dramatically to the situation in the countryside. It is estimated that 300 million Indians live on less than $1 per day and almost half of all children in India are malnourished.

Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. Candidates present and organise effectively relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. A wide range of specialist terms is used skilfully and with precision. [8]

AVAILABLE MARKS

25

AVAILABLE MARKS

4 (a) What does carbon footprint measure?

Award [1] for a basic statement:
e.g. Carbon footprint measures our impact on the environment.

Award [2] for a detailed statement:
e.g. A carbon footprint is a measure of the impact our activities have on the environment. It calculates all the greenhouse gases we are expected to produce in all our activities and measures them in units of carbon dioxide. [2]

(b) Describe **one** benefit and **one** disadvantage of using a renewable energy source that you have studied.

Accept any valid renewable energy source.

Allow up to [2] marks for benefit and [2] marks for disadvantage.

Award [1] for a basic description:
e.g. Benefit: wind power will not run out.
e.g. Disadvantage: some places are not windy enough.

Award [2] for a detailed description:
e.g. Benefit: wind power harnesses the power of the wind and as this is a naturally occurring part of our weather it will not run out.
e.g. Disadvantage: wind farms are best located on high ground or coastal areas to gain the best windy conditions, this means that some areas of the UK are therefore not suitable for wind farms.
(2 x [2]) [4]

(c) Evaluate the effects of climate change. You should make reference to places in your answer.

If there is no global place reference award maximum Level 1.

The effects of climate change may be considered as actual and potential and/or positive and negative.

Level 1 ([1]–[2])
A basic description of one effect of climate change (actual or potential/ positive or negative). There is no attempt to evaluate:
e.g. Ice caps will melt [1].
e.g. Ice caps will melt causing sea levels to rise [2].

Level 2 ([3]–[4])
A limited description and basic evaluation which covers both actual and potential or positive and negative effects of climate change. There will be appropriate place reference:
e.g. Rising temperatures in the last century have resulted in polar ice caps melting.

AVAILABLE MARKS

e.g. Arctic sea ice has retreated by 20%. This will cause sea level to rise which will be very bad for low lying areas such as Bangladesh. However, new shipping routes could be created through an ice free Arctic. [4]

Level 3 ([5]–[6])
A detailed description and clear evaluation which covers both positive and negative effects of climate change (or both actual and potential impacts) along with appropriate global references. There must be a concluding comment or a final judgement at the end for top Level 3:
e.g. Rising temperatures in the last century have resulted in polar ice caps melting, e.g. Arctic sea ice has retreated by 20%. This will cause a worldwide increase in sea level which will threaten many low lying areas for example Bangladesh and islands in the Indian and Pacific oceans. However, new and more efficient shipping routes could be created through an ice free Arctic. [5]

In conclusion the negative effects of climate change are much greater than the positive effects. [6]

(d) Complete **Table 6** by placing the letters A–F into the correct box to show whether the impact of mass tourism is positive or negative.

Table 6

	Positive impact	**Negative impact**
Cultural	A **(given)**	E
Economic	D	C
Environmental	F	B

(5 × [1]) [5]

(e) (i) State the meaning of the term **ecotourism.**

Award [1] for a partial definition:
e.g. tourism that does not harm the environment.

Award [2] for a full definition:
e.g. A sustainable form of tourism which involves protecting the environment and local way of life at the destination. This form of tourism is usually on a small scale. [2]

(ii) With reference to a named case study, describe and explain how ecotourism can protect the environment.

Award [0] for a response not worthy of credit.

If there is no named case study award maximum Level 1.

Level 1 ([1]–[2])
A basic description of ecotourism with no or little reference to the environment:
e.g. Ecotourism means people care for the environment when they are on holiday.

Level 2 ([3]–[4])
A limited description and limited explanation addressing how ecotourism protects the environment. The case study detail is limited:
e.g. Ecotourism means that the environment being visited will be looked after. In the Amazon rainforest the Yachana Ecolodge ensures that trees are not cut down but are conserved as they are an important attraction.

Level 3 ([5]–[6])
A detailed description and explanation addressing how ecotourism protects the environment giving specific examples from an appropriate case study:
e.g. The Yachana Ecolodge in the Amazon rainforest in Ecuador is a small ecolodge where small numbers of ecotourists can stay. It has its own protected 1200 hectare section of rainforest which is home to thousands of tropical plants and animals. The dining room at the ecolodge serves the guests meals using locally grown food. This means lower carbon emissions compared to importing foods from elsewhere and it also supports local farmers. Activities such as bird watching and rainforest hiking help tourists to understand the diversity of wildlife in the area and this helps to protect species from extinction. This means that tourism is sustainable and nature is valued. [6]

AVAILABLE MARKS
25
100

BLANK PAGE

Rewarding Learning

General Certificate of Secondary Education
2019

Geography

Unit 3

Fieldwork

[CODE]

SPECIMEN

MARK SCHEME

1 State **two** specific fieldwork risks that you identified during the planning for your fieldwork investigation.

AVAILABLE MARKS

Candidates are required to state two risks identified during the planning stage; the risks must relate to their fieldwork.

Appropriate answers include: injury from falling on slippery river banks; potential drowning by falling into the river; being knocked down by traffic; contracting Weil's disease by contact with infected water.

Award [0] for a response not worthy of credit.

(2 x [1]) [2]

2 During planning for your fieldwork you set out hypotheses. Choose **one** of your hypotheses and explain how it helped meet the aim of your fieldwork study.

Candidates are required to explain how the chosen hypothesis helped to meet the stated aim of their fieldwork.

If the candidate does not write their chosen hypothesis in the space provided, the submitted statement of fieldwork aims and hypotheses should be checked to establish the likely hypothesis. Where there is no link to any one of the hypotheses listed in the submitted statement of aims and hypotheses award [0].

Award [0] for a response not worthy of credit.

e.g. Stated aim (see statement of fieldwork aims and hypotheses attached to the paper): An investigation of how river characteristics change downstream.

Chosen hypothesis: The cross-sectional area of the Curly Burn increases from source to mouth.

Note: there are no marks for stating the chosen hypothesis.

Award [1]–[2] for a reasonable explanation of how their stated hypothesis helped to meet the aim of the study:
e.g. this hypothesis looks at the cross-sectional area of the river. It will help me to investigate how river characteristics change downstream.

Award [3]–[4] for a detailed explanation of how the stated hypothesis helped to meet the aim of the fieldwork:
e.g. the cross-sectional area of a river is an important river characteristic. Processes such as abrasion, solution and hydraulic action cause erosion of the river banks and river bed which widens and deepens the channel, increasing the cross-sectional area of the river from its source to its mouth.

This will help me to examine the overall aim of my study which was to investigate how river characteristics change downstream. [4]

3 Name **one** specific secondary source you used in your fieldwork investigation. Describe how you used this secondary source as part of your fieldwork investigation.

Name of specific secondary source: a range of acceptable answers here including maps, textbooks [1].

The command word is 'name', thus expect some detail such as the scale of the OS map or the series, e.g. Landranger OS map of the Mournes, OS map 1: 50 000, title of the textbook etc.

Award [0] for a response not worthy of credit. [1]

How the secondary source was used:
The answer must relate to the specific secondary source named and the fieldwork undertaken as indicated by the statement.

Award [0] for a response not worthy of credit.

Award [1] for a basic description of how the secondary source was used:
e.g. the map showed the course of the river.

Award [2] for a limited description of how the secondary source was used:
e.g. the map helped us to identify sites along the river.

Award [3] for a detailed description of how the secondary source was used:
e.g. the map helped us to identify accessible sites along the river for sampling and data collection. [3]

4 Describe and explain the choice of location(s) used for your fieldwork.

Candidates must describe the location(s) used for their fieldwork enquiry and explain why the location(s) was/were selected.

Description:
Expect relevant place names such as the name of the river, street etc. along with details of stops made, distance covered etc.

Explanation:
Answers will be dependent upon the type of investigation which was undertaken, but could include some of the following:

- Accessibility factors, for example within walking distance, type of terrain, proximity to Field Centre for resources and expertise;
- Safety considerations, for example away from unstable cliffs, water level not too deep, water flow not fast; and
- Site factors, for example size of area, length of river providing a range of survey points, no land restriction issues.

Award [0] for a response not worthy of credit.

Level 1 ([1]–[2])
Answers at this level include a basic description of the location(s) along with a basic explanation for the site selection:
e.g. We chose the Ormeau Road for our study as it as it is within walking distance of our school. The choice of this transect meant that we did not have to waste time travelling to the study area.

Level 2 ([3]–[4])
Answers at this level include a reasonable description of the location(s) along with a reasonable explanation for the site selection:
e.g. We chose the Ormeau Road for our study. We included Adelaide Avenue and Ormeau Avenue to give us a transect from the city centre. We chose this transect as it as it is within walking distance of our school and it is suitable for our aim to investigate how land use changes from the city centre to the suburbs. The choice of this transect meant that we did not have to waste time travelling to the study area.

Level 3 ([5]–[6])
Answers at this level will include a detailed description of the location(s) along with a detailed explanation for the site selection:
e.g. We chose the Ormeau Road for our study as it is within walking distance of our school. We included Adelaide Avenue and Ormeau Avenue to give us a transect from the city centre. Our chosen transect continued along the Saintfield Road to its junction with the Outer Ring. We chose this transect as it was suitable for our aim to investigate how land use changes from the city centre to the suburbs. The length of the transect was 8 km which allowed us to collect data at ten study sites. The choice of this transect meant that we did not have to waste time travelling to the study area and we were able to collect all the data we required within one day. [6]

5 Choose a different hypothesis from the one you wrote about in Question 2. Use the graph paper below to present data for this hypothesis. The data for your graph must be taken from your table of data.

The candidate must present a graph relevant to the aim of the fieldwork and accurately plot values displayed in their submitted table.

If the candidate does not write their chosen hypothesis in the space provided, the submitted statement of fieldwork aims and hypotheses should be checked to establish the likely hypothesis.

The breakdown of marks is as follows:

Appropriate title which refers to both variables plotted [2].

Award [1] for a partial title:
e.g. a graph showing pebble size.

AVAILABLE MARKS

AVAILABLE MARKS

Award [2] for a full title which refers to both variables:
e.g. A graph showing how pebble size changes with distance along the Shimna River.

Appropriateness of technique used [1].

Accurate and precise plotting of the chosen values from the table submitted [3].

Award [1] for plotting precisely and accurately some of the available data, less than 50% of the available data is plotted accurately.

Award [2] for plotting precisely and accurately the majority of the available data; there will be errors in the plotting of data, however, a minimum of 50% of the available data is plotted accurately.

Award [3] for precisely and accurately plotting all relevant data.

Use of appropriate conventions [2].

Award [1] where at least one convention is incomplete or missing.

Award [2] for all relevant conventions shown in full (both axes labelled including relevant units, provision of a key if appropriate, scaling as required). [8]

6 Describe what your graph shows about your chosen hypothesis.

Candidates are required to analyse (describe) their graph as it relates to the chosen hypothesis. The analysis should make reference to the overall pattern or trend shown, specific values should be quoted (e.g. start and finish), the presence of any anomalies should be described including value/s and there should be reference to the chosen hypothesis, i.e. the data presented supports/ does not support the chosen hypothesis.

Award [0] for an answer not worthy of credit.

Award [1]–[2] for a partial or incomplete analysis:
e.g. figures may be omitted, clear anomalies are ignored or there is no reference to the chosen hypothesis.

Award [3]–[4] for a detailed analysis which describes the overall pattern or trend shown quoting specific values (e.g. start and finish); describes any anomalies present including appropriate value/s and refers to the chosen hypothesis, i.e. the data presented supports/ does not support the chosen hypothesis. [4]

7 Explain what your graph shows using your knowledge of geographical theory.

AVAILABLE MARKS

The focus of this question is interpretation and not analysis. If the answer is purely analysis award [0].

The explanation must be related to the data displayed on the graph in Q.5. The geographical theory must relate to the relationship or pattern shown. Alternatively, the candidate may propose reasons to explain why no obvious pattern or trend was evident on the graph.

Award [0] for a response not worthy of credit.

Level 1 ([1]–[2])
Simplistic reasoning is provided with little/no attempt to integrate theoretical knowledge. There may be little or no specialist terminology used.

Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. A limited range of specialist terms is used appropriately.

Level 2 ([3]–[4])
Explanation is more limited with less effective integration of relevant theory and specialist terminology.

Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. A good range of specialist terms is used appropriately.

Level 3 ([5]–[6])
The answer displays sound explanation of the graph presented by the candidate in Q.5 with integration of relevant theoretical knowledge. There is competent use of specialist terminology.

Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. Candidates present and organise effectively relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. A wide range of specialist terms is used skilfully and with precision. [6]

8 Choose **one** variable from your table of data, describe and evaluate the method used to collect the data.

Candidates are required to describe the method used to collect one variable shown on their submitted table of data.
Note: this must be a primary data collection method. There are no marks for stating the name of the variable.

AVAILABLE MARKS

Candidates must also evaluate the data collection method; this should include both positive and negative comments allowing the candidate to make an overall judgement of its effectiveness as a data collection method.

e.g. The velocity of the river was measured by timing a float over a 10 metre stretch of river. We used a stop watch to time the movement of the float and a tape measure to measure the 10 m distance. This was done at three points across the river at each of our five stops along the course of the river. We then worked out the average for each stop. This helped to give a more accurate result for each stop which is important to produce accurate analysis and conclusions.

A limitation of the method was that sometimes the float got caught in the stones on the river bed and we had to free it by hand. This meant that the velocity reading was not completely accurate which would impact on our conclusions.

Overall this was a good method to measure velocity as the materials were readily available and did not cost anything. As the same method was used at each stop we had data that we were able to compare and draw conclusions from.

Award [0] for a response not worthy of credit.

Level 1 ([1]–[2])
The answer demonstrates a basic description of an appropriate data collection technique. There is little or no use of specialist terminology. There may be a basic evaluation of the primary data collection method which may refer to only positive or negative comments. There is a limited or no attempt to assess the effectiveness of the data collection method.

Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. A limited range of specialist terms is used appropriately.

Level 2 ([3]–[4])
The answer demonstrates a sound description of an appropriate data collection technique using some specialist terminology as appropriate. There is a reasonable evaluation of the primary data collection method including both a positive and negative comment. There is a reasonable assessment of the effectiveness of the data collection method.

Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. A good range of specialist terms is used appropriately.

Level 3 ([5]–[6])
The answer demonstrates a detailed description of an appropriate data collection technique using specialist terminology as appropriate. There is a thorough evaluation of the primary data collection method including both a positive and negative comment. This is followed by an overall assessment of the effectiveness of the data collection method.

Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. Candidates present and organise effectively relevant information in a form and using a style of writing which suits its purpose. The text is fluent and legible. A wide range of specialist terms is used skilfully and with precision. [6]

Total

AVAILABLE MARKS
40

COUNCIL FOR THE **CURRICULUM, EXAMINATIONS** AND **ASSESSMENT**
29 Clarendon Road, Clarendon Dock, Belfast BT1 3BG
Tel: +44 (0)28 9026 1200 Fax: +44 (0)28 9026 1234
Email: info@ccea.org.uk Web: www.ccea.org.uk

Rewarding Learning