

General Certificate of Secondary Education 2016

Geography

Unit 2: Living in Our World
Foundation Tier
[GGG21]

WEDNESDAY 8 JUNE, AFTERNOON

MARK SCHEME

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. The mark schemes should be read in conjunction with these general marking instructions.

Assessment objectives

Below are the assessment objectives for GCSE Geography.

Candidates must show they are able to:

- recall, select and communicate their knowledge and understanding of places, environments and concepts (AO1);
- apply their knowledge and understanding in familiar and unfamiliar contexts (AO2); and
- select and use a variety of skills, techniques and technologies to investigate, analyse and evaluate questions and issues (AO3).

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 15- or 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 15- or 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.

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.

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.

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 limited
- Level 2: Quality of written communication is satisfactory
- Level 3: Quality of written communication is of a high standard.

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

Level 1 (Limited): Candidates present some relevant information in a form and using a style of writing which suits its purpose. The text is reasonably legible. Spelling, punctuation and the rules of grammar are used with some accuracy so that meaning is reasonably clear. A limited range of specialist terms is used appropriately.

Level 2 (Satisfactory): Candidates present relevant information in a form and using a style of writing which suits its purpose. The text is legible. Spelling, punctuation and the rules of grammar are used with considerable accuracy so that meaning is clear. A good range of specialist terms is used appropriately.

Level 3 (High Standard): Candidates present, and organise effectively, relevant information in a form and style of writing which suits its purpose. The text is fluent and legible. Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. A wide range of specialist terms is used skilfully and with precision.

Assessment of spelling, punctuation and the accurate use of grammar.

Marks for spelling, punctuation and the accurate use of grammar will be allocated to specific questions where there is a requirement for sufficient extended writing to enable the accurate application of Performance descriptions (see below). These marks will be identified to candidates on the question papers.

Performance descriptions

(i) Threshold performance

Candidates spell, punctuate and use the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.

(ii) Intermediate performance

Candidates spell, punctuate and use the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.

(iii) High performance

Candidates spell, punctuate and use the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.

As shown by the performance descriptions, SPaG marks are awarded 'in the context of the demands of the question'. If the candidate's response does not address the question then no SPaG marks are available. However, if the candidate has attempted to answer the question but produced nothing of credit, SPaG marks may still be awarded.

1 (a) (i) State the straight line distance from the bus station at GR 911649 to the lighthouse at 926573.

(ii) State the height of the land at the spot height found inside GR 8757.

(iii) Underline the direction Yalberton (GR8658) is from Marldon (GR8663)

NORTH WEST <u>SOUTH</u> [1]

(iv) Using the Ordnance Survey map, complete **Table 1** by drawing or stating the meaning of the following symbols.

Symbol	Meaning	
(given)	Viewpoint	
Δ	Mast (given)	
(given)	Heliport	
	Golf course (given)	

[4]

(v) Torbay is an area that attracts many tourists. Using the Ordnance Survey map, state **three** pieces of map evidence to support this statement. Grid references not required in answer.

Accept any valid tourist activity,

e.g. picnic areas, caravan parks, golf courses, nature reserves, holiday park, marina, museum etc.

$$(3 \times [1]) \tag{3}$$

5

- **(b)** Study **Fig. 1** which shows the 2020 projected population pyramid for Torbay in south west England. Answer the questions which follow.
 - (i) Using **Fig. 1**, state the largest age group shown in the population pyramid.

(ii) Underline the smallest group of the population shown in this pyramid.

aged dependents working population <u>Youth dependents</u> [1]

(iii) Describe the difference between the percentage of the aged dependent population for Torbay and the percentage of the aged dependent population for England as shown on **Fig. 1**.

Award [1] for a basic statement, e.g. There are more elderly people in Torbay.

Award [2] for a brief comparison. This could be total dependent population on comparison of one cohort e.g. There are more elderly people in Torbay in all age groups from 65 plus. In the 65–85 age groups around 28% of the population are in this age category.

Award [3] for a detailed comparison between Torbay and England pyramid, either a total dependent population or a cohort e.g. There are more elderly people in Torbay in all age groups from 65 plus. In the 65–85 age group around 28% of the population of Torbay are in this age category compared to only approx. 18% of the population for England.

(iv) Complete **Table 2** by drawing an arrow to show if the statements are economic or social impacts of an ageing population. One has been completed for you.

Table 2

Social impact	Statement	Economic impact
•	Some elderly people feel unwanted	
	Elderly people require pensions from the government.	-
4	Many elderly people are more vulnerable to crime	
(given) ◀	Elderly people are more likely to suffer from more health problems.	
The government needs to -	•	
	invest more money into the health service.	

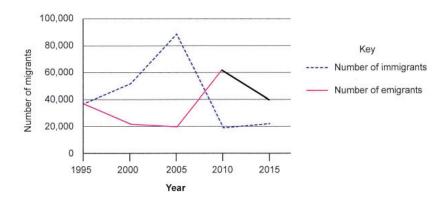
[4]

(c) (i) Complete the graph in **Fig. 2** by drawing in the following information. Award [1] for correctly plotting 40,000

Award [1] for joining the line

[2]

[2]



(ii) State the meaning of the term emigration.

Award [1] for a basic definition, e.g. people moving out of a country.

Award [2] for a fuller definition, e.g. people moving out of a country to live or work.

(iii) Using Fig. 2, describe the pattern of immigration in the Republic of Ireland between 1995 and 2015.

Award [1] for a basic statement with no figures, e.g. it increased and then decreased

Award [2] for a statement that quotes one figure, e.g. it increased to over 80,000 in 2005 before falling

Award [3] for a statement that quotes two figures, e.g. it increased to over 80,000 in 2005 before falling to 20,000 in 2010 [3]

(iv) GIS can be used to display population data.

Complete the term GIS by choosing from the list below.

Geographic Information Systems

Graphical Geographic Government [1]

(v) List two advantages of using GIS.

Advantages – it saves time, it can display lots of information, and it allows comparisons to be made, maps/graphs are produced $(2 \times [1])$ [2]

Accept accurate/up to date/easy to read/accessible.

- (d) Study **Table 3** which shows the growth of Mumbai, a city in India. Answer the questions which follow.
 - (i) Using **Table 3**, describe how Mumbai has grown since 1880.

Level 1 ([1]-[2])

An answer which briefly discusses the growth in population *or* the growth in the area of the city,

e.g. The city has increased its population [1] by 14.1 million people [2].

Level 2 ([3]-[4])

An answer which discusses the growth in population *and* the growth in the area of the city with figures quoted on each.

e.g. The city has increased its population [1] by 14.1 million people [2]. The size of the city has expanded rapidly [3] from 50 sq km to 3970 sq km, an increase of 3920 sq km [4].

(ii) Underline the name of the process occurring in Mumbai shown in Column 3.

Counterurbanisation <u>Urban Sprawl</u> Migration [1]

(iii) Explain one cause of urbanisation in LEDC cities.

Award [1] for one cause simply stated, e.g. Push and pull factors or natural increase.

Award [2] for one cause with a consequence,

e.g. In LEDCs people are attracted to the cities as the standard of living is seen as higher, e.g. you can get access to piped water and electricity.

Award [3] for one cause with a consequence and elaboration, e.g. In LEDCs many people are attracted to the city due to the prospect of a job. They can earn up to six times more money in these factories as they can from working off the land. Due to mechanisation in the countryside, there is little chance of earning a living so many people leave the countryside for the city. [3]

8

(i) Underline the main land use function in the inner city.

Housing Shopping Leisure [1]

(ii) Underline the correct term in each of the following statements which relate to the inner city.

The main type of house found in the inner city is **detached** / **terraced**. Unemployment levels are **high** / **low** in the inner city. Houses are **cheap** / **expensive** to buy. Inner city areas are located next to the **rural urban fringe** / **CBD**. (4 × [1])

(iii) Urban redevelopment occurs within MEDC cities. For one planning scheme that you have studied, assess the extent to which the environment and housing have improved.

Name of MEDC Inner City Area – most will mention Titanic Quarter, Belfast, but accept any valid alternative. [1]

ENVIRONMENT

Award [1] for a basic statement, e.g. In Belfast the environment has been made much cleaner.

Award [2] for a more detailed statement, e.g. The environment has also been improved. Many buildings have also been restored to their former glory.

Award [3] for a detailed statement with one specific fact/figure, e.g. The environment has also been improved. Many buildings such as the Harland and Wolff Headquarters have also been restored to their former glory. This preserves the heritage and character of the area. [3]

HOUSING

Award [1] for a basic statement, e.g. In Belfast there are lots of new houses built.

Award [2] for a more detailed statement,

e.g. In the Titanic Quarter lots of apartments have been built. These luxury apartments are aimed at young professionals who move in to work in this area.

Award [3] for a detailed statement with one specific fact/figure, e.g. In the Titanic Quarter lots of apartments have been built. In the Arc 7,500 apartments have been constructed. These provide homes for up to 20,000 people. These luxury apartments are aimed at young professionals who move in to work in this area. [3]

Assessment of spelling, punctuation and the accurate use of grammar

If the answer does not address the question then no SPaG marks are available. If the candidate has attempted to answer the question but produced nothing of credit, SPaG marks may still be awarded.

Threshold performance ([1])

Candidates spell, punctuate and use the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.

Intermediate performance ([2]–[3])

Candidates spell, punctuate and use the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.

High performance ([4])

Candidates spell, punctuate and use the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.

SPaG [4]

AVAILABLE

54

2 (a) State the meaning of the term development gap.

Award [1] for a basic definition, The difference between MEDCs and LEDCs.

Award [2] for a more detailed definition,

The division between wealthy and poor areas, in particular the disparity between LEDCs and MEDCs.

[2]

(b) (i) Name **one** social and **one** economic indicator of development from **Table 4**.

Social – one of: Life expectancy, % obesity and % of population below poverty line [1]

Economic – GDP per capita [1]

[2]

(ii) Using evidence from **Table 4**, compare the level of development between a **MEDC** and a **LEDC**.

Award [0] for candidates who do not compare a MEDC with a LEDC.

Level 1 ([1])

A simple comparison with no evidence from **Table 4** included.

United Kingdom is more economically developed than Afghanistan.

Level 2 ([2]-[3])

A more detailed comparison which includes at least one fact or figure for top level 2.

 Afghanistan's poor economic development is evidenced by its low GDP per capita of \$1,100 whereas the United Kingdom has a high GDP per capita.

Level 3 ([4])

A minimum of 2 facts/figures are named which include both social and economic indicators. Some judgement or conclusion is needed for full comparison.

- Afghanistan's poor economic development is evidenced by its low GDP per capita of \$1,100. The opposite however applies to the United Kingdom with its high GDP per capita of \$37,300. Overall the United Kingdom is more developed than Afghanistan. [4]
- (c) Explain how some LEDCs find it hard to develop because of their history.

Level 1 ([1])

A simple statement only.

Colonisation hindered many LEDCs from developing.

Level 2 ([2]-[3])

A simple statement with a slight elaboration

 Colonisation meant many LEDCs supplied the richer MEDCs with raw materials at a low price [2] which meant they had little money to develop. [3]

Level 3 ([4])

A statement, consequence and elaboration describe how historical factors hinder development

- Many LEDCs are former colonies of Western European countries (e.g. Malaysia and Britain). The colonies provided raw materials for the richer European countries. While the colonising countries often built roads and railways and provided education, colonisation mainly had a negative impact on LEDCs leaving them dependent on the markets in the MEDCs with little income to invest in development.

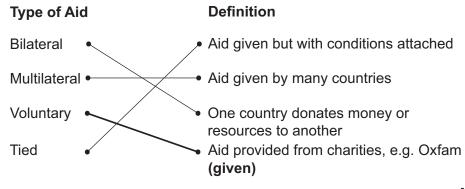
 [4] Accept reference to wars.
- (d) (i) Complete **Table 5** by placing a tick (✓) to show whether each example is long-term or short-term aid. One has been completed for you.

Table 5

Example	Short-term aid	Long-term aid
Building a school		✓
Providing food and water	✓	
Improving health care		✓
Providing shelter after a natural disaster	✓	
Donating money	√ (Given)	

[4]

(ii) Draw a line to match each type of aid with the correct definition. One has been completed for you.



[3]

(iii) Describe **one** positive and **one** negative impact of aid on LEDCs. You should refer to places in your answer.

Level 1 ([1]-[2])

A basic statement which addresses only one aspect of the question [1] or both [2].

- Some governments keep the money and squander it on weapons.
- Aid provides food, medicine and shelter for people.

Level 2 ([3]-[4])

A statement with a consequence. If the candidates answer one part of the question with a basic statement however the second part of the question is answered with some elaboration they can only achieve bottom of Level 2.

- Some countries promise aid to certain LEDCs but there usually are conditions attached to help the MEDC out. [2]
- Aid is good as it provides food, medicine and shelter for people.
 This aid may be needed after a natural disaster such as a flood. [2]

Level 3 ([5]-[6])

A statement with detailed explanation and place reference(s) included.

- Some countries promise aid to certain LEDCs but with conditions attached to help the MEDC out. For example the construction of the Akosombo Dam in Ghana. Therefore the aid may not be spread around the country. [3]
- Comic Relief raised £67 million for projects to tackle poverty across the UK and Africa. This aid provides food, medicine and shelter helping keep people alive and prevent suffering. [3] [6]

Assessment of spelling, punctuation and the accurate use of grammar

If the answer does not address the question then no SPaG marks are available. If the candidate has attempted to answer the question but produced nothing of credit, SPaG marks may still be awarded.

Threshold performance ([1])

Candidates spell, punctuate and use the rules of grammar with reasonable accuracy in the context of the demands of the question. Any errors do not hinder meaning in the response. Where required, they use a limited range of specialist terms appropriately.

Intermediate performance ([2]-[3])

Candidates spell, punctuate and use the rules of grammar with considerable accuracy and general control of meaning in the context of the demands of the question. Where required, they use a good range of specialist terms with facility.

High performance ([4])

Candidates spell, punctuate and use the rules of grammar with consistent accuracy and effective control of meaning in the context of the demands of the question. Where required, they use a wide range of specialist terms adeptly and with precision.

SPaG [4]

29

3 (a) (i) Complete the paragraph about **Fig. 5** using the correct terms from the box below.

Award [1] for each correct term.

Most sources of energy used in China are <u>non-renewable</u>. The <u>largest</u> increase in fuel use was between 2002–2010. China will use most renewable energy in <u>2020</u>. CO_2 emissions are predicted to more than <u>double</u> between 2002–2025. This will have a <u>negative</u> impact on the environment.

 $(5 \times [1]) \tag{5}$

(ii) Explain why world demand for energy is increasing.

Award [1] for a simple explanation, e.g. People are using more energy.

Award [2] for a reasonable explanation or two simple explanations, e.g. Population is growing so more people means a greater demand for energy,

e.g. People are using more energy and economic development increases the need for energy.

Award [3] for a detailed explanation which may refer to either population increase or increased economic/technological development,

- e.g. As economic prosperity increases people have more money to spend on equipment such as household appliances which uses more energy,
- e.g. As economic development takes place in LEDCs the number of factories increases and these all need a source of energy which leads to more demand for energy.

Credit valid alternative answers [3]

(b) (i) State the meaning of the term carbon footprint.

Award [1] for a simple definition,

e.g. The total amount of pollution/carbon caused by a person or an event.

Award [2] for a detailed definition related to the production of greenhouse gases,

- e.g. The total set of greenhouse gases caused by an individual or event expressed as CO₂ emissions. [2]
- (ii) More traffic in cities causes many problems. Using one case study of a city within the European Union (excluding the British Isles) evaluate the sustainability of the measures used in this city to manage traffic.

Award [1] for name of city, e.g. Freiburg [1]

Award [0] for a response not worthy of credit. No named city Level 1 max.

AVAILABLE MARKS

Level 1 ([1])

A simple accurate statement,

- e.g. Public transport was encouraged by building more cycle tracks,
- e.g. Trams were introduced.

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

Level 2 ([2]-[3])

Valid statement(s) with consequences which refer to at least two measures although one may be more detailed than the other, e.g. People were encouraged to use public transport by being given passes and cyclists were given the right of way at junctions so that the use of the car decreased.

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

Level 3 ([4]–[5]) Statements with consequences and evaluation which includes two

facts/figs/places in the named city and provides an evaluative statement as to whether the measures are sustainable or not, e.g. People were encouraged to use public transport by being given passes and cyclists were given the right of way at junctions. This led to a decrease in car usage from 60–46% from 1976 to 1992. Trams were introduced which decreased journey to work time and over 70% of local journeys are now made using the tram system. However, there is no free parking in the city centre of Freiburg and recidents must now for a

parking in the city centre of Freiburg and residents must pay for a parking pass in their street, this increased use of public transport is sustainable because less pollution is produced so the environment is more protected and it preserves the historic centre of Freiburg for the future.

Candidates present, and organise effectively, relevant information in a form and style of writing which suits its purpose. The text is fluent and legible. Spelling, punctuation and the rules of grammar are used with almost faultless accuracy so that meaning is clear. A wide range of specialist terms is used skilfully and with precision. [5]

(c) Reducing is one way to manage waste. State one other method of waste management.

Award [1] for a correct element of the waste hierarchy.

Any from: Recycle/reuse/incineration/landfill/energy recovery/disposal [1]

(d) (i) State **one** reason why ecotourism should be practised in this area.

Award [1] for a simple statement, e.g. There are few Laurisilva forests left.

Award [2] for a valid reason like elaboration,

e.g. There are very few Laurisilva Forests remaining in Europe so the forest should be protected for future generations,

e.g. There are many rare trees and birds which should be protected for the future. [2]

(ii) This travel company practises ecotourism in a number of ways. Choose **one** method used from the list below and suggest how it could protect the environment in Madeira.

[0] for method.

Award [1] for a simple statement,

- e.g. Guides can teach visitors about the special plants and animals in the area and the importance of this environment,
- e.g. The use of biodiesel in jeeps is more environmentally friendly and less polluting,
- e.g. Waste is recycled.

Award [2] for a statement with elaboration,

- e.g. The guides are able to educate and inform visitors about the value of this unique environment and how important it is to preserve it for future generations,
- e.g. By using biodiesel in their jeeps the company reduces their ${\rm CO_2}$ emissions which means it contributes less to global warming,
- e.g. By collecting and sorting waste carefully it can be recycled and the environment is kept for future generations. [2]
- (iii) Describe the impact of a sustainable tourism project on the local community in a country you have studied.

 If answer focuses on environment, max Level 1.

Award [1] for the name of country, e.g. Laos

[1]

Impact on community

Award [1] for a simple statement,

e.g. Local people can earn money through planning and developing the tourist treks.

Award [2] for a statement and consequence,

e.g. In Nam Ha, Laos, an ecotourism project conserves the area and culture. Tourists stay an average of four days and spend an average of \$9 per day. All trekking is arranged through the Nam Ha Eco-guide service using local guides and money made is invested to expand ecotourism.

Award [3] for a valid statement with consequence and elaboration, e.g. In the Nam Ha area of Laos an ecotourism project organised by UNESCO is being promoted to conserve the natural and cultural heritage of Laos. Tourists stay an average of four days and spend an average of \$9 per day. All trekking is arranged through the Nam Ha Eco-guide service using local guides and money made is invested to expand ecotourism. \$34,400 was earned in a year through trekking and river tours and this contributed to 40% of the village income and helped the poor due to improvements in health and education. Local people have learnt the benefit of conservation in terms of the earnings they can make to improve their quality of life.

25

Total

108