



**General Certificate of Education (A-level)**  
**June 2011**

**General Studies B**

**GENB2**

**(Specification 2765)**

**Unit 2: Space**

**Final**

***Mark Scheme***

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Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation events which all examiners participate in and is the scheme which was used by them in this examination. The standardisation process ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for standardisation each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed and legislated for. If, after the standardisation process, examiners encounter unusual answers which have not been raised they are required to refer these to the Principal Examiner.

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## INTRODUCTION

The nationally agreed assessment objectives in the QCA Subject Criteria for General Studies are:

- AO1** Demonstrate relevant knowledge and understanding applied to a range of issues, using skills from different disciplines.
- AO2** Marshal evidence and draw conclusions; select, interpret, evaluate and integrate information, data, concepts and opinions.
- AO3** Demonstrate understanding of different types of knowledge appreciating their strengths and limitations.
- AO4** Communicate clearly and accurately in a concise, logical and relevant way.

- Candidates will often perform at a uniform level across the four Assessment Objectives. Sometimes, though, their performance will be uneven across the AOs.
- The mark awarded for a response should reflect the relative weightings of AOs for the unit (see below).
- **Thus, for Unit 2, knowledge and understanding [AO1] and marshalling evidence and drawing conclusions [AO2] have equal weight. These should determine the level (1 – 5) to which the response is allocated.**
- Whether communication is clear and accurate [AO4] – and, to a lesser extent, whether fact and opinion are distinguished [AO3] – should determine the mark within the level.
- **Answers given in the mark scheme are not necessarily definitive. Other valid points must be credited, even if they do not appear in the mark scheme.**

### Distribution of marks across the questions and assessment objectives for Unit 2

Question Numbers		Q1	Q2	Q3	Total marks
Assessment Objectives	1	10	10	10	30
	2	10	10	10	30
	3	4	4	4	12
	4	6	6	6	18
Total marks per Question		30	30	30	90

**1 (a) Using Source A, calculate percentage changes in CO<sub>2</sub> emissions between 1990 and 2007 for Households and for Transport.**

**You are advised to show how you arrived at your answer.**

**(4 marks)**

**Households:**  $142 - 156 = -14$

$-14 / 156 (x100) = -8.97\% (-9\%)$   
(negative/minus must be shown to be correct)

**Transport:**  $153 - 141 = 12$

$12 / 141 (x100) = 8.51\% (9\% \text{ or } 8.5\%)$

When a candidate shows their working award:

4 marks:	HOUSEHOLDS	% calculation (1 mark)	correct answer (1 mark)
	TRANSPORT	% calculation (1 mark)	correct answer (1 mark)

(the negative/minus figure must be identified for 'Households')

The above method of calculation is only one way of achieving it. Other methods may be acceptable.

**For example**

**Households:**  $142 / 156 (x 100) = 91.03$   
 $91.03 - 100 = -8.97\% (-9\%)$

**Transport:**  $153 / 141 (x100) = 108.51$   
 $108.51 - 100 = 8.51\% (9\% \text{ or } 8.5\%)$

If a candidate does not show working:

2 x 2 marks for each correct answer

(the negative/minus figure must be identified for 'Households')

- 1 (b) Referring specifically to the data in Source A, describe and suggest reasons for the changes in carbon dioxide emissions in the United Kingdom between 1990 and 2007.**

**(10 marks)**

Candidates are expected to refer explicitly to the data in this part of the answer by identifying changes, trends, differences and even reference to CO<sub>2</sub> emissions. Candidates may also draw on their own knowledge.

Points that might be suggested include:

- decline in Britain's manufacturing and business base
- higher energy costs
- legislation on emissions and energy efficiency
- better fuel efficiency and insulation in residential properties
- many families own more than one car
- more people use air travel.

Other valid points are acceptable.

**Level 1 (8 – 10 marks)**

- Three or more valid points which are well made and refer specifically to the figures in the data provided, quoting percentage and/or actual differences
- Two well made points and at least one other point with some exemplification may feature at the lower end of the mark range
- An awareness of the specific reasons behind the figures presented.

**Level 2 (4 – 7 marks)**

- Two or more points competently made
- At the upper end, reference is likely to be made specifically to the data and the changes that they show
- There is likely to be evidence of linking the reason with the data at the upper end.

**Level 3 (1 – 3 marks)**

- At least one point which is briefly made
- Where more than one point is made, the answer is likely to be based on simplistic description
- Responses are more likely to be descriptive rather than explanatory.

- (0)** No response, or no relevant information.

**1 (c) Explain three measures that the government might encourage to reduce household emissions.**

**(6 marks)**

Points that might be suggested include:

- incentives to encourage people to insulate homes
- tax high energy users
- advertising that promotes energy efficiency and saving
- encourage manufacturers to make appliances more energy efficient
- offer trade-in schemes to get consumers to replace high energy appliances/boilers etc.
- encourage households/businesses to install their own renewable energy sources.

1 mark each for identifying a point such as the ones above up to a maximum of 3: a further mark for each for providing a suitable expansion.

**1 (d) Discuss what can be done by individuals to help reduce the effects of global warming as shown in Source B, and the likely effectiveness of these measures. (10 marks)**

In this question, candidates should use their own knowledge, but may refer to the data in the source to support their arguments. The question suggests a two-sided discussion but a candidate can reach Level 1 by presenting a single position on the effectiveness of their proposals.

Points that might be offered could include:

- use public transport instead of personal transport
- reduce unnecessary travel
- become more energy efficient in the home and at work
- switch to renewable energy sources
- recycle more
- turn down heating in workplace.

The points suggested above are only indicative and other valid responses are acceptable.

To gain full marks for any point, a candidate would be expected to make some reference to the likely effectiveness of each suggestion made.

**Level 1 (8 – 10 marks)**

- At least 3 points well made which show an awareness of the issues and drawing on specific examples
- Two well made points and at least one other point with some exemplification may feature at the lower end of the mark range
- Answers will show clear development of the points made and discussion of the issues and the likely effectiveness of the measures
- Both sides of the debate are likely to be addressed in order to reach this level.

**Level 2 (4 – 7 marks)**

- At least 2 points are competently made with some exemplification
- There will be some exemplification and discussion of effectiveness
- A candidate who addresses more than two points without expansion or examples may feature at the lower end of this band.

**Level 3 (1 – 3 marks)**

- One well-developed point or a list of undeveloped points
- Exemplification may be weak
- There is unlikely to be any real discussion of the effectiveness of the measures.

**(0)** No response, or no relevant information.

**2 (a) Argue in favour of distributing goods by rail rather than by road (Source C).**

**(10 marks)**

**NB** This answer requires a one-sided response.

Reasons that might be offered include:

- a large number of lorries would be taken off the road reducing congestion, especially on smaller roads
- lorries are generally more environmentally damaging than trains
- it is more cost effective over long distances
- rail transport is quicker
- fewer lorries would cause less damage, which would benefit ordinary road users.

Any other valid points should be credited.

**Level 1 (8 – 10 marks)**

- At least 3 points well made that show an awareness of the issues and draw on specific examples, which may include the source
- Two well made points and at least one other point with some exemplification may feature at the lower end of the mark range
- Answers will show clear development of the points made and discussion of the issues.

**Level 2 (4 – 7 marks)**

- At least 2 points are competently made with some exemplification
- Specific examples may include the source
- A candidate who addresses more than two points without expansion or examples may feature at the lower end.

**Level 3 (1 – 3 marks)**

- One well-developed point or a range of undeveloped points
- Exemplification may be weak
- It may be totally or heavily reliant on the source.

**(0)** No response, or no relevant information.

*Bullet-pointed answers are unlikely to progress beyond the lower end of level 2, as they are unlikely to include discussion of the issues.*



**2 (b) Why might some businesses prefer to distribute their goods by road (Source D)?**

**(10 marks)**

**NB** This answer requires a one-sided response.

Reasons that might be offered include:

- lorries deliver door to door whereas rail seldom does
- rail is not very effective for small loads or multiple deliveries
- can be limited by time of scheduled train departures
- rail network is not comprehensive
- total reliance on one network
- road distribution is usually cheaper
- new logistical technologies make road distribution more flexible and efficient
- company names on lorries provide advertising.

Any other valid points should be credited.

**Level 1 (8 – 10 marks)**

- At least 3 points well made that show an awareness of the issues and draw on specific examples, which may include the source
- Two well made points and at least one other point with some exemplification may feature at the lower end of the mark range
- Answers will show clear development of the points made and discussion of the issues.

**Level 2 (4 – 7 marks)**

- At least 2 points are competently made with some exemplification
- Specific examples may include the source
- A candidate who addresses more than two points without expansion or examples may feature at the lower end.

**Level 3 (1 – 3 marks)**

- One well-developed point or a range of undeveloped points
- Exemplification may be weak
- It may be totally or heavily reliant on the source.

**(0)** No response, or no relevant information.

*Bullet-pointed answers are unlikely to progress beyond the lower end of level 2, as they are unlikely to include discussion of the issues.*

**2 (c) Discuss the view that expanding the rail system is a better solution to passenger transport problems than expanding the motorway network.**

**(10 marks)**

Points suggested are likely to involve discussion of:

- rail is often more expensive than road travel
- the cost of the infrastructure could be immense
- most journeys are short distance
- people enjoy personal space in cars
- toll roads could become more acceptable as in France
- less environmentally damaging
- rail expansion could reduce fares through greater use
- off-peak/pre-booked rail is often inexpensive
- road expansion would be more 'land-hungry'.

It is anticipated that candidates will make an attempt to present a balanced argument that discusses the relative merits of the two sides of the debate. Some of the bullet points could be argued either way.

However, a candidate can reach Level 1 by presenting a single position on the effectiveness of their proposals.

Any other valid points should be credited.

**Level 1 (8 – 10 marks)**

- At least 3 points well made that show an awareness of the issues and draw on specific examples, which may include the source
- Two well made points and at least one other point with some exemplification may feature at the lower end of the mark range
- Answers will show clear development of the points made and discussion of the issues.

**Level 2 (4 – 7 marks)**

- At least 2 points are competently made with some exemplification
- Specific examples may include the source
- A candidate who addresses more than two points without expansion or examples may feature at the lower end.

**Level 3 (1 – 3 marks)**

- One well-developed point or a range of undeveloped points
- Exemplification may be weak
- It may be totally or heavily reliant on the source.

**(0)** No response, or no relevant information.

*Bullet-pointed answers are unlikely to progress beyond the lower end of level 2, as they are unlikely to include discussion of the issues.*

**3 (a) Why might some people argue that policing the Internet is necessary?**

**(15 marks)**

Candidates might offer such points as the ones listed below, hopefully with examples to support their arguments. Other valid points are acceptable. The examples listed are merely illustrative.

- children need to be protected from violence and pornography
- some material may be offensive
- children and others need to be protected from predatory individuals
- some political leaders may want to conceal wrongdoings and prevent their citizens from knowing what is going on within and beyond their boundaries
- some data could threaten security/law and order
- censoring may reduce and deal with bogus/fraudulent/scam websites.

**Level 1 (12 – 15 marks)**

- A good response showing awareness of the issues, commenting on a range of points related to the source material and perhaps moving beyond that by introducing additional ideas [AO1]
- Clear examples from the source and perhaps beyond that illustrate the central issues and their relative importance [AO2]
- An awareness of why some people believe that the issues raised are important; evidence of understanding of different positions and why these positions are held [AO3]
- Communication is clear, accurate and the argument is well structured [AO4].

**Level 2 (5 – 11 marks)**

- A competent response showing some awareness of a range of points, perhaps, but not necessarily, touching on points not offered in the source but giving suitable ideas to support the arguments. Clear development of ideas and relying on the source for examples can be a feature across all marks at this level [AO1]
- Examples may focus on the source only and there may be some reference to reasons why the arguments have validity, perhaps only using the examples provided [AO2]
- References may be made to the positions held by different groups but answers are unlikely to explain why different groups hold different positions [AO3]
- There may be errors in the language used, but they do not impair communication; the response has some structure [AO4].

**Level 3 (1 – 4 marks)**

- A limited response that shows little awareness of the issues surrounding the subject and almost certainly relying heavily on the source [AO1]
- Reasons are likely to be anecdotal/list-like with little development or are confined to the source [AO2]
- There is little understanding of the reasons why some groups may hold different positions [AO3]
- Errors of language may impair communication; there is little structure in the response and it may be brief [AO4].

**(0)** No response, or no relevant information.

**3 (b) Why might some people argue that censoring the Internet threatens our freedom?**

**(15 marks)**

Candidates might offer such points as the ones listed below, hopefully with examples to support their arguments. Other valid points are acceptable. The examples listed are merely illustrative.

- we have a right to access knowledge and information whatever the source
- it is a restriction on freedom of ideas and speech
- political leaders censor to protect their regimes
- it is an individual's or parent's right to censor
- social attitudes and values change and regulatory bodies may not reflect societal views
- who has the right to decide what we access?
- who will censor the censors?

**Level 1 (12 – 15 marks)**

- A good response showing awareness of the issues, commenting on a range of points related to the source material and perhaps moving beyond that by introducing additional ideas [AO1]
- Clear examples from the source and perhaps beyond that illustrate the central issues and their relative importance [AO2]
- An awareness of why some people believe that the issues raised are important; evidence of understanding of different positions and why these positions are held [AO3]
- Communication is clear, accurate and the argument is well structured [AO4].

**Level 2 (5 – 11 marks)**

- A competent response showing some awareness of a range of points, perhaps, but not necessarily, touching on points not offered in the source but giving suitable ideas to support the arguments. Clear development of ideas and relying on the source for examples can be a feature across all marks at this level [AO1]
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- References may be made to the positions held by different groups but answers are unlikely to explain why different groups hold different positions [AO3]
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- There is little understanding of the reasons why some groups may hold different positions [AO3]
- Errors of language may impair communication; there is little structure in the response and it may be brief [AO4].

**(0)** No response, or no relevant information.

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