

Write your name here

Surname

Other names

Centre Number

Candidate Number

Edexcel GCSE

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Citizenship Studies

Unit 3: Citizenship in Context

Option A: Environmental Change and Sustainable Development

Additional Sample Assessment Material

Time: 1 hour 15 minutes

Paper Reference

5CS03/3A

You must have:

Sources Booklet (enclosed)

Total Marks

Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided
– *there may be more space than you need*.

Information

- The total mark for this paper is 50.
- The marks for **each** question are shown in brackets
– *use this as a guide as to how much time to spend on each question*.
- Questions labelled with an **asterisk (*)** are ones where the quality of your written communication will be assessed.
– *you should take particular care with your spelling, punctuation and grammar, as well as the clarity of expression, on these questions*.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

Turn over ▶

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Study the sources in the Sources Booklet.

Answer ALL questions.

For questions 1–7, choose an answer A, B, C or D and put a cross in the box . Mark only one answer for each question. If you change your mind about an answer, put a line through the box and then mark your new answer with a cross .

- 1 Which **one** of the countries listed in Source A and below would regard itself as a less economically developed country (LEDC) rather than a more economically developed country (MEDC)? (1)
 A India
 B Germany
 C Canada
 D Japan
- 2 According to Source B, new nuclear power stations are now being planned to: (1)
 A increase UK use of sustainable energy
 B ensure the UK has a good supply of nuclear fuel
 C reduce dependence on fossil fuels
 D replace old worn-out power stations
- 3 The statement in Source B that 'If the UK has a new nuclear programme, others might want the same' is an opinion rather than a fact because: (1)
 A it can be proved to be correct
 B it cannot be proved to be correct
 C an opinion poll says a majority of people believe this
 D it was stated in a newspaper
- 4 Which of the energy sources below is a fossil fuel? (1)
 A solar power
 B wind power
 C natural gas
 D nuclear power

- 5 According to Source C, the UK Department for International Development give Malawian villagers beekeeping equipment and training because: (1)
- A honey is a nutritious addition to the villagers' diet
 - B the villagers would starve if this was not done
 - C beekeeping is more desirable than burning rainforest
 - D they can buy fertiliser and seeds from the income
- 6 According to Source D, the estuary of the River Severn would be a specially suitable site for a barrage because: (1)
- A of the big difference in water levels at high and low tides
 - B it would fit in well with the ecology of the local area
 - C a barrage in that area would be relatively cheap
 - D it would have little impact on large population centres
- 7 People who favour the proposed Severn Barrage outlined in Source D are likely to do so because: (1)
- A there is virtually no opposition to the proposal
 - B it offers no threat to birds or fish
 - C it produces energy from a renewable source
 - D it makes better use of the mudflats

(Total for Questions 1–7 = 7 marks)

- 8 Using Source A, briefly explain why some countries have high **total** carbon emissions but very low carbon emissions **per person**. (2)
-
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.....

(Total for Question 8 = 2 marks)

- 9** Source E refers to Jonathan Dimbleby's 'NIMBY neighbours'. State and briefly explain what the phrase stands for.

(2)

(Total for Question 9 = 2 marks)

- 10** Source B suggests there may be safety concerns over nuclear waste. Describe **three** such safety concerns.

(3)

1

2

3

(Total for Question 10 = 3 marks)

11 Green taxes, such as higher petrol tax, aim to reduce greenhouse gas emissions. Explain how effective such green taxes might be.

(6)

(Total for Question 11 = 6 marks)

- 12** (a) Give two reasons why less economically developed countries (LEDCs) believe they should **not** be required to reduce their use of fossil fuels.

(2)

1

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.....

2

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.....

- (b) Give two **other** reasons why more economically developed countries (MEDCs) should reduce their use of fossil fuels.

(2)

1

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2

.....

.....

(Total for Question 12 = 4 marks)

13 (a) State the difference between sustainable and non-sustainable energy sources. (1)

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.....
.....

(b) Give an example of each. (2)

Sustainable example:

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.....
.....

Non-sustainable example:

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.....
.....

(Total for Question 13 = 3 marks)

14 Use evidence from Source C and your own knowledge.

Do you agree that providing technology and training (as in the case of bee-keeping) is a better way to help people in LEDCs than simply supplying money or food aid?

Give reasons for your opinion, showing that you have considered **another point of view**.

(8)

(Total for Question 14 = 8 marks)

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***15** 'Those who oppose wind farms should be ignored. They delay or prevent action to reduce global warming and climate change for purely selfish reasons.'

Do you agree with this view?

Give reasons for your opinion, showing that you have considered **another point of view**.

(15)

You could consider the following points in your answer and other information of your own:

- Why do some people support the building of wind farms?
- Why do other people oppose the building of wind farms?
- In a democracy everyone has a right to their say, so could it ever be justifiable to ignore anyone's views?
- Do people think purely of their own interests and wishes – or do they take into account the needs of others in the community?

(Total for Question 15 = 15 marks)

TOTAL FOR PAPER = 50 MARKS

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Edexcel GCSE

Citizenship Studies

Unit 3: Citizenship in Context

Option A: Environmental Change and Sustainable Development

Additional Sample Assessment Material
Sources Booklet

Paper Reference
5CS03/3A

Do not return this booklet with the question paper.

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Study the following sources and answer the questions in the question paper.

Source A: World-wide Carbon Dioxide Emissions 2006/7

In 2006/7 the list of countries with the highest carbon dioxide emissions differed when the countries were listed by emissions per head of population.

	Total Emissions (%)	Rank Order in World		Rank Order per Head of Population
China	22%	1st	USA	9th
USA	20%	2nd	Canada	10th
Russia	6%	3rd	Russia	33rd
India	5%	4th	Japan	35th
Japan	5%	5th	Germany	36th
Germany	3%	6th	UK	41st
UK	2%	7th	China	91st
Canada	2%	8th	India	130th

(Source: adapted from <http://en.wikipedia.org>)

Source B: 10 new nuclear power stations for the UK – but is nuclear the answer?

In 2009 the government announced plans to build ten new nuclear power stations as a substitute for worn-out power stations. However, the UK's Sustainable Development Commission says nuclear power is **not** the whole answer. It says:

- More nuclear power stations will help to stabilise CO₂ emissions.
- They will widen the UK's range of energy sources.
- However, even doubling the UK's nuclear capacity would only cut CO₂ emissions by 8% by 2035.
- Nuclear fuel is limited in supply so strictly it is not sustainable.
- It is expensive, if not impossible, to dispose of nuclear waste safely in the long term.
- If the UK has a new nuclear programme, other countries might want the same. This might lead to accidents, radiation exposure and terrorist attacks.



(Source: adapted from <http://www.sd-commission.org.uk> and <http://www.treehugger.com>)

Source C: Aid to promote improve living standards and promote trade

In Malawi, the UK's Department for International Development is helping millions of people to afford essentials like seeds and fertiliser.

- In Thyolo District, ten beehives were provided, along with beekeeping equipment and training in how to produce honey.
- Each beehive can produce 50 bottles of honey, so the villagers should make over \$700 at each harvest.
- 'The money from the sale of the honey will raise the people's living standards as they can purchase fertiliser and boost their other crop harvests next season', says Sailesi Vaheke of the local beekeeping group.



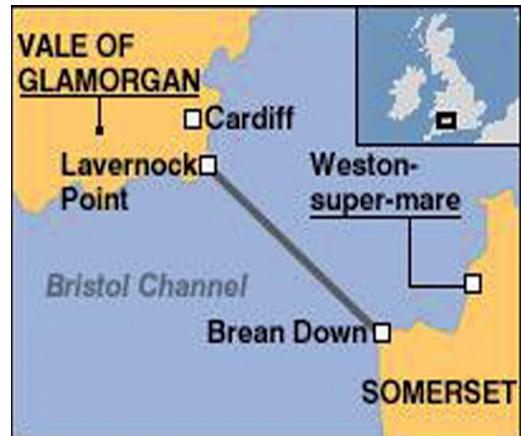
Sailesi Vaheke's beehive could produce up to 50 bottles of honey.
Photo credit: Elvis Sukali/Oxfam.

(Source: adapted from <http://www.dfid.gov.uk/>)

Source D: Severn Barrage proposed to make sustainable energy

A Severn Barrage using tidal power to make sustainable energy has been proposed. Water would be captured behind a dam in the river estuary. It would flow through the gates as the tide goes out. This would drive turbines which generate electricity.

- The River Severn has a 14 metre difference between water levels at high and low tides. This makes the turbines generate a great deal of electricity.
- The government hopes to harness the power of the Severn to generate electricity.
- Many groups are concerned about the environmental impact of these proposals.
- Bristol-based pressure group *Stop the Barrage Now* say that the barrage could cost over £15 billion.
- They say the barrage would add to local flooding, reduce fish stocks, damage bird life as well as ruining mudflats across an area of more than 77 square miles.



(Source: adapted from <http://www.climateandfuel.com>, <http://www.guardian.co.uk>, and <http://www.carboncommentary.com>)

Source E: Who do you support - the Nimby or the Dimby?

Jonathan Dimbleby used to protest against windfarms. Now he plans to build a small wind turbine in his meadow in Devon, upsetting his NIMBY neighbours.

- Jonathan's wind turbine will provide his family with all the electricity they need in their home.
- It will stand 50ft high, but will be out of earshot and largely hidden from the village by the surrounding trees and hedges.
- His neighbours Bob and Marinella Hollies see things very differently. Bob says they were plagued by noisy neighbours before they moved to their favourite corner of Devon.
- They valued the quietness and the views of rolling countryside.
- Their garden is a haven for wildlife.
- They think Jonathan's turbine will be an eyesore.



(Source: adapted from <http://www.mailonsunday.co.uk>)

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Mark Scheme

Additional Sample Assessment Material

GCSE

GCSE Citizenship (Unit 5CS03/Option A)

General Marking Guidance

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

Question Number	Answer	Mark
1	A India	1

Question Number	Answer	Mark
2	D replace old worn-out power stations	1

Question Number	Answer	Mark
3	B it cannot be proved to be correct	1

Question Number	Answer	Mark
4	C Natural gas	1

Question Number	Answer	Mark
5	D they can buy fertiliser and seeds from the income	1

Question Number	Answer	Mark
6	A of the big difference in water levels at high and low tides	1

Question Number	Answer	Mark
7	C it produces energy from a renewable source	1

Question Number	Answer	Mark
8	<p>Allow one mark for each point and one mark if it is supported by an appropriate example – eg:</p> <ul style="list-style-type: none"> • Population much greater – eg India/China compared to UK <p>AND/OR</p> <ul style="list-style-type: none"> • Country may be fossil fuel-rich (eg coal, natural gas, oil) and see no reason to limit use – eg middle eastern oil producers compared to UK 	2

Question Number	Answer	Mark
9	<p>Award one mark for recognising NIMBY stands for ‘Not In My Backyard’.</p> <p>Award one mark for simple explanation – eg</p> <p>Natural for people to act to defend things as they are/not welcome change</p> <p>OR</p> <p>Some people may accuse them of deliberately acting to stand in the way of progress</p> <p>OR</p> <p>Some answers may refer to typical NIMBY arguments over wind-turbines – eg dangerous to birds, make a dreadful noise, spoil the view, devalue my house</p>	2

Question Number	Answer	Mark
10	<p>Allow one mark for each broad area of possible concern mentioned in the candidate's own words (MAX 1 MARK IF TEXT IS SIMPLY REPEATED) – eg</p> <ul style="list-style-type: none"> • Spent nuclear fuel can be a health risk if radiation is not contained. <p>OR</p> <ul style="list-style-type: none"> • Spent nuclear fuel can be misused by terrorists <p>OR</p> <ul style="list-style-type: none"> • Cannot guarantee safe disposal - spent nuclear fuel may leak out of secure drums or other containers <p>OR</p> <ul style="list-style-type: none"> • It may be expensive to prevent spent nuclear fuel from contaminating the environment in which it is stored. 	3

Question 11 – Indicative content

Acceptable points could include

EFFECTIVE:

- If green taxes increase the cost of private motoring more people may switch to public transport if it is available.
- If there is greater use of public transport it will become more cost efficient.
- Some households may find they now only need to run one car

NOT EFFECTIVE:

- But if green taxes are raised too high this may threaten personal choice.
- At a time of economic recession is it fair to deliberately increase people's costs?
- In some areas, there may be no rail services and buses may run at inconvenient times.

Level	Mark	
0	0	The answer does not seriously address the question
1	1-2	The answer offers just 1 or 2 very simple points only without any development
2	3-4	The answer makes two or three points but they are fairly superficial and any examples will probably be generalised
3	5-6	Three or more well-chosen points supported by simple but acceptable examples or evidence

Question Number	Answer	Mark
12(a)	<p>Award 1 mark for each clearly different point made – eg:</p> <ul style="list-style-type: none"> • Some LEDCs may have very high carbon emissions levels but large populations so their emissions per head figure is very low. <p>OR</p> <ul style="list-style-type: none"> • Some LEDCs may say that global warming was caused in the rich world in the 18th/19th/20th centuries and they should not be denied the chance to become similarly industrialised. <p>OR</p> <ul style="list-style-type: none"> • Some LEDCs may believe they cannot cut emissions without technical support and investment from richer countries (MEDCs) 	2

Question Number	Answer	Mark
12(b)	<p>Points made must be different from those used in 12(a)</p> <p>Award 1 mark for each clearly different point made – eg:</p> <ul style="list-style-type: none"> • MEDCs need to cut emissions by developing new technologies to cut global warming <p>OR</p> <ul style="list-style-type: none"> • Nuclear and renewable energy technologies can help MEDCs cut greenhouse gas emissions but they also need to provide funds to poorer countries to introduce them. <p>OR</p> <ul style="list-style-type: none"> • If MEDCs do not cut greenhouse gas emissions, more hurricanes, flooding, intense drought, desertification and climate change are likely to occur throughout the world <p>OR</p> <ul style="list-style-type: none"> • If global warming isn't arrested, it is likely polar ice could melt completely (at least in summer) causing devastating increases in sea levels. <p>OR</p> <ul style="list-style-type: none"> • Supply of fossil fuels is finite, so new energy sources and technologies need to be found before the present known sources are depleted. 	2

Question Number	Answer	Mark
13(a)	<p>Allow 1 mark for correctly distinguishing between sustainable and non-sustainable energy sources – eg – a sustainable energy source is not limited in supply whereas a non-sustainable energy source is limited and could eventually run out.</p>	1

Question Number	Answer	Mark
13(b)	<p>Allow 1 mark for an example of sustainable energy sources - eg</p> <ul style="list-style-type: none"> • Wind power OR • Solar power OR • Tidal power <p>Allow 1 mark for an example of non-sustainable energy sources - eg</p> <ul style="list-style-type: none"> • Coal OR • Oil OR • Natural gas <p>NB: Allow Nuclear fuel (uranium)</p>	2

Question 14 – Indicative content

Candidates are likely to make points such as the following:

TECHNOLOGY AND TRAINING BEST

- If people are trained to change their farming practices, the skills will support them long term
- Learning something like bee keeping is low-tech and the equipment is unlikely to break down
- If more complicated technology is introduced, more time is needed to allow groups to become trained, familiar and at ease with the technology (eg pumping water)
- Once know-how and equipment are in place, the people in the LEDC can raise their standard of living, buying seeds or fertilisers, thus improving harvest outputs and the amount of food they have for their own needs and also for trade.

DIRECT AID BEST

- In an emergency direct food and shelter are needed to meet the immediate needs caused by extreme weather, flooding or earthquakes or civil war
- So are medicines and tents
- If the people are in a very hot or infertile area, or are very ill, they may have no option but to live on food aid.
- Although there are obvious advantages on teaching them how to get out of a cycle of dependency, developed countries have often been keen to dump surpluses onto developing countries – thus appearing to be generous but in fact weakening the local market infrastructure in the process.

NB – it is acceptable for students to argue in favour of direct aid, especially when faced with crisis situations such as extreme weather or earthquakes.

Level 0	0 marks	No rewardable material
Level 1	1-2 marks	Basic and/or very brief approach – likely to be opinionated with basic knowledge and little understanding/sense of strategy.
Level 2	3-4 marks	An approach which demonstrates considerable realism, some relevant evidence/interpretation some good understanding of what needs to be done. Students who do not indicate what possible strategies they considered but rejected are limited to a maximum of 4 marks
Level 3	5-6 marks	An approach covering recommended actions and a clear statement of other ideas which had been rejected - using some supporting evidence/interpretation or evaluation to develop limited arguments, demonstrating quite good knowledge and understanding.
Level 4	7-8 marks	A balanced approach indicating favoured and rejected strategies which uses clear evidence and interpretation/evaluation to support arguments and demonstrates good knowledge and understanding.

Question 15 (includes QWC) – Indicative content

Candidates must look at two sides of the argument:

KEY POINTS:

- Like Jonathan Dimbleby's neighbours, many NIMBY people just don't want things to change – often also claiming that global warming isn't a problem.
- They often say the value and enjoyment of their property would be reduced.
- Sometimes they say a particular view involves 'outstanding natural beauty'
- Like people who opposed the construction of railways in the nineteenth century, they often claim startling effects if the plans go ahead – the noise of the turbines, the dangers if they fall over, the cruelty of killing rare birds.
- Such people would deny they are selfish – but others may feel differently
- If they do accept the need to combat global warming and climate change, such action is always to be undertaken elsewhere and by other people.
- Those who recognise the dangers of global warming sometimes claim that it is a natural phenomenon and no intervention will make a difference – often (but not always) adding that it is therefore best to leave things as they are.
- But note - not all opponents of wind farms etc are NIMBYs – some do so, claiming scientific arguments.

ALTERNATIVELY....

- Some people who oppose wind farms and other renewable energy innovations do so because they genuinely doubt climate change science.
- However some who oppose development of renewable energy sources may have a vested interest in retaining dependence on fossil fuels such as coal, gas or oil – eg oil companies which fund some climate change sceptics.
- An important dimension of this question is the 'ethical aspect' – ignoring the needs of vulnerable people for what may be though trivial reasons could reasonably be seen as 'selfish'
- However even if NIMBYs ARE selfish, in a democracy, would it be right to ignore the view of people who are simply stating their opinions or standing up for their own interests?
- But perhaps the period for obstructing developments should be shortened so once a decision is made it cannot be appealed over and over again.

Level 1	1-3 marks	Opinion with little or no reasoning, showing simple knowledge and little understanding of issues and/or events. <i>There are some errors in spelling, punctuation and grammar but the basic meaning is clear.</i>
Level 2	4-6 marks	Opinion with limited reasoning, supported by limited relevant evidence and/or examples showing basic knowledge and understanding of issues and/or events. Students who include ONLY points for, or ONLY points against are restricted to a maximum of 6 marks. <i>Spelling, punctuation and grammar are reasonably accurate and meaning is clear.</i>
Level 3	7-9 marks	Points FOR and AGAINST are included in a simple but reasonably effective discussion which shows some knowledge and understanding of some issues and/or events. <i>Spelling, punctuation and grammar are mostly accurate and appropriate language is used to convey meaning.</i>
Level 4	10-12 marks	Points FOR and AGAINST are included in a mainly balanced and reasoned discussion which shows quite good knowledge and understanding of issues and/or events, based on evidence/argument and leading towards a conclusion. <i>Spelling, punctuation and grammar are accurate & appropriate language is used together with some use of specialist terms</i>
Level 5	13-15 marks	Points FOR and AGAINST included in a balanced, reasoned and coherent discussion which shows good knowledge and understanding of issues and/or events, supported by strong evidence and arguments leading to a reasoned conclusion. <i>Fluent and consistently strong use of vocabulary and accurate spelling, punctuation and grammar with use of specialist terms.</i>