

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Introducing the question

Students can be introduced to this question using the Kerboodle assessment:

15 On your marks

This will help students to unpick the question and to decide what they should and shouldn't include in their answer.

Using the student resources

The student resources for this question are provided on the following pages. These resources provide flexible support for your students in answering the question. They can be printed and copied as required.

Student resources	Page
<p>Plan your answer</p> <p>This is a planning document to help students decide what to include and how to structure their answer.</p>	3–5
<p>Write your answer</p> <p>This provides an answer sheet for students to complete their answer on paper in class or at home.</p>	6
<p>Mark your answer</p> <p>This student-friendly checklist and mark scheme can be used for self- or peer-marking. It can also be used by students in assessing the sample answers.</p>	7–8
<p>Sample answers</p> <p>Five sample answers, at a range of levels, are given. These could be used in a number of ways to demonstrate to students how to maximise their marks for this question.</p>	9–13
<p>Marked sample answers</p> <p>These marked and annotated versions of the five sample answers can be used by students to compare with their own marked sample answers.</p>	14–18

Please note: Students do not automatically have access to the *On your marks* presentation or resources from Kerboodle. If you would like your students to access these resources, or to complete the *On you marks* question on-screen, you will need to assign these to your students in Kerboodle.

continued overleaf

Using the Kerboodle Markbook

If you would like to use the Kerboodle Markbook to monitor progress and record student marks for this question, you must assign **15 On your marks** to the students. Students can type their answer onto the final screen of the presentation and then submit this to the Kerboodle Markbook. Students' marks can then be entered into the Kerboodle Markbook and they will be informed automatically of their mark when they next log in to Kerboodle.

Timing	Spelling, punctuation and grammar (SPaG)
Under exam-style conditions, it should take students around six minutes to complete their answer to this question.	No additional marks are awarded for SPaG for this question.

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Before attempting to answer the question, remember to BUG it.

- ✓ **B**ox the command word.
- ✓ **U**nderline the following:
 - the **theme**
 - the **focus**
 - any **evidence** required
 - the **number of examples** needed.
- ✓ **G**lance back over the question – to make sure you include everything in your answer.



Command word: Give reasons **why** something happens. No credit is given for pure description.

Focus and number of examples: You must focus on the management of more than one type of resource and not on other aspects of urban living.

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Focus: This must be the main focus of the answer.

Theme: This question is related to the theme of Urban issues and challenges, assessed in Paper 2, Section A of your exam. The question is compulsory. You must consider urban, not rural, living.

Name _____ Class _____

PEEL your answer

Use **PEEL** notes to structure your answer. This will help you to communicate your ideas to the examiner in the clearest way.

- **Point** – Make two or three points in detail, rather than lots of points in less detail. Don't use bullet points.
- **Explain** – Give reasons by using sentence starters such as: '*This is because ...*', '*One reason is ...*'.
- **Evidence** – Include facts and other details from named examples to back up your point. Each point – with explanation and evidence – should represent a separate PEE paragraph.
- **Link** – To link different points to each other, use PEE sentence starters such as: 'Another important point is ...' or 'Of more importance is ...'. Make sure your conclusion also links back to the question.



Quality not quantity: You will not be marked simply on the number of points you make, but on the quality of your answer. That means the quality of the content and how well you structure your answer.



SPaG: Three extra marks are available for spelling, punctuation and grammar for this question. So use your best English writing style and check your answer carefully.

Name _____ Class _____

Planning grid

Use this planning grid to help you write high-quality paragraphs. Remember to include links to show how your points relate to each other and to the question.

	PEE paragraph 1	PEE paragraph 2	PEE paragraph 3
Point			
Explain			
Evidence			

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

This question is assessing the following assessment objectives (AO).

AO1	Testing your knowledge of sustainable urban living	3 marks
AO2	Testing your understanding of why resource management is necessary for sustainable urban living	3 marks

1. To help you to identify if the answer includes detailed points, first highlight or underline the:



Points in **red**



Explanations in **orange**



Evidence in **green**

2. Use the mark scheme below to decide what mark to give. You will not be awarding marks for individual points, but will choose a level and a mark based upon the **quality** of the answer as a whole.

Level	Marks	Descriptor	Examples
3 (Detailed)	5–6	<p>AO1: Shows detailed and specific knowledge of resource management in urban environments.</p> <p>AO2: Shows thorough understanding of why resource management is needed for urban living to be sustainable.</p>	<p>Sustainability means using resources carefully in order to meet people's needs now without reducing the ability of future generations to meet their needs.</p> <p>For example, urban areas need energy to run many aspects of everyday life and work. Traditionally, energy has come from fossil fuels, but these are running out. Cutting down on the use of these fuels will contribute to the sustainability of urban living. This can be done by providing reliable, affordable, integrated public transport so that people rely less on cars and by developing other sources of energy, such as solar power.</p> <p>Various cities in Europe, such as Freiburg, have made successful efforts to manage resources such as energy, water and green spaces.</p>

continued overleaf

Name _____ Class _____

Level	Marks	Descriptor	Examples
2 (Clear)	3–4	<p>AO1: Shows clear and accurate knowledge of how resources are managed in urban environments.</p> <p>AO2: Shows reasonable understanding of why resource management is needed for urban living to be sustainable.</p>	Cities rely on fossil fuels, which are running out. To cut down on the use of fossil fuels, cities can switch to using renewable energy such as solar power. This also reduces air pollution from diesel and petrol cars. This makes urban living pleasanter and more sustainable.
1 (Basic)	1–2	<p>AO1: Shows limited knowledge of resource management in urban environments. Simple basic statements are not developed and may be purely descriptive.</p> <p>AO2: Shows little understanding of how resource management contributes to the sustainability of urban living.</p>	They are using renewable energy. They make use of public transport rather than cars. People use less water.

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Sample answer 1

People living in urban areas consume a great deal of resources. Living in urban areas has to be made sustainable by people using less energy, water and green spaces so that these resources are still available for future generations. Building on brownfield sites uses derelict land and helps to reduce urban sprawl and preserve the countryside. Vegetation-covered green roofs can help to store rainwater. Using renewable energy such as solar power to make electricity reduces the amount of fossil fuels used. Trams and other forms of public transport cut down on the use of cars. Trees can be planted to produce timber and provide green spaces for people and wildlife.

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Sample answer 2

They reduce the amount of waste produced. They recycle lots of different substances. Some waste is burnt to make electricity. Renewable electricity is made using solar power and wind turbines. They have a tram network. Fewer people use the car. Car parking is expensive. The congestion charge in London is sustainable. Lots of trees have been planted. They collect rainwater.

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Sample answer 3

An area that is designed for sustainable urban living needs to use less energy and less water so that future generations also have enough energy and water.

To use less energy for heating, domestic and office buildings need to use materials that reduce heat loss, store heat in warm weather and release heat when it is colder. Ideally, the materials should be recycled or reclaimed, so reducing the need to use energy to make more. The buildings need to use renewable energy and low-energy lighting. To use less water, buildings need to collect and use rainwater and recycle wastewater.

Integrated transport systems in urban areas discourage people from using cars that run on fossil fuels. Providing charging points for cars that use renewable electricity also helps to conserve energy and reduces pollution.

Managing resources in this way makes sustainable urban living possible.

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Sample answer 4

In Freiburg they have an integrated transport system, which encourages people to use trams rather than cars. In one district car parking spaces cost £20 000 each, making it very expensive to have a car. There are plenty of cycle paths and public transport is very cheap. These strategies help to conserve fossil fuels, reduce air pollution and make the city a nicer place to live in.

Renewable energy from solar power, wind turbines and burning biomass, rather than fossil fuels, is used in Freiburg. For example, renewable energy heats the swimming pools.

The city also has lots of open spaces. There is more green space because new houses are built five storeys high so that they take up less ground space. Large numbers of trees have been planted and they help to protect the environment. Lots of allotments are provided so people can grow their own food, which cuts down on food miles.

Freiburg uses strategies like these in order to use less non-renewable energy and protect the environment for the next generations of people.

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Sample answer 5

People need to live sustainably. They have to do things like recycling their waste and use as little water and energy as little as possible. They could perhaps also make their own electricity by putting solar panels on their roofs. Lots of people living in a town means there is often traffic congestion from cars and lorries. This means a lot of petrol is used and there may be air pollution. Having Park and Ride facilities, building a ring road around the town and pedestrianizing the centre can manage traffic. There should also be plenty of buses or trams so people do not use their cars as much. People can work at home on their computer so they do not have to travel to work.

Strengths of the answer			
Ways to improve the answer			
Level		Mark	

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Sample answer 1

People living in urban areas consume a great deal of resources. Living in urban areas has to be made sustainable by people using less energy, water and green spaces so that these resources are still available for future generations. Building on brownfield sites uses derelict land and helps to reduce urban sprawl and preserve the countryside. Vegetation-covered green roofs can help to store rainwater. Using renewable energy such as solar power to make electricity reduces the amount of fossil fuels used. Trams and other forms of public transport cut down on the use of cars. Trees can be planted to produce timber and provide green spaces for people and wildlife.

Point: Recognises why resources need to be managed.

Evidence: First of a series of examples identifying a range of management strategies but links with sustainability should be clearly stated.

Explanation: Explains how the strategy contributes to sustainability.

Explanation: Could be improved by suggesting how this contributes to sustainable urban living.

Explanation: Could be improved by explaining why this is necessary.

Explanation: Could be improved by explaining why this would be a benefit.

Explanation: Could be improved by explaining why this makes urban living more sustainable.

Feedback: This detailed answer shows clear understanding of how resources can be managed. There is some indication of how these strategies can be used, but clearer explanation of how each one contributes to sustainable urban living would answer the question more precisely.

Level = 3 Marks = 5

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Sample answer 2

They reduce the amount of waste produced. They recycle lots of different substances. Some waste is burnt to make electricity. Renewable electricity is made using solar power and wind turbines. They have a tram network. Fewer people use the car. Car parking is expensive. The congestion charge in London is sustainable. Lots of trees have been planted. They collect rainwater.

Evidence: Missed opportunity to give a named example.

Point: Waste reduction is not a relevant strategy but waste recycling is.

Points: More examples of resource management, but no valid reference to how these make urban living sustainable.

Feedback: This basic answer indicates some knowledge of strategies to manage resources in urban areas. However the statements are not developed to show how these strategies make urban living more sustainable in order to address the question.

Level = 1 Marks = 2

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Sample answer 3

An area that is designed for sustainable urban living needs to use less energy and less water so that future generations also have enough energy and water.

To use less energy for heating, domestic and office buildings need to use materials that reduce heat loss, store heat in warm weather and release heat when it is colder. Ideally, the materials should be recycled or reclaimed, so reducing the need to use energy to make more. The buildings need to use renewable energy and low-energy lighting. To use less water, buildings need to collect and use rainwater and recycle wastewater.

Integrated transport systems in urban areas discourage people from using cars that run on fossil fuels. Providing charging points for cars that use renewable electricity also helps to conserve energy and reduces pollution.

Managing resources in this way makes sustainable urban living possible.

Point: Clearly states why resource management is necessary.

Explanation: Links back to the previous point.

Evidence: Gives various appropriate management strategies that are linked back to the initial statement.

Explanation: Links back to the original point.

Evidence: Gives more appropriate management strategies, also linked back to the initial statement.

Evidence: More appropriate strategies for managing energy use.

Point: Concluding sentence clearly refers back to the question.

Feedback: This basic answer indicates some knowledge of strategies to manage resources in urban areas. However the statements are not developed to show how these strategies make urban living more sustainable in order to address the question.

Level = 1 Marks = 2

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Sample answer 4

In Freiburg they have an integrated transport system, which encourages people to use trams rather than cars. In one district car parking spaces cost £20 000 each, making it very expensive to have a car. There are plenty of cycle paths and public transport is very cheap. These strategies help to conserve fossil fuels, reduce air pollution and make the city a nicer place to live in.

Renewable energy from solar power, wind turbines and burning biomass, rather than fossil fuels, is used in Freiburg. For example, renewable energy heats the swimming pools.

The city also has lots of open spaces. There is more green space because new houses are built five storeys high so that they take up less ground space. Large numbers of trees have been planted and they help to protect the environment. Lots of allotments are provided so people can grow their own food, which cuts down on food miles.

Freiburg uses strategies like these in order to use less non-renewable energy and protect the environment for the next generations of people.

Evidence: A case study not required but is a good way of avoiding generalisations.

Evidence: Identifies an appropriate strategy.

Explanation: Explains the effect of the strategy.

Evidence: Identifies another appropriate strategy.

Explanation: Hints at the effect of the strategy.

Point: Links the strategies to factors in sustainable urban living.

Evidence: Gives further appropriate strategies.

Point: Makes a broad point ready to give more detail in the following sentences.

Explanation: Explains how the space is achieved.

Evidence: Gives another appropriate strategy.

Explanation: Could be explained more clearly.

Explanation: Links the strategy to sustainable urban living.

Evidence: Gives another appropriate strategy.

Point: Clearly links back to the question.

Feedback: This detailed answer makes effective use of case study material and so avoids over-generalisation. It successfully makes links to show why resource management is needed for sustainable urban living.

Level = 3 Marks = 6

Name _____ Class _____

Explain why the management of resources is necessary if urban living is to be sustainable. (6 marks)

Sample answer 5

People need to live sustainably. They have to do things like recycling their waste and use as little water and energy as little as possible. They could perhaps make their own electricity by putting solar panels on their roofs. Lots of people living in a town means there is often traffic congestion from cars and lorries. This means a lot of petrol is used and there may be air pollution. Having Park and Ride facilities, building a ring road around the town and pedestrianizing the centre can manage traffic. There should also be plenty of buses or trams so people do not use their cars as much. People can work at home on their computers so they do not have to travel to work.

Point: Shows understanding of what is meant by sustainable urban living.

Evidence: Identifies one appropriate strategy.

Explanation: Explains why management strategies are needed.

Evidence: Identifies strategies to manage traffic but fails to explain clearly how these contribute to sustainability.

Feedback: This answer shows clear understanding of the need for traffic management but the link with the availability of fossil fuels is not brought out clearly and other possible strategies are not developed. It shows some understanding of why resource management is needed for urban living to be sustainable, but this could be explained more clearly.

Level = 2 Marks = 4