









Revision Checklist – Sustainable Living

	Revised for homework? (1)	Revised for homework? (2)	Revised in lesson?
Sustainability, sustainable community, sense of community.			
Renewable resources and non-renewable resources.			
Features of sustainable buildings.			
Features of sustainable communities.			
Is Eddington sustainable?			
Advantages and disadvantages of environmental quality surveys.			
Geographical skills.			



Coordinates 	OS maps 	Grid references 	Distance 	Percentages 	Averages 	Writing tips 	Revision tips 
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Sustainable Buildings (1 / 3)

Core Knowledge

Humans need several things to live happy and healthy lives. These needs are social, economic and environmental.

Sustainability is meeting the social, economic and environmental needs of people today, without stopping people in the future from meeting their own needs.

Humans need resources. Resources can be renewable and non-renewable.

Renewable resources can be replenished (replaced) and will not run out. For example, wind and solar energy. This means that people now and, in the future, can use renewable resources to meet their own needs.

Non-renewable resources cannot be replenished (replaced) and will run out. Non-renewable energy comes from fossil fuels oil, coal and gas. Fossil fuels take millions of years to be created and cannot be replaced. This means that burning them all now would stop people in the future from using fossil fuel energy.

Revision Questions

- What are the three aspects that humans need to live happy and healthy lives?
- What is sustainability?
- What are the two types of resources?
- What is a renewable resource?
- Give an example of a type of renewable energy.
- Why is renewable energy sustainable?
- What is a non-renewable resource?
- Give an example of a type of non-renewable energy.
- Why is non-renewable energy not sustainable?

Sustainable Buildings (2 / 3)

Core Knowledge

Buildings can be designed to reduce non-renewable energy use:

- Insulation can be added to the walls and roof. Insulation stops heat from escaping from the house.
- Double or triple glazing are windows made of two or three layers of glass with cavities (space) between them. The cavities act as insulation so less heat escapes.
- Large windows let lots of light into a building. This means that less energy is needed for artificial lighting.
- In the Northern Hemisphere, south facing buildings will receive more sunlight, reducing the need for artificial lighting and heating.
- Solar panels can be added to the roofs of buildings. These panels capture energy from the sunlight and convert it into electricity. If houses generate more electricity than they need they can sell this to energy companies to earn money.
- Wind turbines convert wind energy into electricity. Wind energy is renewable.

These features are sustainable because less non-renewable energy is used. As a result, energy is saved for future generations to meet their own needs. It is also sustainable because less money has to be spent on energy bills, helping people to meet their economic needs.

Revision Questions

- What is insulation and where is it usually added to buildings?
- How does adding insulation make a building more sustainable?
- What is double or triple glazing and how does it make a building more sustainable?
- How do large windows improve sustainability?
- Why are south facing buildings (in the Northern Hemisphere) more sustainable?
- What are solar panels and how do they make a building more sustainable?
- What are wind turbines and how do they make a building more sustainable?

Sustainable Buildings (3 / 3)

Core Knowledge

Other sustainable design features:

- Green roofs (also known as living roofs) are roofs that are partially or completely covered with plants. Green roofs provide habitats (homes) for wildlife. This is sustainable because it helps us to meet our environmental needs.
- Water butts can be added to gardens. Pipes collect rainfall and direct this into the butt where it is stored. This water can then be used for watering the garden. This helps meet our environmental needs.
- Dual flush toilet systems have two flush options – a full flush and a half flush. A half flush uses less water, reducing water waste. This saves water for future generations.
- Reclaimed materials are recycled materials that are reused. This reduces waste and means that fewer new materials need to be made. This is sustainable because it saves resources for future generations.

Revision Questions

- What are green roofs and how do they improve sustainability?
- What is a water butt and how does it make a building more sustainable?
- What is a dual flush?
- How are dual flush systems sustainable?
- What are reclaimed materials?
- How does using reclaimed materials improve sustainability?

Sustainable Communities

Core Knowledge

- A settlement is a place where people live. It will include different services such as shops, houses and doctors.
- A resident is a person who lives in a settlement.
- A sense of community is a feeling of belonging where all people feel included.
- Sustainable communities are places which meet the social, economic and environmental needs of existing and future residents. They are fair and inclusive places with a strong sense of community.

There are many ways in which communities can be designed to be sustainable.

- Settlements need transport so that people can go to work and meet their economic needs. Buses can transport large numbers of people at the same time. This reduces the number of private cars. As a result, less energy is used, saving it for future generations.
- Cycle parks and cycle ways can make it easier and safer to travel by bike. Cycling does not use any energy, saving it for future generations. Cycling is a form of exercise, helping people meet their social needs.
- An economically sustainable community needs to include places for people to work and places for them to shop. This reduces the need for them to travel outside the settlement.
- Schools, community centres and local pubs and restaurants can help to make a community more socially sustainable. This is because they bring people together. This can help to create a sense of community.

Revision Questions

- What is a settlement?
- What is a resident?
- What is a sense of community?
- What is a sustainable community?
- How can transport help improve sustainability?
- How can buses help improve sustainability?
- How can car sharing help improve sustainability?
- How can cycle parks and cycleways help improve sustainability?
- How can communities be economically sustainable?
- How can schools, community centres and local pubs and restaurants help improve sustainability?

Is Eddington sustainable?

Core Knowledge

- Eddington is a new settlement in north west Cambridge. It is located near Cambridge city centre (approx. 2.5km away) where there are a vast range of job opportunities available for all groups of people.
- There is a fast and frequent bus service to the city centre which uses a bus lane. There are wide pavements and cycleways along the main road linking Eddington to the city centre.
- The houses at Eddington have high levels of insulation and triple glazing. Some houses have green roofs; some have solar panels.
- Eddington has no wheelie bins. Instead, underground bins collect waste and recycling. When the container is 80% full, a signal is automatically sent to the collection company to alert them to empty the container. This reduces the number of times bins must be collected.
- Eddington's has play equipment for children and an outdoor gym so people can exercise. Thousands of trees and wildflowers have been planted, and many of Eddington's buildings have features to encourage bird nesting.
- There is a Sainsbury's supermarket at Eddington for the local community to use. This provides a range of jobs for people within the local area eg. store manager, working on the tills, shelf stacking.
- Eddington has a local primary school. It also has a community centre with café facilities for people to use for events, social gatherings and classes.
- House prices are above UK average. A four bedroom house costs over £1 million, for instance

Revision Questions

- Where is Eddington?
- How does Eddington's location help it to be sustainable?
- What sustainability features have been included in the houses in Eddington?
- How does Eddington manage waste disposal and how does this help the area to be more sustainable?
- How do the open spaces at Eddington help improve sustainability?
- How does the local supermarket help improve sustainability?
- What community buildings are there in Eddington?
- How do they help improve sustainability?
- How sustainable do you think Eddington is? Why?

Environmental Quality Surveys

Core Knowledge

- There are different ways of measuring how sustainable buildings are. An environmental quality survey (EQS) is one way.
- An EQS can be used to measure the quality or sustainability of a place or building. It is a technique used to try to describe how good or bad a place is. The place of building is given a score for each feature and these are then added up to give an overall score.
- Advantages of using an EQS are it is quick, cheap and easy to do. It doesn't need any specialised equipment. If the same person does the same EQS for different places/buildings then the scores can be compared with each other.
- Disadvantages of using an EQS are that it is subjective (not everyone will give the same scores), that the time of day can have a big effect on scores and that it can be hard to generalise answers as not all rooms within a buildings are the same.
- EQS data can be shown on a map. This is a useful way of linking the data to the place in which it was collected.

Revision Questions

- What is an EQS?
- What are the advantages of using an EQS?
- What are the disadvantages of using an EQS?
- How can EQS data be shown on a map?