Your notes

KS3 Geography: revision notes

Resources and sustainability

Contents

1. Resources and demand
2. Energy
3. Water and food
4. Sustainability
5. Key terms
6. Quick questions
7. What to do next

Resources and demand

- Food, water and energy are vital **resources**. Demand for them is rising because the population is growing and people in many countries are becoming wealthier.
- **Renewable resources** won't run out (wind, solar, tidal, wave, hydroelectric, geothermal and biomass). **Non-renewable** resources will (coal, oil, natural gas and nuclear fuel).
- Burning **fossil fuels** releases carbon dioxide, which causes climate change.

Energy

- **Energy security** means having a reliable, affordable supply of energy.
- **Renewable** energy produces little carbon dioxide, but some types depend on the weather: wind turbines only work when it is windy, and solar panels only when it is light.
- Islands such as Guernsey have strong winds and tides that could be used for **renewable** energy.

Water and food

- **Water stress** is when demand for water is greater than the supply. Solutions include dams, reservoirs, water transfers, **desalination** (removing salt from sea water, which uses a lot of energy) and saving water.
- **Food miles** are the distance food travels from farm to plate. Eating local, seasonal food reduces them.
- Overfishing is catching fish faster than they can breed.

Sustainability

- **Sustainability** means meeting our needs today without harming the ability of future generations to meet theirs.

- A **carbon footprint** is the amount of greenhouse gas a person or activity produces. It can be reduced by using less energy, travelling by public transport, bike or on foot, and buying less.
- Reduce, reuse and recycle.

Your notes

Key terms

Resource	Something useful to people, such as food, water or energy.
Renewable	A resource that won't run out, such as wind.
Non-renewable	A resource that will run out, such as coal.
Fossil fuel	Coal, oil or gas, formed from ancient living things.
Energy security	Having a reliable, affordable supply of energy.
Water stress	When demand for water is greater than the supply.
Desalination	Removing salt from sea water to make fresh water.
Food miles	The distance food travels from where it is grown to where it is eaten.
Carbon footprint	The amount of greenhouse gas a person or activity produces.
Sustainability	Meeting today's needs without harming future generations.

Quick questions

Cover the answers and test yourself: remembering is what makes it stick.

1. Which of these energy resources is non-renewable?
2. Which of these energy resources is renewable?
3. Why are fossil fuels bad for the environment?
4. What is sustainability?
5. What is water stress?
6. What is desalination?
7. What are food miles?
8. What is a carbon footprint?

Answers

1. Coal
2. Hydroelectric power
3. Burning them releases carbon dioxide, which causes climate change
4. Meeting today's needs without harming future generations
5. When demand for water is greater than the supply
6. Removing salt from sea water to make fresh water
7. The distance food travels from where it is grown to where it is eaten
8. The amount of greenhouse gas a person or activity produces

What to do next

Practise 12 questions on this topic

Try 4 exam questions, with mark schemes

Read the lesson, one step at a time

Free revision for GCSE and KS3 at lycolearn.co.uk. Some notes are for one exam board only, and say so in brackets.

Your notes