

**AQA, OCR, Edexcel**

# GCSE Science

## GCSE Biology

Pollution of Land and Water  
Answers

Name:

**M M E**

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Total Marks: /22

Q1: Give 2 examples of how water may become polluted.

A= Accept any 2 of the following:

- Sewage
- Industry
- Fertiliser

(2 marks)

Q2: Explain the term sewage.

A= Human waste and water

(1 mark)

Q3: How can sewage pollute the land if not properly treated?

A= 1 mark for each point:

- Chemicals
- Parasites

(2 marks)

Q4: Farmers use pesticides to improve their crops. Explain the effect pesticide pollution has on an ecosystem.

A= Accept any 3 of the following:

- Chemicals are poisonous
- Leach out / get into the soil
- Get into the food chain
- Washed into water system

(3 marks)

Q5: Define the term bioaccumulation.

A= the build up of toxins along the food chain

(1 mark)

Q6: What effect does excess nitrates have on the waterways of the UK?

A= Algae Blooms/ Build up

(1 mark)

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Q7: Scientists are investigating the species present in a green pond and find the species numbers have decreased. Explain why the species numbers have decreased.

A= 1 mark for each point:

- Increased competition for light
- Increased competition for oxygen

(2 marks)

Q8: The Norfolk Broads is a unique waterways habitat that not only consists of a highly varied wildlife but also pleasure boaters. Environmentalists found the waterways were becoming polluted from heavy use and poor pollution management.

Discuss the ways in which, the Norfolk Broads could have reduced the pollution in recent years and the effects now seen.

A = 4 marks awarded for any 4 of the following clean up points:

- Treat sewage
- Low carbon emission boats
- Lower fertiliser use
- Reduce nitrates – e.g. washing up liquid
- Education

2 marks awarded for any 2 of the follow effects:

- Wildlife returning
- Less algae bloom/ build up
- Less toxins in water

(6 marks)

Q9: Explain what a bio indicator is and give an example.

A= 1 mark awarded for definition:

- Species only found in very clean water (or very polluted water)

1 mark for one of the following examples:

- Salmon
- Bloodworms

(2 marks)

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Q10: Give 2 ways scientist can use instruments to measure pollution levels.

A= 1 mark for each of the following:

- Oxygen levels
- pH

(2 marks)