

**AQA, OCR, Edexcel**

# GCSE Science

## GCSE Biology

Antibiotics and Painkillers  
Answers

Name:

**M M E**

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Total Marks: /19

Q1: Give an example of a painkiller.

A= accept one of the following:

- Paracetamol
- Aspirin
- Also accept any other valid pain killers

(1 mark)

Q2: State the function of paracetamol in treating a cold.

A= Treats the symptoms not the virus

(1 mark)

Q3: Explain why antibiotics were considered a wonder drug in the 1940's.

A= 1 mark for each of the following points:

- Decreases communicable diseases
- Decreases number of deaths
- Fast acting

(3 marks)

Q4: Explain how antibiotics such as penicillin work.

A= Kill bacteria from inside the body.

(1 mark)

Q5: Describe the main methods of administering antibiotics.

A= 1 mark for each of the following:

- Tablet
- Intravenous (IV) / Straight into the blood stream

(2 marks)

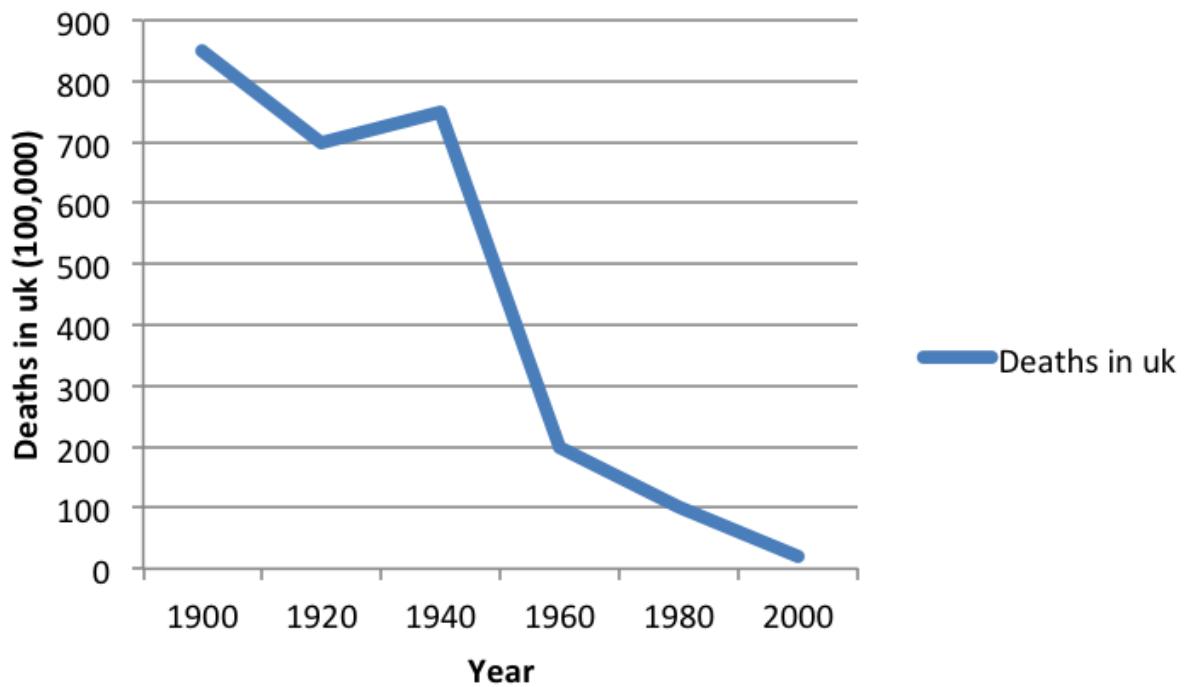
Q6: Explain why when choosing antibiotics they should be specific to the bacterial infection.

A= 1 mark for each of the following:

- More effective
- Prevent resistance

(2 marks)

Q7: Septicaemia was common after childbirth prior to antibiotics. Using the graph below, state the number of deaths, which occurred due to septicaemia in 1900.



A= 850

(1 mark)

Q8: when treating a cold what should a GP prescribe the patient? Circle the correct answer.

A= Painkillers

(1 mark)

Q9: Explain why antibiotics cannot be used to treat viruses.

A= 1 mark for each of the following points:

- Virus reproduce inside the cell
- Antibiotics kill the bacterial cell not the human cell.

(2 marks)

Q10: Explain why it is difficult for scientists to create drugs to treat viruses.

A= Accept any 2 of the following:

- Avoid damaging human/ host cells
- Viruses can evolve quickly
- Viruses can hide from the immune system.

(2 marks)

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Q11: Why are scientists trying to limit the number of antibiotics prescribed?

A= Accept any 3 of the following:

- Reduce number resistant bacteria
- Save for very serious pathogens – e.g. Tb
- Difficult to develop new antibiotics
- Reduce the number of deaths

(3 marks)