AQA GCSE Combined Science - Trilogy | 8464

SPECIFICATION POINT 5.9.2.3

Global climate change

Past-paper questions

Tier	**Higher**
Question groups	**2**
Available paper years	**2018–2023**

Using this booklet

1. Answer the questions in order and show your working.
2. Original question numbers and marks are retained.
3. Print at actual size (100%) for measuring questions.
4. Use the companion answer booklet to check your work.

Name: _____ **Date:** _____

Whole questions are retained for context, so some parts assess other specification points. Current and legacy sources are labelled. Continue on extra paper if needed.

5.9.2.3 Global climate change

Question 01

June 2018 | 8464/C/2H | Original Q2

0 2 This question is about the Earth's atmosphere.

0 2 . 1 Carbon dioxide is a greenhouse gas.

What is another greenhouse gas?

[1 mark]

Tick **one** box.

- Argon ☐
- Methane ☐
- Nitrogen ☐
- Oxygen ☐

0 2 . 2 Greenhouse gases cause global climate change.

Give **two** effects of global climate change.

[2 marks]

1 _____

_____

2 _____

_____

0 2 . 3 4.1 kg of a plastic, used to make plastic bottles, has a carbon footprint of 6.0 kg of carbon dioxide.

Calculate the carbon footprint of one plastic bottle of mass 23.5 g

[2 marks]

_____

_____

_____

_____

Carbon footprint = _____ kg of carbon dioxide

5.9.2.3 Global climate change

Question 01 · continued

0 2 . 4 Give **one** way that carbon dioxide emissions can be reduced when a plastic bottle is manufactured.

[1 mark]

0 2 . 5 Explain how the percentages of nitrogen, oxygen and carbon dioxide in the Earth's atmosphere today have changed from the Earth's early atmosphere.

[6 marks]

12

5.9.2.3 Global climate change

Question 02

0 5 An increase of greenhouse gases in the Earth's atmosphere is causing global warming.

Global warming is causing global climate change.

0 5 . 1 Give **one** effect of global climate change.

[1 mark]

0 5 . 2 Explain how greenhouse gases cause global warming.

[4 marks]

0 5 . 3 Explain how planting trees reduces global warming.

[3 marks]

8