

Greenhouse gases and the greenhouse effect

Q1. (2018)

0 2 . 1 Carbon dioxide is a greenhouse gas.

What is another greenhouse gas?

[1 mark]

Tick **one** box.

Argon

☐

Methane

☐

Nitrogen

☐

Oxygen

☐

Q2. (2019)

0 7 . 4 Carbon dioxide is a greenhouse gas.

Describe the greenhouse effect in terms of the interaction of short and long wavelength radiation with matter.

[4 marks]

Q3. (2020)

0 6 . 1 Carbon dioxide is a greenhouse gas.

The greenhouse effect happens in four stages.

The four stages are:

Stage **A** Carbon dioxide stops longer wavelength radiation escaping

Stage **B** Radiation is absorbed by the Earth

Stage **C** Longer wavelength radiation is emitted

Stage **D** Shorter wavelength radiation enters the atmosphere

What is the correct order of stages **A**, **B**, **C** and **D**?

[1 mark]

Tick (✓) **one** box.

C, A, B, D

☐

C, D, B, A

☐

D, B, C, A

☐

D, C, B, A

☐

Q4. (2022)

0 5 . 3 The combustion of 1.0 kg of coal produces more carbon dioxide than the combustion of 1.0 kg of natural gas.

Suggest why.

[1 mark]

Q5. (2023)

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 . 2

Explain how greenhouse gases cause global warming.

[4 marks]