

0 1

This question is about gases in the Earth's atmosphere.

0 1 . **1**

The amount of carbon dioxide in the Earth's atmosphere decreased during the first billion years of the Earth's existence.

Complete the sentences. Use words from the box.

[2 marks]**carbonates dissolved evaporated melted nitrates sulfates**

The amount of carbon dioxide in the Earth's atmosphere decreased because
the carbon dioxide _____ in the oceans.

Sediments were formed when _____ were produced.

Algae and plants use carbon dioxide and water to produce oxygen.

0 1 . **2**

What is the name of this process?

[1 mark]Tick **one** box.

Carbon capture	<input type="checkbox"/>
Combustion	<input type="checkbox"/>
Photosynthesis	<input type="checkbox"/>
Polymerisation	<input type="checkbox"/>

0 1 . **3**

Complete the word equation for this process.

[1 mark]

carbon dioxide + _____ → glucose + _____

- 0 1 . 4** Draw **one** line from each gas to the approximate percentage of the gas in the Earth's atmosphere today.

[3 marks]

Gas	Approximate percentage of gas in the Earth's atmosphere today
	<1
Carbon dioxide	5
	10
Nitrogen	20
	50
Oxygen	80
	>90

- 0 1 . 5** Carbon dioxide is a greenhouse gas.

Why does increasing the amount of carbon dioxide change the global climate?

[1 mark]

Question 1 continues on the next page

0 1 . 6 How can countries reduce carbon dioxide emissions?

[1 mark]

Tick **one** box.

only burn methane ☐

use renewable energy supplies ☐

use waste plastic bags as fuel ☐

0 1 . 7 Give **one** reason why it is difficult for countries to reduce emissions of carbon dioxide.

[1 mark]

Question 1

Question	Answers	Extra information	Mark	AO / Spec. Ref.
01.1	dissolved carbonates	in this order	1 1	AO1/1 5.9.1.2
01.2	Photosynthesis		1	AO1/1 5.9.1.3
01.3	water oxygen	In this order both needed for the mark	1	AO1/1 5.9.1.3
01.4	<p>Gas</p> <p>Approximate percentage of gas in the Earth's atmosphere today</p>	Extra lines from Gas negate the mark	3	AO2/1 AO1/1 AO1/1 5.9.1.1
01.5	increases global temperatures		1	AO1/1 5.9.2.2
01.6	use renewable energy supplies		1	AO1/1 5.9.2.4
01.7	correct reason, eg: <ul style="list-style-type: none"> renewable technology underdeveloped disagreement between countries 		1	AO1/1 5.9.2.4
Total			10	