

## GCSE Chemistry A (Gateway Science)

J248/02 C4-C6 and C7 Foundation (Foundation Tier)

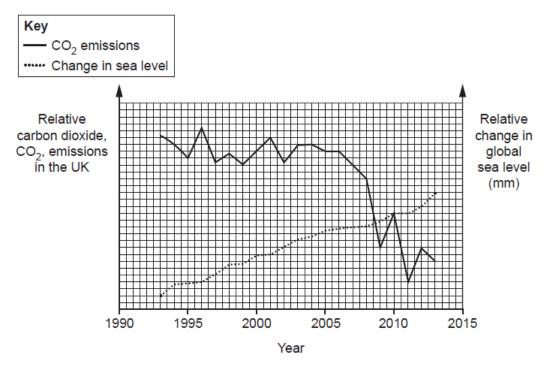
**Question Set 30** 

1 Some scientists believe that the increased burning of fossil fuels has contributed to global warming.

The scientists say that global warming is causing ice to melt, which results in sea levels rising.

Other scientists believe that rises in global temperatures are just natural variations.

The graph shows the carbon dioxide, CO<sub>2</sub>, emissions by fossil fuels in the UK and the changes in global sea levels between 1993 and 2013.



(a) Evaluate the information shown in the graph.

To what extent does the graph support a link between human activity and global warming? The global sea level rises as the CO2 emission [3] decreases This means human activity is not linked to the global warming. (b) There are problems with using information about CO2 emissions by fossil fuels to draw

conclusions about the effect of carbon dioxide emissions on global sea levels.

Suggest what these problems are. CO2 is not only released by fossil fuels and we need to consider the rate of CO2 absorptions by plants (treas) as well. [2]

(c) (i) Describe one effect on the Earth's climate of increased carbon dioxide levels, other than rising sea levels.

(ii) Suggest how we can lower carbon dioxide levels.

643

## **Total Marks for Question Set 30: 7**



## **Copyright Information**

OCR is committed to seeking permission to reproduce all third-party content that it uses in its assessment materials. OCR has attempted to identify and contact all copyright holders whose work is used in this paper. To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced in the OCR Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download from our public website (www.ocr.org.uk) after the live examination series.

If OCR has unwittingly failed to correctly acknowledge or clear any third-party content in this assessment material, OCR will be happy to correct its mistake at the earliest possible opportunity.

For queries or further information please contact The OCR Copyright Team, The Triangle Building, Shaftesbury Road, Cambridge CB2 8EA.

OCR is part of the Cambridge Assessment Group; Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge