

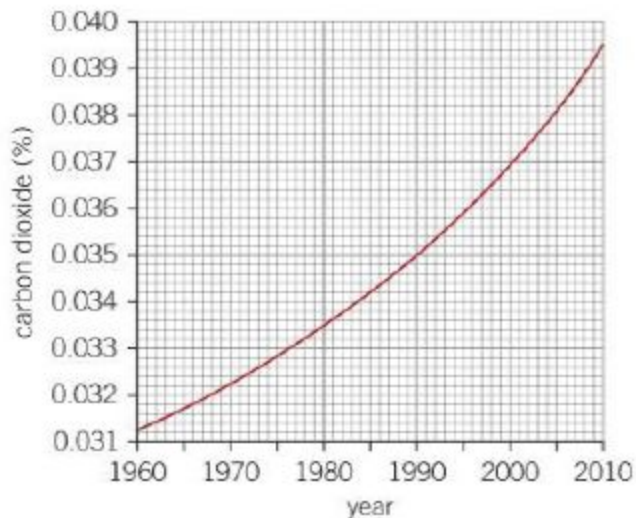
Environmental Friends

KS4

Monday - Science

Here are some questions about greenhouse gases and climate change. These are exam style questions. I have included how many marks each question would be. You may need to research to find your answers or revise this topic first and answer it as exam practice.

1. a) Name 3 greenhouse gases. [3 marks]
b) Explain how increasing levels of these gases in the atmosphere gases can result in a rise in the temperature of the Earth's atmosphere. [6 marks]
2. Explain how boiling an electric kettle may increase the amount of carbon dioxide in the Earth's atmosphere. [2 marks]
3. List three reasons why the amount of carbon dioxide in the Earth's atmosphere has increased so much in the recent past. [3 marks]
4. Why should media reports about global warming be treated with caution? [1 mark]
5. This graph shows the change in levels of carbon dioxide in the atmosphere over time.



- a. A closer look at the data would show annual variations to a peak and trough in each year. Explain these variations. [5 marks]
- b. Describe the overall trend shown by the data. [2 marks]
6. a) List three possible consequences of global climate change. [3 marks]
b) Describe why these consequences are difficult to predict. [2 marks]
7. a) Suggest two problems that representatives of countries face in reaching international agreements. [2 marks]

- b) Suggest and explain the relationship between a nation's wealth and its emissions of carbon dioxide. Explain your reasoning. [2 marks]
8. a) Explain the process of 'carbon capture and storage' (CCS) and why it is important. [4 marks]
- b) State an advantage and disadvantage of using CCS. [2 marks]
- c) State two other ways in which greenhouse gases can be reduced. [2 marks]
9. Suggest why hydrogen would be a better alternative to carbon-based fuels. Include a balanced symbol equation. [5 marks]