

### Teacher modelled question

Copy the model answer down.

It is believed that the Earth's original atmosphere was produced from volcanoes. The following tables show the gases given out by a volcano and the gases present in today's atmosphere.

| Gas            | Amount given out by a volcano (%) |
|----------------|-----------------------------------|
| water vapour   | 79.0                              |
| carbon dioxide | 12.0                              |
| sulfur dioxide | 6.5                               |
| nitrogen       | 1.5                               |
| others         | 1.0                               |

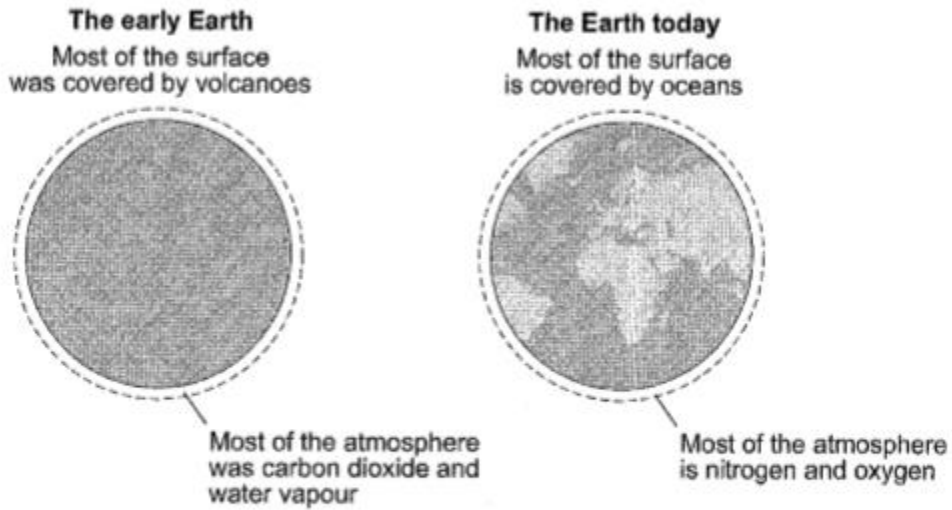
| Gas                           | Amount present in today's atmosphere (%) |
|-------------------------------|--|
| nitrogen                      | 78.0                                     |
| oxygen                        | 21.0                                     |
| carbon dioxide                | 0.04                                     |
| others including water vapour | 0.9                                      |

Use the information in the table and your own knowledge to describe and explain the changes that have happened to the atmosphere.

## Student question

Use the same techniques to answer this question.

This Earth and its atmosphere today are not like the early Earth and its atmosphere.



Describe and explain how the surface of the early Earth and its atmosphere have changed to form the surface of the Earth and its atmosphere today.

**[6 marks]**