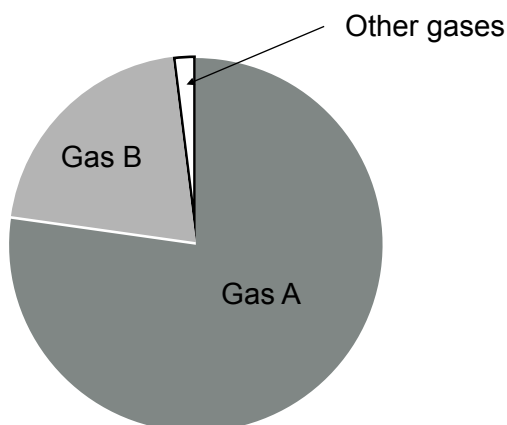


- 1 The Earth's atmosphere contains a mixture of gases.



- 1 (a) (i) Name Gas A and Gas B

[2 marks]

Gas A      Nitrogen [1]

Gas B      Oxygen [1]

For some reason students very often forget that the majority of the air is made of nitrogen, followed by oxygen. Examiners say this often.

- 1 (a) (i) Carbon dioxide is one of the 'Other gases' in the pie chart.

Name two more gases that make up 'Other gases'.

[2 marks]

Any two from: argon, neon, water vapour.

- 1 (a) (ii) Billions of years ago, the levels of the gases in the atmosphere were very different.

Describe the processes which have brought about the changes in the proportions of the gases in the air over billions of years. [4 marks]

Any 4 from:

Plants/algae evolved and carried out photosynthesis to take in  $\text{CO}_2$  give out  $\text{O}_2$ . [1]

Water vapour in atmosphere condensed (due to cooling). [1]

Less  $\text{CO}_2$  is produced from volcanoes. [1]

$\text{CO}_2$  from air trapped or locked in sedimentary rocks or fossil fuels. [1]

$\text{CO}_2$  from air dissolved in oceans. [1]

Nitrogen produced by bacteria/microbes/decay of dead organisms. [1]

Nitrogen builds up because it is unreactive. [1]

End

(Total 8 marks)