

0 6

Scientists believe that the first life on Earth was primitive anaerobic bacteria which first appeared billions of years ago.

0 6 . 1

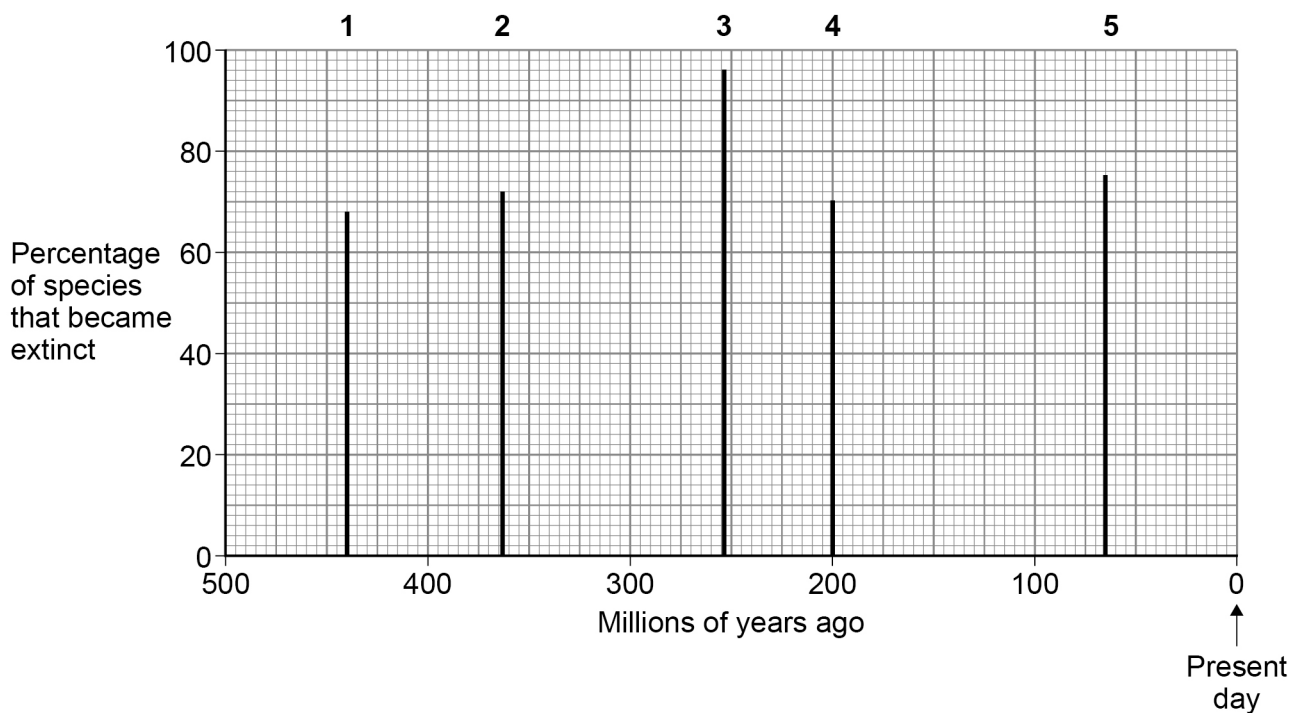
Which domain of the three-domain classification system do these primitive anaerobic bacteria belong to?

[1 mark]

Scientists have identified five periods of mass extinction since the fossil record began.

Figure 6 shows the timeline of the five mass extinction events.

Figure 6



0 6 . 2

Ammonites were organisms that first appeared in the oceans 415 million years ago.

Ammonites disappeared in the 5th mass extinction.

Draw a horizontal line on **Figure 6** to show the time period that ammonites existed on Earth.

Label the line 'ammonites'.

[1 mark]



0 6 . 3 Another type of organism that existed in the oceans was called trilobites.

Trilobites existed from 544 million years ago until 278 million years ago.

How many more years did ammonites exist than trilobites?

[2 marks]

_____ years

0 6 . 4 There was an increase in the percentage of species which became extinct in the third mass extinction compared to the first mass extinction.

Calculate the percentage increase.

[3 marks]

Percentage increase = _____ %

7

Turn over for the next question

Turn over ►



Question	Answers	Extra information	Mark	AO / Spec. Ref.
06.1	archaea	allow archea or archaia as phonetic spelling	1	AO1 4.6.4
06.2	horizontal line from –415 to –65 (labelled ammonites)	allow -410 to -420 for -415 (to -65) allow oblique line	1	AO2 4.6.3.3
06.3	ammonites = 350 (million years) and trilobites = 266 (million years) 84 million (years) or 84 000 000	allow range 345 to 355	1	AO2 4.6.3.3
		allow correct calculation from their answer for ammonites allow answers in standard form	1	
06.4	68 and 96 [(96-68) ÷ 68] × 100 41.17647... or 41.2 or 41	allow +/- half a small square	1	AO2 4.6.3.3
			1	
			1	
Total			7	