

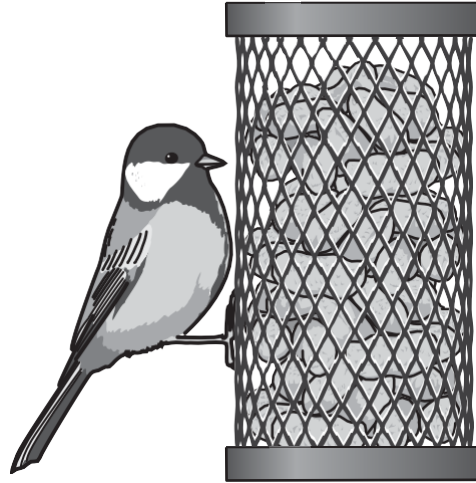
GCSE Biology A (Gateway)

J247/04 Biology A B4-B6 and B7 (Higher Tier)

Question Set: 19

1 Blue tits are small birds seen in gardens

(a) Many people in the UK feed birds nuts using a bird feeder, as shown in the diagram below.



Scientists measured the mean lengths of blue tits' beaks in the UK.

They found that blue tit beaks in the UK are slightly longer than blue tit beaks in the rest of Europe.

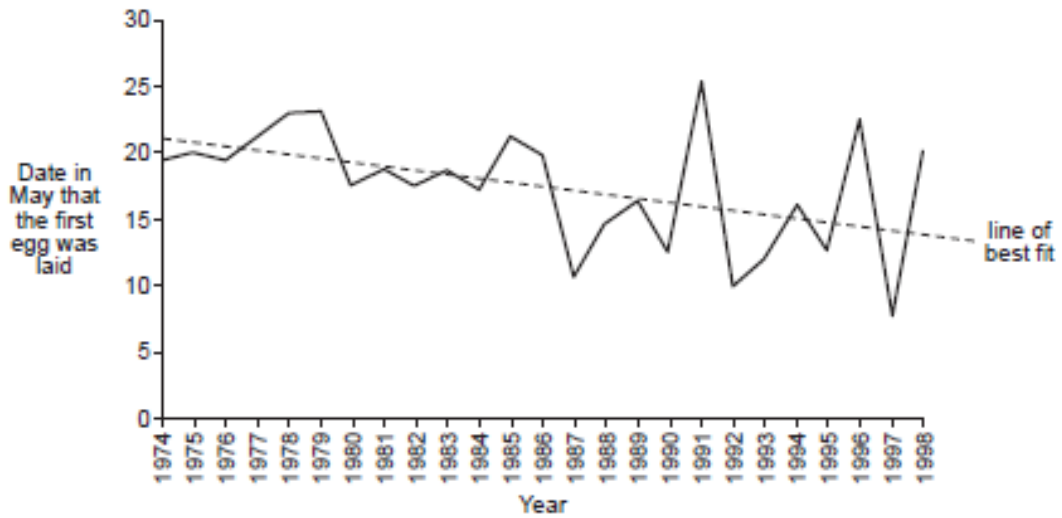
Very few people in the rest of Europe put bird feeders out for their birds.

Use Charles Darwin's theory of natural selection to explain why the blue tits in the UK have slightly longer beaks than those in the rest of Europe.

[4]

(b) Blue tits usually lay their eggs in the month of May.

For many years, the scientists have recorded the first day that an egg was laid. This data is shown in the graph.



The scientists made this explanation for the results:

The results are due to climate change.

Suggest arguments **for** and **against** this possible explanation.

Use information from the graph in your answer.

[4]

Total Marks for Question Set 19: 8

OCR

Oxford Cambridge and RSA

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