

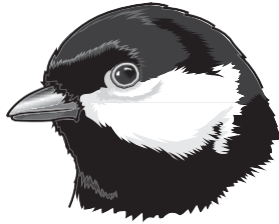
GCSE Biology B (Twenty First Century Science)
J257/03 Breadth in Biology (Higher)

Question Set 15

1

Scientists studying birds called great tits think they may be evolving larger beaks.

They think this may be because of bird feeders.



(a) (i) Place the following statements in the correct order to explain how scientists think this may have occurred

- A The birds are more likely to survive and reproduce.
- B The offspring will be more likely to have larger beaks.
- C The birds get more food.
- D Birds that have longer beaks can feed more successfully on the bird feeders.
- E The birds will pass on the alleles for larger beaks to their offspring.

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(ii) What phrase describes the process occurring in part (a)(i)?

[1]

(b) Great tits reproduce sexually.

[1]

Write down **one** reason why sexual reproduction is an advantage.

[1]

(c) Scientists studied populations of great tits in the Netherlands to see if there were any differences between the genomes of birds there and in the UK.

What gene technology would scientists use to work this out?

[1]

Total Marks for Question Set 15: 4

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