Life Science: Biology

Three calibration cases • Official criteria with hypotheses for anonymous local work

JUNE 2026 / Q8 / 1 credit criterion

Connect ecosystem evidence to an outcome

Q8 calls for a validity judgment supported by evidence linking runoff, algal growth, oxygen and the organisms the system can support.

Test this possibility. A local response may name the trend but omit how the change affects consumers.

Ask: What happens to oxygen as algae increase, and why does that matter to consumers?

Exam task Official scoring criterion · PDF p. 3

JUNE 2026 / Q14 / 1 credit criterion

Explain population change over generations

The guide connects inherited variation in roe deer to differential survival, reproduction and a later population shift.

Test this possibility. Test for an individual-acclimation explanation if the response only says the deer adapted.

Ask: Did one deer change during its life, or did a trait become more frequent across generations? What would distinguish these accounts?

Exam task Official scoring criterion · PDF p. 4

JUNE 2026 / Q32 / 1 credit criterion

Defend a design judgment with its trade-off

The guide accepts either verdict on transporting bees when the explanation supports the chosen judgment.

Test this possibility. Choosing an unexpected side does not establish a misconception. The issue may be an unsupported design decision.

Ask: Which benefit or cost mattered most to your decision? What change would reverse it?

Exam task Official scoring criterion · PDF p. 7

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Constructed practice responses • Read independently, then compare with the facilitator interpretation.

BIO-4 / Explain selection with a counterexample

In two fictional insect populations the dark-color trait is inherited. On dark bark, its frequency changes from 20% to 45% to 62% across three generations. On pale bark it stays near 20%. Propose a selection explanation and one observation that would test it.

Focal request

Use the inherited dark-color trait and the three generations of data in the Studio task to explain the increase.

Response A

The insects needed to hide on the dark tree, so more of them turned dark.

Response B

If dark insects were less often eaten, they could leave more offspring carrying dark color. That could raise its frequency over generations; survival by color would test the explanation.

What the pair distinguishes

A places change within individuals and treats need as a causal mechanism. B uses inherited variation and differential reproduction and marks its explanation as testable. The frequency data do not themselves prove predation.

A fresh transfer check

Suppose a dark insect and a pale insect survive equally often but dark insects leave more offspring. What could happen to frequency?

Evidence of transfer

Uses differential reproduction even when survival is held constant and distinguishes a possible mechanism from an observed value.