

2023 Bi H1 Q25

Section: Sustainability and Interdependence

Topic: Social Behaviour

Question Summary

The question asks which row in a table correctly matches a type of behaviour with an example of that behaviour.

Worked Solution

Let's examine each option:

A. Cooperative hunting – vampire bats giving a blood meal

■ Incorrect. Sharing food with non-relatives is reciprocal altruism, not cooperative hunting.

B. Reciprocal altruism – herring forming large groups

■ Incorrect. Herring form groups for social defence, not altruism.

C. Cooperative hunting – killer whales working together to kill seals

■ Correct. Cooperative hunting involves individuals working together to hunt more effectively and share the prey.

D. Social defence – killer whales working together to kill seals

■ Incorrect. That's hunting behaviour, not defence.

■ Answer: C — Cooperative hunting; killer whales working together to kill seals

Revision Tips

- Cooperative hunting: Animals hunt together, increasing success (e.g. wolves, killer whales).
- Social defence: Animals form groups to reduce predation risk (e.g. fish shoals, birds flocking).
- Altruism: Behaviour that benefits another individual at a cost to the donor.
 - Kin selection: Benefits relatives (e.g. warning calls in meerkats).
 - Reciprocal altruism: Benefits non-relatives with expectation of return (e.g. vampire bats).