

Animal Body Adaptations

Camouflage Canyon with Shiftling

Learning target

Explain how a body feature can help an animal.



Before you begin

Use the reference page and discussion prompts on their own, or open the optional browser adventure. No earlier lesson or physical kit is required.

For online play: use an internet-connected current browser with local storage enabled. Read the three-part Gemling briefing, answer the quick check, and apply the evidence at three checkpoints. Retry feedback supports review; results are not a secure test or gradebook.

Use for teacher-led review, science centers or partner practice. Independent readers may need support with the vocabulary below. The design target is grades 3-5; choose support based on the learner.

Vocabulary and concepts to discuss

Camouflage; coverings; body shapes; feeding and protection

Open Camouflage Canyon - direct lesson link

Scan the QR code or use the clickable link. This guide is usable offline; the adventure runs on an external educational website.



Animal Body Adaptations - key ideas

1. The first clues

Camouflage can make an animal harder to see against its surroundings. Coverings and body shapes can also aid protection, feeding or movement.

2. How the clues connect

A feature should be matched to an observed function. Camouflage works relative to a background, not by making an animal literally invisible everywhere.

3. Our evidence record

Our cards show a brown patterned insect on bark and the same insect on bright plain paper. The bark background makes the pattern less noticeable.

Keep the science accurate

Organisms do not choose new inherited traits because they need them. Avoid advanced genetics or equating seasonal behavior with instant evolution.

Apply the evidence

Use a specific observation from this lesson to explain one choice. Point to a clue, then connect that clue to a scientific idea.

Curriculum reference: <https://www.nextgenscience.org/dci-arrangement/3-Is4-biological-evolution-unity-and-diversity>

Talk through the evidence

1. Where is the insect better camouflaged?

Expected answer: On bark

Reasoning: Our cards show a brown patterned insect on bark and the same insect on bright plain paper. The bark background makes the pattern less noticeable.

2. Does camouflage mean invisible everywhere?

Expected answer: No

Reasoning: A feature should be matched to an observed function. Camouflage works relative to a background, not by making an animal literally invisible everywhere.

3. What else can body structures support?

Expected answer: Feeding, protection or movement

Reasoning: Camouflage can make an animal harder to see against its surroundings. Coverings and body shapes can also aid protection, feeding or movement.

4. Which evidence supports the camouflage claim?

Expected answer: Comparison against two backgrounds

Reasoning: Camouflage can make an animal harder to see against its surroundings. Coverings and body shapes can also aid protection, feeding or movement.

Guide the discussion

Ask learners to name the evidence that supports their answer. If an answer differs, revisit the matching key idea on page 2 and invite a revised explanation.

Online rewards: this lesson grants one fixed digital Expedition Discovery. Five saved digital Gemling friends become available only after all six distinct subject lessons are complete, in any order. Digital rewards do not establish physical ownership.