

Animal Pollinators

Butterfly Arch Orchard with Buzzling

Learning target

Explain how animals can transfer pollen while feeding.



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

Bees; butterflies; birds; bats; flower visits

Open Butterfly Arch Orchard - 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 Pollinators - key ideas

1. The first clues

Bees, butterflies, some birds, bats and other animals can transfer pollen during flower visits. Honeybees are not the only pollinators.

2. How the clues connect

A visitor may seek nectar or pollen and brush against flower parts. Seeing an animal near a flower alone does not prove it transferred pollen.

3. Our evidence record

Our observation records a bee touching anthers, then a stigma with pollen on its body. A butterfly passing overhead has no recorded flower contact. The bee record gives stronger transfer evidence.

Keep the science accurate

Keep anther/stigma terms supported with diagrams. Pollination, fertilization and seed dispersal are different; advanced reproductive cell biology is optional.

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/2-Is2-ecosystems-interactions-energy-and-dynamics>

Talk through the evidence

1. Can animals other than bees pollinate?

Expected answer: Yes

Reasoning: Bees, butterflies, some birds, bats and other animals can transfer pollen during flower visits. Honeybees are not the only pollinators.

2. Which record supports pollen transfer?

Expected answer: The bee contacting flower parts

Reasoning: Our observation records a bee touching anthers, then a stigma with pollen on its body. A butterfly passing overhead has no recorded flower contact. The bee record gives stronger transfer evidence.

3. What may a flower visitor seek?

Expected answer: Nectar or pollen

Reasoning: A visitor may seek nectar or pollen and brush against flower parts. Seeing an animal near a flower alone does not prove it transferred pollen.

4. Why record contact with flower parts?

Expected answer: It helps test whether transfer occurred

Reasoning: Our observation records a bee touching anthers, then a stigma with pollen on its body. A butterfly passing overhead has no recorded flower contact. The bee record gives stronger transfer evidence.

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.