

Other Pollination Pathways

Hummingbird Cliffs with Buzzling

Learning target

Compare animal and wind pollination without assuming every plant needs a bee.



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

Wind pollination; animal versus wind features; water examples as extension

Open Hummingbird Cliffs - 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.



Other Pollination Pathways - key ideas

1. The first clues

Some plants use wind to carry pollen. Their flowers often expose pollen or receiving parts and need not attract animal visitors.

2. How the clues connect

Animal-pollinated flowers may offer nectar or visual and scent cues. Features suggest a pathway, but observations provide stronger evidence than a feature alone.

3. Our evidence record

Our grass record shows exposed anthers releasing pollen into moving air. Our bird-flower record shows contact during nectar visits. Match each to its observed carrier.

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. What carries pollen in the grass record?

Expected answer: Wind

Reasoning: Our grass record shows exposed anthers releasing pollen into moving air. Our bird-flower record shows contact during nectar visits. Match each to its observed carrier.

2. What carries pollen in the second record?

Expected answer: The visiting bird

Reasoning: Our grass record shows exposed anthers releasing pollen into moving air. Our bird-flower record shows contact during nectar visits. Match each to its observed carrier.

3. Must every flower attract an animal?

Expected answer: No

Reasoning: Some plants use wind to carry pollen. Their flowers often expose pollen or receiving parts and need not attract animal visitors.

4. What best supports a pathway claim?

Expected answer: Recorded pollen movement

Reasoning: Animal-pollinated flowers may offer nectar or visual and scent cues. Features suggest a pathway, but observations provide stronger evidence than a feature alone.

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.