Food Webs & Energy Flow

Canopy Network Bridge with Linkling

Learning target

Use a food web to explain ecosystem dependence.

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

Producers; consumers; connected feeding links; energy transfer

Open Canopy Network Bridge - 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.

Food Webs & Energy Flow - key ideas

1. The first clues

Food webs show feeding connections and energy transfer. Producers use sunlight; consumers get food by eating organisms.

2. How the clues connect

Arrows point from food to eater. Multiple routes can support a consumer, and shared food sources connect populations.

3. Our evidence record

Our canopy web shows leaves feeding insects, insects feeding birds, and fruits also feeding birds. Both plant-insect-bird and plant-fruit-bird routes matter in the model.

Keep the science accurate

Use a manageable system and one change at a time. No population equations or molecular nutrient cycling.

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/pe/5-ls2-1-ecosystems-interactions-energy-and-dynamics

Talk through the evidence

1. Which direction should a food arrow point?

Expected answer: Toward the eater

Reasoning: Arrows point from food to eater. Multiple routes can support a consumer, and shared food sources connect populations.

2. What gives birds energy in the supplied web?

Expected answer: Insects and fruits

Reasoning: Our canopy web shows leaves feeding insects, insects feeding birds, and fruits also feeding birds. Both plant-insect-bird and plant-fruit-bird routes matter in the model.

3. Why trace two routes?

Expected answer: The birds have multiple listed food sources

Reasoning: Arrows point from food to eater. Multiple routes can support a consumer, and shared food sources connect populations.

4. Which population could affect insect-eating birds?

Expected answer: The insects

Reasoning: Our canopy web shows leaves feeding insects, insects feeding birds, and fruits also feeding birds. Both plant-insect-bird and plant-fruit-bird routes matter in the model.

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.