

Food Chains & Energy Arrows

Hunter Hollow with Chompling

Learning target

Build a food chain with arrows showing energy transfer.



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

Producer to consumer; predator and prey; arrow direction

Open Hunter Hollow - 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 Chains & Energy Arrows - key ideas

1. The first clues

Food-chain arrows show energy moving from food to eater. If a rabbit eats grass, the arrow points from grass to rabbit.

2. How the clues connect

A predator eats prey. In our model, a fox eats the rabbit, so the next energy arrow goes from rabbit to fox.

3. Our evidence record

Our correct chain is grass to rabbit to fox. It shows one path, not a claim that each animal has only one food in real life.

Keep the science accurate

Food-chain arrows point from food to consumer to show energy transfer.

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-Is2-1-ecosystems-interactions-energy-and-dynamics>

Talk through the evidence

1. Which way does the grass-rabbit arrow point?

Expected answer: From grass to rabbit

Reasoning: Food-chain arrows show energy moving from food to eater. If a rabbit eats grass, the arrow points from grass to rabbit.

2. Which is prey for the fox in this model?

Expected answer: Rabbit

Reasoning: A predator eats prey. In our model, a fox eats the rabbit, so the next energy arrow goes from rabbit to fox.

3. What do the arrows represent?

Expected answer: Energy transfer from food to eater

Reasoning: Food-chain arrows show energy moving from food to eater. If a rabbit eats grass, the arrow points from grass to rabbit.

4. Does one chain show every possible food source?

Expected answer: No

Reasoning: Food-chain arrows show energy moving from food to eater. If a rabbit eats grass, the arrow points from grass to rabbit.

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.