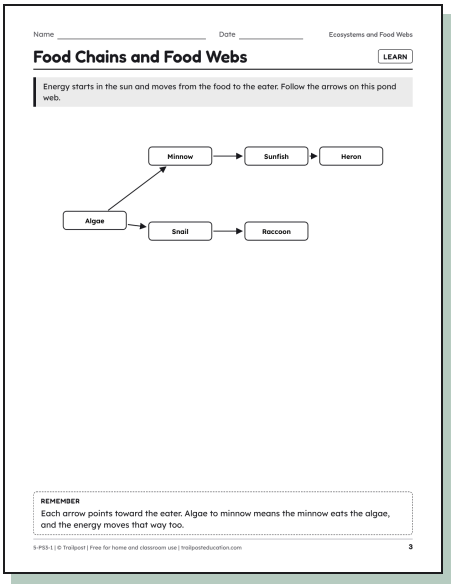
FREE TEACHER GUIDE AND INSTALL GUIDE

Ecosystems and Food Webs

Producers, consumers, decomposers, and what happens when a population changes

Grades 4 to 6 | **Science** | **15 student pages** | **Full answer key**



Name _____ Date _____ Ecosystems and Food Webs

Food Chains and Food Webs LEARN

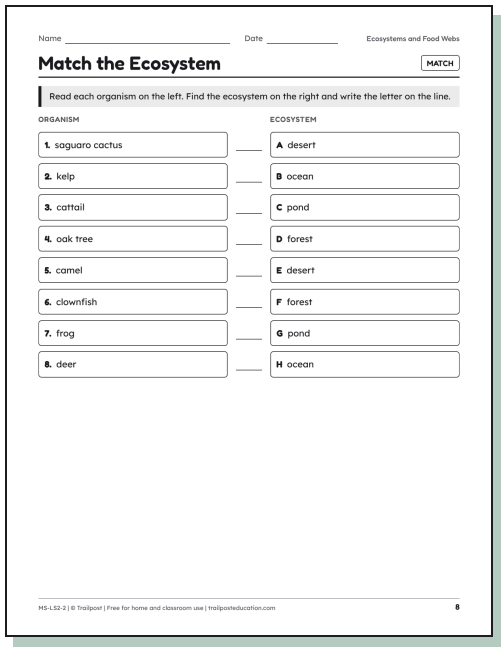
Energy starts in the sun and moves from the food to the eater. Follow the arrows on this pond web.

Minnow → Sunfish → Heron

Algae → Snail → Raccoon

REMEMBER
Each arrow points toward the eater. Algae to minnow means the minnow eats the algae, and the energy moves that way too.

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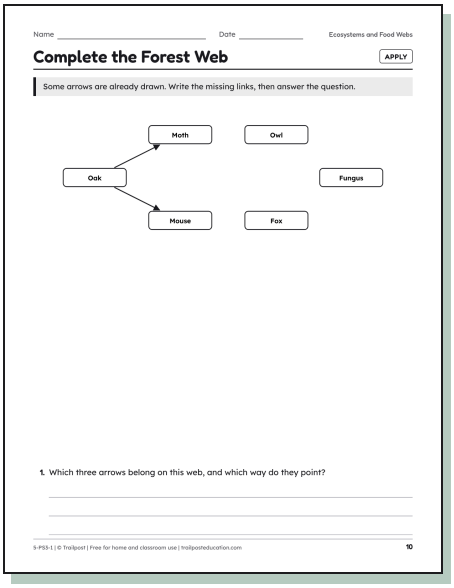
Name _____ Date _____ Ecosystems and Food Webs

Match the Ecosystem MATCH

Read each organism on the left. Find the ecosystem on the right and write the letter on the line.

ORGANISM		ECOSYSTEM
1. saguaro cactus	___	A desert
2. kelp	___	B ocean
3. cattail	___	C pond
4. oak tree	___	D forest
5. camel	___	E desert
6. clownfish	___	F forest
7. frog	___	G pond
8. deer	___	H ocean

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Name _____ Date _____ Ecosystems and Food Webs

Complete the Forest Web APPLY

Some arrows are already drawn. Write the missing links, then answer the question.

Moth, Owl, Oak, Fungus, Mouse, Fox

1. Which three arrows belong on this web, and which way do they point?

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STUDENTS WILL LEARN TO

- ✓ Name producers, consumers, and decomposers
- ✓ Read a food chain and a food web
- ✓ Explain how energy moves through an ecosystem
- ✓ Predict what happens when one population changes

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Getting started

What is in your download

File	What it is
Student-Pages.pdf	The 15-page student packet, starting with a cover page that has a name line and a table of contents.
Answer-Key.pdf	The same pages with every answer filled in, so you can check work quickly or project a page to go over it together.
Teacher-Guide.pdf	This guide, which explains how to print the packet, how to pace it, and which standards it covers.

How to open the files

1. On a Chromebook, open the Files app, double-click the zip folder, and drag the three PDFs into Google Drive or onto the desktop.
2. On a Windows computer, right-click the zip folder and choose Extract All, then open the new folder that appears.
3. On a Mac, double-click the zip folder and a regular folder with the three PDFs will open next to it.
4. Open each PDF in your browser or in any PDF reader, and you are ready to print.

How to print

- Set the print scale to Actual Size or 100 percent so the boxes and lines stay the right size for student handwriting.
- Black and white printing works well, because every page uses black lines and light gray shading.
- Print pages 7 and 14 on one side only, because students cut those pages apart.
- The exit ticket page holds two copies of the same ticket, so one printed page covers two students.

One star and two stars

Pages marked with one star (5) give steady practice with friendly numbers and extra support. Pages marked with two stars (6, 12) ask for more steps and more explaining. Students who finish the one-star page with few mistakes can move straight to the two-star page, and students who need more time can do the one-star page twice with a partner.

Using the answer key

The answer key matches the student packet page for page, so page 6 of the key answers page 6 of the student packet. Written answers in the key are sample answers, and any answer that gives the same idea with good reasoning should earn credit.

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What is inside

Students learn the roles in an ecosystem, read a food web, and explain energy flow. The packet includes a sort, a match, a riddle, a complete-the-web page, a short reading, error analysis, a review, exit tickets, and a self-check.

Page	Title	What students do
1	**Cover**	Students write their name and see a list of every page in the packet.
2	**Roles in an Ecosystem** Learn | 5-LS2-1	Students learn the words producer, consumer, decomposer, herbivore, carnivore, and omnivore.
3	**Food Chains and Food Webs** Learn | 5-PS3-1	Students see a pond food web and learn that arrows point toward the eater.
4	**Read the Pond Web** Guided Practice | 5-PS3-1	Students answer questions about the pond food web.
5	**Roles Practice** Practice ★ | 5-LS2-1	Students label organisms by role.
6	**Energy and the Ten Percent Idea** Practice ★★ | MS-LS2-3	Students use a table to see that each level of a food chain holds less energy.
7	**Sort the Organisms** Cut and Paste | 5-LS2-1	Students sort twelve organisms by role.
8	**Match the Ecosystem** Match | MS-LS2-2	Students match eight organisms to the ecosystem where each one belongs.
9	**Ecosystem Riddle** Riddle | 5-LS2-1	Students write a science word and use the first letters to answer a riddle.
10	**Complete the Forest Web** Apply | 5-PS3-1	Students study a forest web with some arrows missing and write the missing links.
11	**What If a Population Changes** Write About It | MS-LS2-2	Students read a short passage and write a claim about what happens if foxes leave a meadow.
12	**Find the Mistake** Error Analysis ★★ | 5-PS3-1	Students fix a reversed arrow and a role that was labeled wrong.
13	**Mixed Review** Review | 5-LS2-1, 5-PS3-1	Students review roles, food chains, and a short what-if.
14	**Exit Tickets** Check | 5-LS2-1	Two copies of a short exit ticket on each page so you can check understanding in about five minutes.
15	**How Did I Do?** Self-Check | 5-LS2-1	Students rate their own progress on each skill and set one goal for practice.

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Pacing and standards

A suggested plan

Day	Pages	What to do
Day 1	2 to 4	Read the two Learn pages together and talk through the pond web, then have partners finish the guided page.
Day 2	5 to 6	Students start with the one-star page and move to the two-star page when they finish with few mistakes.
Day 3	7 to 10	Use the sort, the match, the riddle, and the complete-the-web page as centers.
Day 4	11 to 13	Students read a short passage, write a what-if explanation, and fix a food-web mistake.
Day 5	14 to 16	Give the review page as a quiz, use the exit ticket the next morning, and finish with the self-check.

Standards

Code	Standard
5-LS2-1	Develop a model to describe the movement of matter among plants, animals, decomposers, and the environment.
5-PS3-1	Use models to describe that energy in animals' food was once energy from the sun and was transferred from organism to organism.
MS-LS2-3	Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem.
MS-LS2-2	Construct an explanation that predicts patterns of interactions among organisms across multiple ecosystems.

Teaching tips

- Have students point from the food to the eater when they read a web, because the arrow direction is the part that most often gets reversed.
- The mystery of a missing population is a good talk prompt: cover one organism and ask what happens to the others.
- On the writing page, require a producer, a consumer, and a decomposer in the explanation so the energy path stays complete.

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Thank you for downloading this packet

I made this packet for families and teachers who need solid practice pages that are ready to print tonight, and I hope it saves you some planning time this week.

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Something look wrong?

If you find a mistake on a page or in the answer key, please email support@trailposteducation.com. I read every message, and I will fix the file and post the new version for everyone.

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More free Trailpost packets

These packets are also free on the Trailpost website, and each one comes with an answer key and a teacher guide like this one.

- **Addition and Subtraction Within 20** | Math, grades 1 to 2
- **Claim, Evidence, Reasoning with Data** | Science, grades 6 to 9
- **CVC Words and Short Vowels** | ELA, grades K to 1
- **One-Step and Two-Step Equations** | Math, grades 6 to 8
- **Figurative Language** | ELA, grades 4 to 6
- **Equivalent Fractions and Number Lines** | Math, grades 3 to 5
- **Main Idea and Key Details** | ELA, grades 3 to 5
- **Map Skills** | Social Studies, grades 3 to 5
- **Multiplication Fact Strategies** | Math, grades 3 to 4
- **Citing Text Evidence** | ELA, grades 5 to 8
- **Telling Time and Counting Money** | Math, grades 2 to 3

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GRADES 3 TO 5 | INTERACTIVE COURSE

Students follow a vanishing puddle through evaporation, clouds, precipitation, and runoff.

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Shifting Ground: Plates and Earthquakes

GRADES 6 TO 8 | INTERACTIVE COURSE

Students learn about the layers of the Earth, plate boundaries, and earthquakes in a narrated course.

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Constellation Maker

GRADES 2 TO 8 | CREATIVE TOOL

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GRADES 2 TO 5 | DIGITAL LESSON

Students learn if and else statements by programming a farmer to finish chores in an offline app.

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