

Living Things Depend on One Another



Photo Credits: Cover: Anthony Mercieca/Photo Researchers, Inc.; 2 (br) Ed Reschke/Peter Arnold, Inc.; 3 (tr) Fred Unverhau/Animals Animals - Earth Scenes, (bl) Bruce Coleman, Inc., (br) Bruce Coleman, Inc.; 4 (bl) Ed Reschke/Peter Arnold, Inc.; 7 (b) Peter Arnold, Inc./Alamy, (inset) Joe Drivas/Getty Images; 8 (t) Bruce Coleman, Inc.; 9 (cr) Getty Images; 10 (cl) Mike Lane/Alamy, (c) C. Allan Morgan/Peter Arnold, Inc., (cr) John Cancalosi/Peter Arnold, Inc.; 11 (b) LACZ, GERARD/Animals Animals - Earth Scenes; 12 (bl) Mike Lane/Alamy, (br) C. Allan Morgan/Peter Arnold, Inc.; 12-13 (bg) Richard Broadwell/Alamy; 13 (bl) Barry Mansell/Nature Picture Library, (r) Bruce Coleman, Inc.; 14 (b) Kevin Schafer/Peter Arnold, Inc.; 16 (b) Tom and Pat Leeson; 17 (t) Frans Lanting/Corbis; 22 (t) Kennan Ward/Corbis, (bl) Pete Oxford/Nature Picture Library, (br) Joe McDonald/Corbis; 23 (c) Getty Images.

If you have received these materials as examination copies free of charge, Harcourt School Publishers retains title to the materials and they may not be resold. Resale of examination copies is strictly prohibited and is illegal.

Possession of this publication in print format does not entitle users to convert this publication, or any portion of it, into electronic format.



Living Things Depend on One Another

Copyright © by Harcourt, Inc.

All rights reserved. No part of this publication may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopy, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Requests for permission to make copies of any part of the work should be addressed to School Permissions and Copyrights, Harcourt, Inc., 6277 Sea Harbor Drive, Orlando, Florida 32887-6777. Fax: 407-345-2418.

HARCOURT and the Harcourt Logo are trademarks of Harcourt, Inc., registered in the United States of America and/or other jurisdictions.

Printed in México

ISBN-13: 978-0-15-362025-6

ISBN-10: 0-15-362025-0

2 3 4 5 6 7 8 9 10 805 16 15 14 13 12 11 10 09 08



Visit *The Learning Site!*
www.harcourtschool.com

How Do Plants and Animals Interact?

VOCABULARY

- producer
- consumer
- decomposer
- herbivore
- carnivore
- omnivore



A **producer** is a living thing that makes its own food. Plants are producers.



A **consumer** is a living thing that gets food by eating plants or animals. Animals are consumers.



■ A **decomposer** is a living thing that breaks down dead things for food. An earthworm is a decomposer.



■ A **herbivore** is an animal that eats only plants. A caterpillar is a herbivore.



■ A **carnivore** is an animal that eats only other animals. A wolf is a carnivore.



■ An **omnivore** is an animal that eats both plants and animals. A chicken is an omnivore.



READING FOCUS SKILL

COMPARE AND CONTRAST

When you **compare and contrast**, you tell how things are alike and different.

- Look for ways to **compare and contrast** how different animals get energy.

Making and Getting Food

All living things need food to get energy. Plants make their own food. They use sunlight, air, and water to make it. Plants store the food they do not use. This food is often full of energy.

- Animals cannot make their own food. They get food by eating plants or other animals. The energy in these foods goes into their bodies.



Tell how how plants and animals get food in different ways.




- Plants get energy from the sun. Rabbits get energy by eating plants.

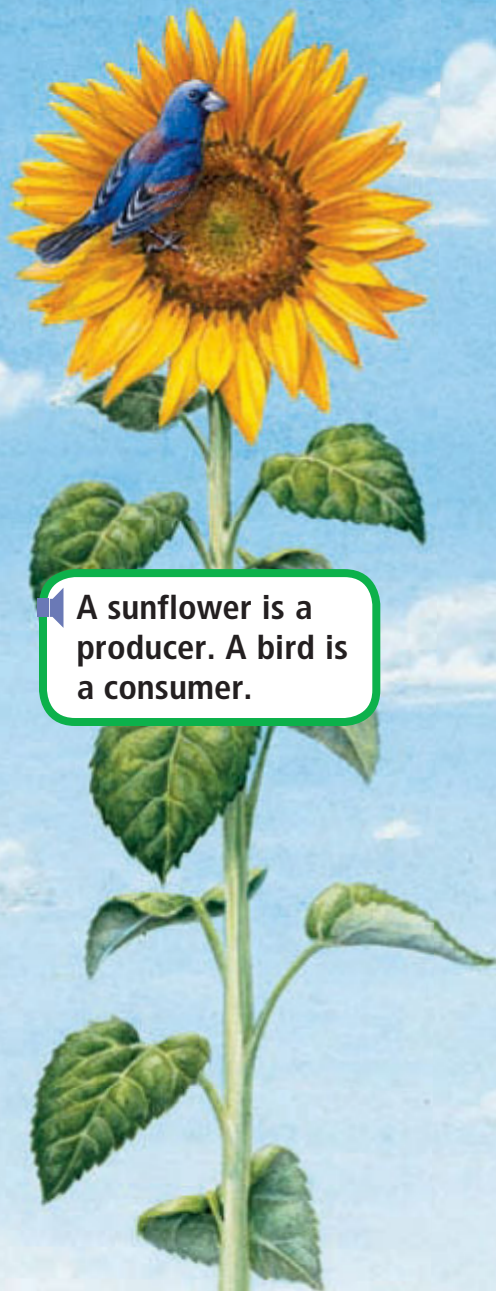


Producers and Consumers

Plants are producers. A **producer** is a living thing that makes its own food. Producers use this food to grow.

Animals are consumers. A **consumer** gets energy by eating other living things. Consumers eat plants or other animals. A consumer cannot make its own food.

 **Tell how producers and consumers are alike and different.**



A sunflower is a producer. A bird is a consumer.



Decomposers

Some living things are decomposers. A **decomposer** breaks down dead things for food. Earthworms and mushrooms are decomposers. Most decomposers are very small. You can see them only with a microscope.



 **Tell how decomposers and producers are alike and different.**

 ▼ Earthworm



Herbivores

There are three kinds of consumers. They are called herbivores, carnivores, and omnivores.

A **herbivore** is a consumer that eats only plants. Herbivores can be small, like bees. They can also be large, like horses.

Each herbivore has body parts that help it eat plants. Cows and horses have flat teeth. Their teeth help them grind up grass.



Tell how a herbivore is different from a producer.

Horses eat grass. ▼

This Galápagos (guh•LAH•puh•gohs) tortoise eats only plants. ▼





🔊 ▲ Wolves eat only meat.

🔊 Carnivores


A **carnivore** is a consumer. It gets food by eating other animals.

🔊 Carnivores have body parts that help them hunt and eat. Wolves have sharp teeth to eat meat. Some birds have sharp claws and strong beaks. These body parts help them catch and eat food.

🔊  Tell how a herbivore and carnivore are the same.

Omnivores

An **omnivore** is a consumer that eats both plants and animals. Bears are omnivores.

 Most omnivores have teeth that help them eat plants and animals. They have sharp teeth to help them eat meat. They also have flat teeth to help them grind up plants.

 **How are herbivores, carnivores, and omnivores different?**




 Raccoons are omnivores. ►



Review



Complete these **compare and contrast** statements.

-  1. All _____ need food.
-  2. Unlike consumers, _____ can make their own food.
-  3. Both carnivores and _____ eat other animals.

What Are Food Chains?

VOCABULARY

- food chain
- energy pyramid
- predator
- prey



Plant

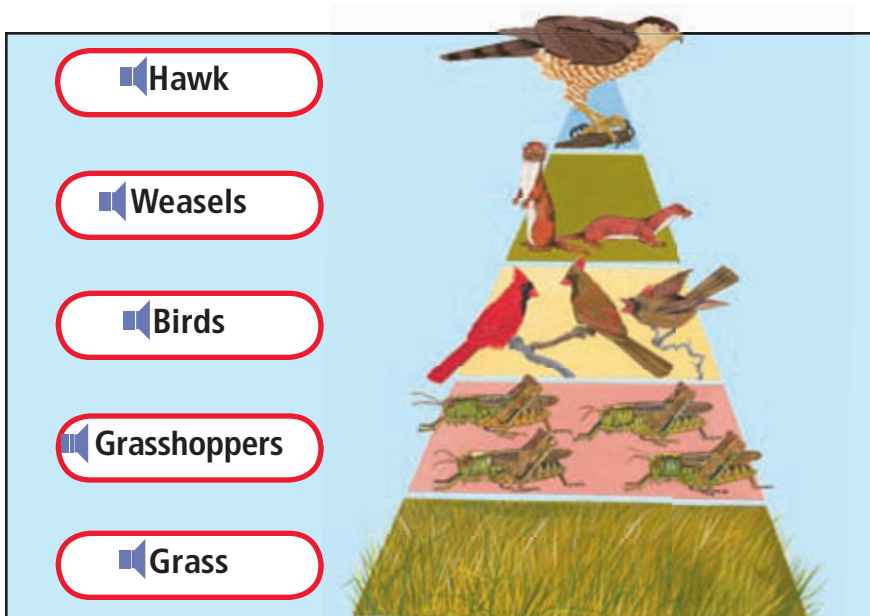


Grasshopper



Lizard

- A **food chain** shows how energy moves from one living thing to another. It does this by showing what animals eat.



■ An **energy pyramid** shows how energy is used in a food chain.



■ A **predator** is an animal that hunts another animal for food. The animal that is hunted is called **prey**. This cheetah is the predator and the antelope is the prey.



READING FOCUS SKILL

SEQUENCE

A **sequence** is the order in which things happen.

- Look for the **sequence** of how energy passes through a food chain.

Food Chains

A **food chain** shows the path of food from one living thing to another. Use the arrows below to see what each animal eats.



- ▲ A plant is a producer. It uses sunlight to make its own food.



- ▲ The grasshopper eats the leaves. It gets energy stored in the leaves.

■ A food chain starts with a producer. A plant is the producer in this food chain. It uses energy from the sun to make its food. This energy is passed on in a food chain.

■ Some food chains are long. Some are short. People are at the end of many food chains.

■  **What happens to the energy in a plant after the grasshopper eats it?**



▲ This lizard eats the grasshopper. It gets energy from the grasshopper.



▲ This owl eats the lizard. It gets energy from the lizard.

Energy in a Food Chain

Energy passes from one living thing to another in a food chain. When animals eat plants, they get the energy stored in plants. Animals use some of the energy to live and grow. The rest is stored in their bodies. Other animals get that energy when they eat them.



What happens to the energy in plants?




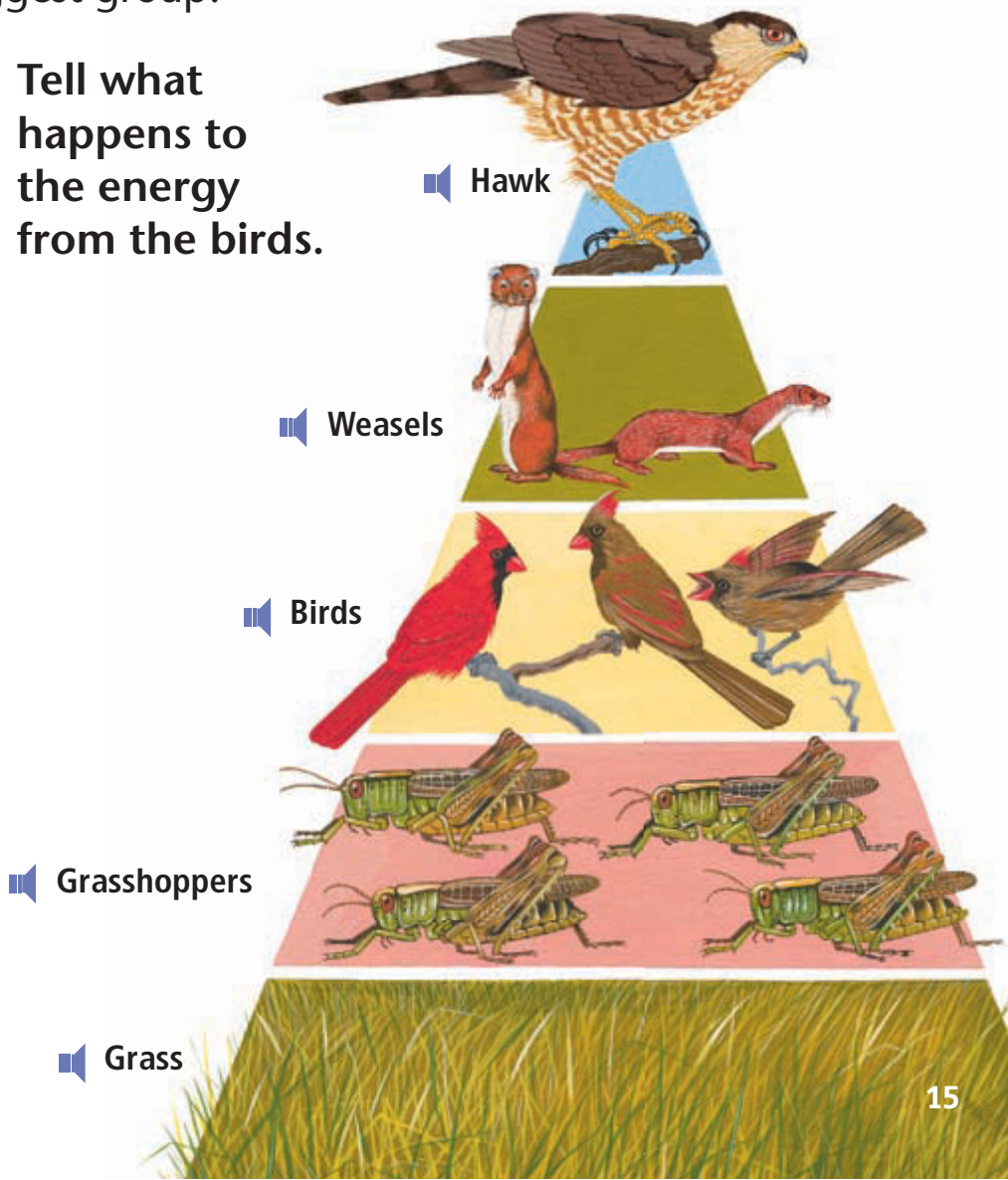
This bobcat must eat many smaller animals to get the energy it needs. ►



Energy Pyramid

An **energy pyramid** shows how energy is used in a food chain. It shows that very little energy is passed up from one level to the next. That is why each level has fewer living things than the one below it. Producers, or plants, are at the bottom of an energy pyramid. They are the biggest group.

 Tell what happens to the energy from the birds.



🔊 Predator and Prey

A **predator** is an animal that hunts another animal for food. A lynx is a predator. An animal hunted for food is called **prey**. A rabbit is prey for a lynx.



Some animals are predators and prey. Birds that eat insects are predators. But these birds may be prey for a hawk.

 Tell what happens to prey.

Puffins are predators that eat many fish. ►



Review

 Focus Skill

Complete these **sequence** sentences telling about a food chain.

1. A food chain always begins with a _____.
2. Predators and _____ are part of food chains.
3. Living things get _____ stored in the plants and animals that come before them in a food chain.



VOCABULARY



food web

What Are Food Webs?



A **food web** is made up of food chains that overlap.



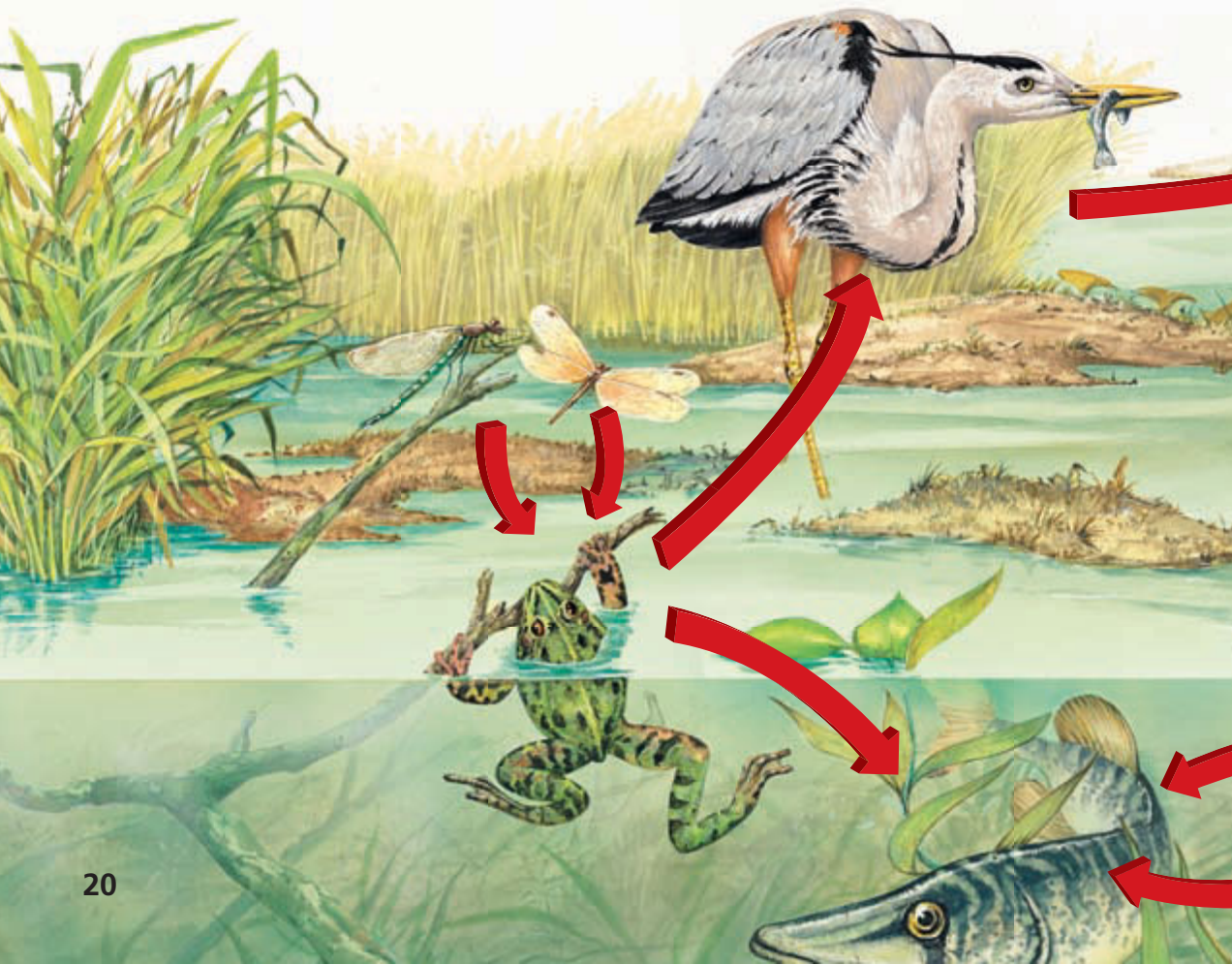
READING FOCUS SKILL MAIN IDEA AND DETAILS

A **main idea** is what the text is mostly about.

Details tell more about the **main idea**.


Look for **details** about food webs.

■ A Marsh Food Web



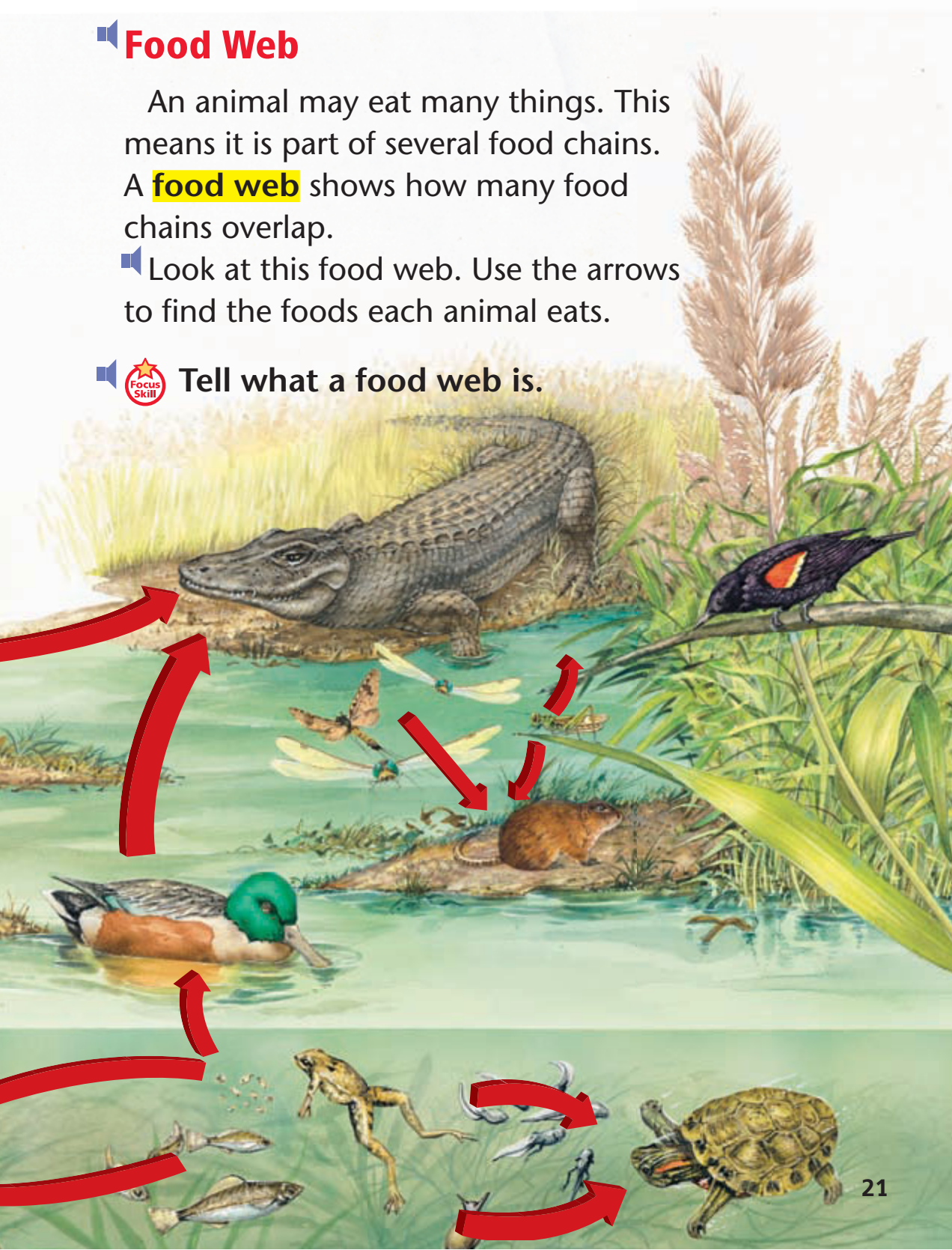
Food Web

An animal may eat many things. This means it is part of several food chains. A **food web** shows how many food chains overlap.

 Look at this food web. Use the arrows to find the foods each animal eats.



Tell what a food web is.





🔊▲ Wildebeests live in big herds to stay safe.

🔊Ways Animals Defend Themselves

Animals defend themselves in many ways. An animal's color or shape may help it hide. Its teeth, sting, or bad smell can protect it. It may run fast. It may play dead, too.



🔊 Tell three ways animals defend themselves.

🔊▼ A snake may bite.



🔊▼ Opossums play dead.



Changes in Food Webs

Many things can change a food web. A change to one part can change other parts.

- Adding new plants can change a food web. New plants may crowd out other plants. Adding new animals can change a food web, too. New animals may eat other animals or plants.

What can change a food web?



Review

 Focus Skill

Complete this **main idea** statement.

- 1. A _____ is made up of food chains that overlap.



Complete these **detail** sentences.

- 2. Animals have many ways to _____ themselves from predators.
- 3. A food web can change if _____ or animals are added to it.

GLOSSARY



- ▶ **carnivore** (KAHR•nuh•vawr) an animal that eats only other animals (8)
- ▶ **consumer** (kuhn•soom•er) a living thing that gets its energy by eating other living things as food (5)
- ▶ **decomposer** (dee•kuhm•POHZ•er) a living thing that breaks down dead organisms for food (6)
- ▶ **energy pyramid** (EN•er•jee PIR•uh•mid) a diagram that shows how energy gets used in a food chain (15)
- ▶ **food chain** (FOOD CHAYN) the path of food from one living thing to another (12)
- ▶ **food web** (FOOD WEB) food chains that overlap (21)
- ▶ **herbivore** (HER•buh•vawr) an animal that eats only plants (7)
- ▶ **omnivore** (AHM•nih•vawr) a consumer that eats both plants and animals (9)
- ▶ **predator** (PRED•uh•ter) an animal that hunts another animal for food (16)
- ▶ **prey** (PRAY) an animal that is hunted by another animal, a predator (16)
- ▶ **producer** (pruh•DOOS•er) a living thing that makes its own food (5)

Think About the Reading

-  **1.** Tell the difference between a producer and a consumer. Name three kinds of consumers.
-  **2.** Explain what a food chain, an energy pyramid, and a food web show.

Hands-On Activity

Draw pictures of producers and consumers on index cards. Be sure to include yourself.

-  **1.** Use the cards to make a food chain with yourself at the end.
-  **2.** Use the cards to make a food web that shows you as part of several overlapping food chains.

School-Home Connection

Find examples of producers, herbivores, carnivores, omnivores, and decomposers in your neighborhood. Draw and label them. Talk about how body parts or behavior help each consumer eat or defend itself.

GRADE 3

Book 5

WORD COUNT

850

GENRE

Expository Nonfiction

LEVEL

See TG or go Online



Harcourt Leveled
Readers Online Database
www.eharcourtschool.com

ISBN-13: 978-0-15-362025-6
ISBN-10: 0-15-362025-0

