

Learn Words About a New Subject

Getting Started



Mystery Word of the Week Clue 1

Food gives plants and animals the _____
they need for living.

The Mystery Word of the Week is *energy*.

Model/Teach

- Distribute the Student Reproducible pages 271 and 272.
- Ask a volunteer to read the Word Learning Tip. Explain that when they read about a special subject such as science, they may find many content words they do not know. These words may be the longest and the most difficult words in the text. They may appear over and over again. Content words are all related to the big idea they are reading about. In this lesson, the big idea is that living things depend on one another for food.
- Invite students to read the Vocabulary Building Strategy. Remind them to think of the connections between the content words and the big idea. Tell them to relate the vocabulary words to the big idea in order to learn what specific meaning that word has and what it tells about the big idea.
- Then have students read the directions. Discuss what a storyboard is used for and how it is set up (pictures of action and dialogue for characters). Ask students where the action is taking place in the first panel. Have them tell who the characters are. Read the dialogue aloud.
- Before you read the text a second time, do the **Think Aloud** on page 265.
- After you have modeled how to find the meaning of the phrase *food chain* by associating the word with the big idea, read each panel on pages 271-272 again. This time pause at each boldface word.

Materials Needed

- Student Reproducibles, pp. 271–272
- Transparency 2, p. 419

Vocabulary Words

carnivore
food chain
herbivore
omnivore
prey

Words About How Living Things Depend on One Another

Think Aloud

I want to share with you my thinking as I determine the meaning of these content words. First, I want to get an understanding of what the author's big idea is. I see that the story is set in a natural history museum, so I know that the topic is science. The teacher and students are visiting an exhibit about *food chains*. The phrase *food chain* appears in the first panel. I read the dialogue carefully to find clues to what a *food chain* is. The teacher says, "We're going to see how living things depend on one another for food. That's called a **food chain**." That probably is the big idea! Next, I read what the first student says: "That means one thing eats another, right?" Now I know that a *food chain* refers to the way living things are linked because one living thing eats another living thing. In other words, a food chain shows how living things depend on one another for food. The new content words will tell something specific about how this food chain works or what it is.

- Place the transparency on the overhead projector. Ask students what word belongs as the title or the author's big idea (how living things depend on one another for food). Remind students that all the words are related to this idea and write the phrase in the title space.
- Tell students that as you pause at each boldface word, you want them to tell you how the word is connected to the big idea. You also want them to tell you what it means. For example, *food chain* is connected to the idea of how living things depend on one another for food, because it tells the connection between living beings, in which smaller weaker creatures are eaten by larger, stronger ones. Record their thinking on the transparency.
- After students have discussed each word, allow them to work in small groups. Give them the opportunity to use flashcards to reinforce word meanings.

English Language Learners

- Spanish- and French-speaking students may recognize four of the vocabulary words: *carnivore*, *herbivore*, *omnivore*, *prey*. Ask students to say the words in their languages of origin. Have students practice pronouncing the English words with the accent on the first syllable. Then ask them to use the words in oral sentences.

Independent Activity

- ★ **Think About Consequences** Ask students to create a food chain showing how all the living creatures mentioned in the storyboard are linked: **algae--krill--codfish--seal--whale**. Ask students what would happen to the whale if the water became polluted and the algae died. Have them write their answers in their personal word journals. Tell them to use as many vocabulary words as they can.

Answer Key

See page 395 for definitions.

Connect Words and Meanings

Getting Started



Mystery Word of the Week Clue 2

Many plants make their food by using the _____ from sunlight.

Materials Needed

- Student Reproducible, p. 273

- ★ **Review and Share** Have students share their **food chains and the consequences** they wrote about for the activity on page 265. Post their food chains on the bulletin board and add the vocabulary words to the word wall.

Model/Teach

- Distribute the Student Reproducible page 273.
- Before students start, do the **Think Aloud**.
- After you have modeled matching a word to its definition, have students finish the rest of the activity on their own.
- Then tell students to read the directions to the second activity and complete it on their own.

Independent Activities

- ★ **Make Connections Among Words** Write the following words on the chalkboard: *carnivore*, *herbivore*, and *omnivore*. Demonstrate breaking them down into word parts: *vore* (from *vorore*) means “to eat up completely,” *carni-* is “meat,” *herba-* means “a plant with seeds,” and *omni-* means “all.” Tell students these roots all come from Latin. Have students write about the meanings of the three words and their roots in their journals.
- **Illustrate Food Chains** Have students work in small groups to research a food chain in a particular environment, such as a local stream or lake, a local park or garden, a desert, a temperate forest, or a tropical rain forest. Invite each group to make a poster of its food chain to present to the class.

Think Aloud

I know that all of the vocabulary words deal with the big idea of how living creatures depend on one another for food. Let's look at the first definition together: “a living creature that eats a wide variety of plants and animals.” I notice the word eat in the definition, which connects to the big idea. I remember that three of the vocabulary words tell about the types of food that living creatures eat. They are *herbivore*, *carnivore*, and *omnivore*. An *herbivore* eats only plants, and a *carnivore* eats only meat. I'm looking for a word that tells that the creature eats both plants and animals, so *omnivore* is my answer, and I write it in the blank.

Answer Key

1. omnivore
2. herbivore
3. carnivore
4. food chain
5. prey
6. food chain
7. herbivore
8. carnivore
9. prey
10. omnivore

Words About How Living Things Depend on One Another

Use Content Words

Materials Needed

- Student Reproducible, p. 274

Think Aloud

I see that this diagram shows which animals eat other animals or plants. I think these are *food chains*. Let's read the first numbered sentence to find out more. It says: "A food web shows the different food chains in an environment. Figs, wasps, and spiders make up one _____ in the rain-forest food web." When I look back at the chart, I see that figs, wasps, and spiders make up a *food chain*. Wasps eat figs, and then spiders eat the wasps. That fits what I know about a *food chain*. I'll write *food chain* in the blank.

Answer Key

1. food chain
2. prey
3. carnivore
4. herbivore
5. herbivore
6. omnivore
7. prey
8. carnivore
9. food chain
10. carnivore

Getting Started

Mystery Word of the Week Clue 3



Animals that are *carnivores* get their _____ from eating meat.



Review and Share Give students an opportunity to share their thoughts about the **word connections** they wrote about in their personal word journals for the activity on page 266. Ask them for other related words. Add them to the word wall.

Model/Teach

- Distribute the Student Reproducible page 274.
- Before students start the activity, do the **Think Aloud**.
- After you have modeled filling in the blanks with the vocabulary words, have students complete the rest of the items on their own.

English Language Learners

- Divide students into small groups. Have them discuss the food chains in the diagram and others that they have researched. Tell them to write down new words and phrases that come up in the discussion.

Independent Activities



Create a Food Chain Guide students in their research about food chains. Students can do research in encyclopedias and nonfiction books. Or, they can enter search words on the Internet. Help students find key words to make their research successful. Remind them to use the Word Learning Tip and Vocabulary Building Strategy to find the meaning of new words as they read.

- **Think About Idioms** After students study the food chains, ask them to talk to a partner about what the expression "at the bottom of the food chain" means. Is this a good place to be or a bad place to be? Then have them write a sentence using the expression.

Put Words Into Action

Materials Needed

- Student Reproducible, p. 275

Getting Started



Mystery Word of the Week Clue 4

Animals that are herbivores get their _____ from eating plants.

- ★ **Review and Share** Have students share the **food-chain webs** they created for the activity on page 267. Ask them to identify the plants and animals on the web and show how the food chains are related. Remind them to tell about the sources they used for information.

Model/Teach

- Distribute the Student Reproducible page 275.
- Use the **Think Aloud**.
- After you have modeled how to complete the activity, ask students to finish it on their own. Arrange them in pairs to share their responses.

Independent Activities

- ★ **Make a Collage** This activity would make a good homework assignment. If done in class, students can draw pictures or cartoons to illustrate the vocabulary words. You might assign one word to each student if the activity is done in class.
- **Write About Food Chains** Have students write a paragraph summarizing what they have learned about food chains. Remind them to use all the vocabulary words in their paragraph.

Think Aloud

I see that these items are riddles about animals. The riddles contain clues and end with a question. My job is to answer the question. Let's read the first item together. Then I will model the type of thinking I do to complete the item. "I am a rabbit. My fear is that an owl, hawk, or coyote will catch and eat me. What is the word that describes an animal like me that is hunted by other animals?" I think carefully about what the question is asking. It asks for the vocabulary word that describes animals that are hunted by other animals. I look through the vocabulary words for the word that fits best. Animals that are hunted by other animals are called *prey*. For example, a rabbit is the *prey* of owls, hawks, and coyotes. They all hunt and eat rabbits. So, I'll write the word *prey* in the blank.

Answer Key

1. prey
2. herbivore
3. omnivore
4. carnivore
5. food chain
6. carnivore
7. prey
8. herbivores
9. omnivore
10. food chain

**Words About How
Living Things Depend
on One Another**

Review and Extend

Materials Needed

- Student Reproducible, p. 276

Think Aloud

Follow along as I read the first sentence aloud: “All the plants and animals that live in a forest form a(n) _____.” I can think of two possible answers. The first could be *food chain*, but a food chain doesn’t include all the plants and animals in a forest. A single food chain would include only those plants and animals that are food for one another. The other possible answer is *ecosystem*. Let’s reread the definition for *ecosystem*: “a community of plants and animals that is affected by its environment, including the air, water, sunlight, and soil. Example: all the plants and animals in a lake.” This definition convinces me that *ecosystem* is the correct choice. So, I will write that in the blank.

Answer Key

Mystery Word of the Week: energy
(Accept any other words that fit the context.)

1. ecosystem
2. herbivores
3. predators
4. prey
5. carnivores
6. ecosystem
7. prey
8. carnivores (also accept predators)

Getting Started

Mystery Word of the Week Clue 5



An animal that is the prey of other animals needs lots of _____ to run for its life.

- ★ **Review and Share** Give students the opportunity to share the **collages** they created for the activity on page 268. Class members can guess which parts of the collage are meant to illustrate specific vocabulary words. Create a display area for the collages.

Model/Teach

- Distribute the Student Reproducible page 276. Read the boxed information aloud and discuss the new bonus content words: *ecosystem* and *predator*.
- Use the **Think Aloud** to model how to complete the activity.
- After you have modeled completing an item, ask students to finish the rest on their own and then share their responses.

Independent Activities

- ★ **Think About It** Allow students to work with a partner to discuss the question: Why do carnivores like lions and tigers need long, sharp teeth? Then have them write their responses individually. As students share their responses, make sure they understand the cause-and-effect relationship between long, sharp teeth and the ability to catch prey and devour them.
- **Create a Diagram** Have students make a diagram of an ecosystem they have researched. Discuss with students what might happen if an important predator disappeared from an ecosystem. What would happen to its prey?

Check Your Mastery

Materials Needed

- Student Reproducible, p. 277

Give the Test

- Distribute the Student Reproducible page 277.
- Read the directions aloud. “Read each question below. Circle the letter of the choice that best answers each question.” Point out to students that their job is to choose the best word to answer each question.
- Model how to answer a question by writing the following on the board and reading it aloud:

I'm a squirrel that eats seeds and nuts.
Which vocabulary word describes my eating habits?

A. carnivore **B.** herbivore **C.** omnivore

- Ask students to choose the correct answer (B). Remind them to circle the letter of their answer.
- Tell students that, after they finish, they should read over the page and check their answers.
- Review Check Your Mastery orally with the students.
- Have students work with a partner to talk about the questions they got wrong. Ask them to write a new sentence using the correct vocabulary word for each item they missed.
- Ask them to discuss how the Word Learning Tip and Vocabulary Building Strategy helped them find the correct response.
- Tally students' correct responses.

Student Self-Assessment

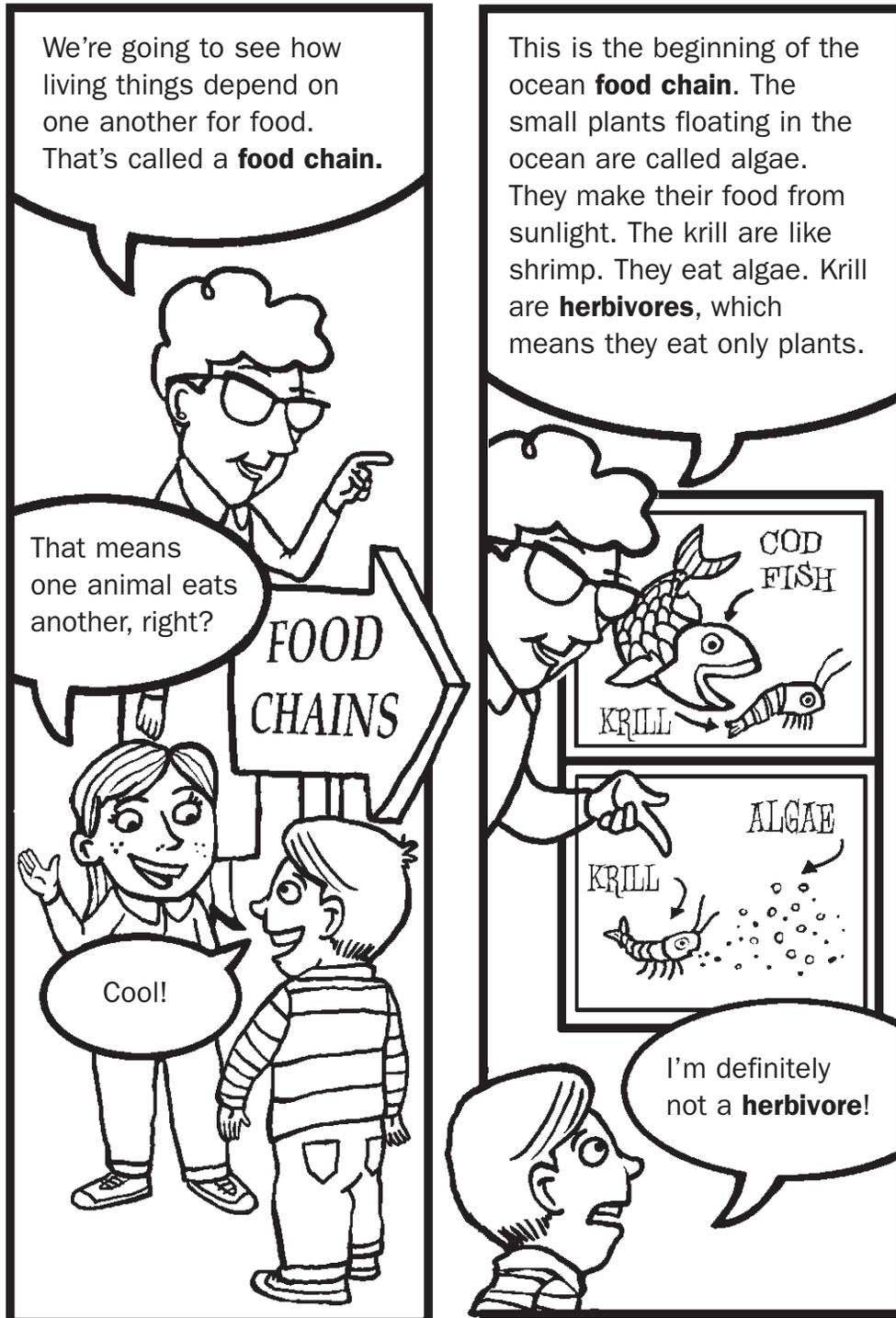
Journal Writing Have students answer the following questions in their personal word journals: How are all of the words in this lesson linked? What have you learned from the Word Learning Tip and Vocabulary Building Strategy that can help you learn other unknown content words in the future?

Answer Key

1. C
2. A
3. B
4. B
5. A
6. C
7. A
8. C
9. B
10. C

Learn Words About a New Subject

Directions The panels below are a storyboard for a video. Look at the pictures and the dialogue. Think about how the boldface words are connected to the big idea of how living things depend on each other for food..



Vocabulary Words

- | | |
|-------------------|-----------------|
| carnivore | omnivore |
| food chain | prey |
| herbivore | |

Word Learning Tip!

When you read about a new subject, you may see new content words that you haven't seen in everyday reading. These words are often the longest and most difficult words in the text. They tell something specific about the topic. To learn these new words, think about the big idea or subject about which you are reading. All of the words in this lesson tell how living things depend on one another for food. They all tell about how animals eat.

Vocabulary Building Strategy

To learn the meaning of content words that tell about a new subject, make connections between the unknown words and the big idea or subject you are reading about. Tie together the big idea and the meanings of other content words you know in the text. This will help you learn the meaning of unknown words.

Learn Words About a New Subject

carnivore

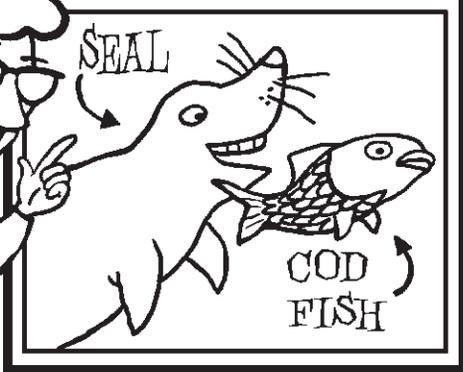
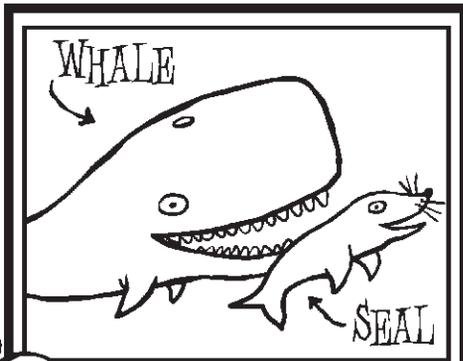
food chain

herbivore

omnivore

prey

FOOD CHAIN



Here is the rest of the ocean **food chain**. These animals are all **carnivores**. They eat only meat. The cod eats the krill. The seal eats the cod, and the whale eats the seal. The animal that is hunted and eaten is called the **prey**.

Humans eat animals, like your tuna fish sandwich. We also eat plants, like that salad. We are **omnivores**.



We eat everything!
We are **omnivores**!

Connect Words and Meanings

carnivore

food chain

herbivore

omnivore

prey

Directions Write the vocabulary word that best fits each definition. You may use your dictionary or the glossary to help you.

- 1. Definition:** a living creature that eats a wide variety of plants and animals _____
- 2. Definition:** a living creature that eats only or mostly plants _____
- 3. Definition:** a living creature that is only or mostly a meat eater _____
- 4. Definition:** a chain of living beings in which smaller and weaker creatures are eaten by larger and stronger creatures _____
- 5. Definition:** an animal that is hunted and eaten by another animal
(or even by a meat-eating plant!) _____

Directions Write the vocabulary word that best fits in each blank. Use each vocabulary word only once.

A (6) _____ is made up of living creatures that eat one another. One example can be seen in the grasslands of Africa. An antelope is a (7) _____ that feeds on the grass. The lion is a (8) _____ that eats only meat. The lion hunts and then eats the antelope, which is its (9) _____. Monkeys live in the rain forests of Africa. They eat plant leaves and fruits. Monkeys also eat birds, birds' eggs, insects, and lizards. A monkey is an (10) _____.

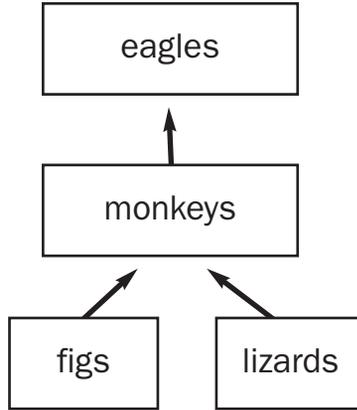
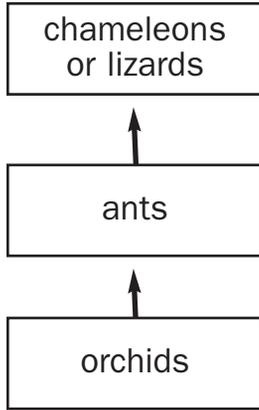
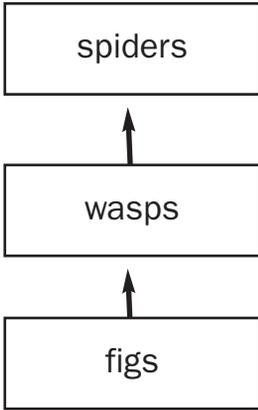


Make Connections Among Words Many science words contain Latin roots. The three words that describe “eaters” in a food chain are *carnivore*, *herbivore*, and *omnivore*. The root *-vore* comes from the Latin word *vorare*, which means “to eat up completely.” Other Latin roots are *carni-*, which means “meat,” *herba-* which means “a plant with seeds,” and *omni-*, which means “all.” In your personal word journal, tell how these roots make up the meaning of these three words: *carnivore*, *herbivore*, and *omnivore*.

Use Content Words

carnivore **food chain** **herbivore** **omnivore** **prey**

Directions Look at the food chains below. The first item that is eaten is at the bottom of the food chain. Write the vocabulary word that fits best in each sentence.



1. A food web shows the different food chains in an environment. Figs, wasps, and spiders make up one _____ in the rain-forest food web.
2. The wasp is the _____ of the spider that eats it.
3. The eagle is a(n) _____ that eats meat.
4. An ant is a(n) _____ because it eats only plants, such as orchids and other flowers.
5. An adult wasp feeds mainly on fruit and sugar. It eats figs. Is the wasp a carnivore or an herbivore? _____
6. The monkey is a(n) _____ because it eats both figs and lizards.
7. An animal can be the _____ of a stronger, larger, or fiercer animal.
8. A chameleon eats mostly ants and other insects. Is the chameleon a carnivore or an herbivore? _____
9. One _____ in the rain forest begins with orchids.
10. A spider traps wasps and other insects in its web and then eats them. Is the spider a carnivore or an herbivore? _____



Create a Food Chain Put a plant at the bottom of a food chain and show the animal or animals that eat it. Next, add an animal that eats the plant-eating animal. Look in an encyclopedia for information. Label each animal with the word *carnivore*, *herbivore*, or *omnivore*.

Put Words Into Action

carnivore

food chain

herbivore

omnivore

prey

Directions Read the animal riddles below. Answer each riddle question with a vocabulary word. Write it in the blank.

1. I am a rabbit. My fear is that an owl, hawk, or coyote will catch and eat me. What is the word that describes an animal like me that is hunted by other animals?

2. I am a horse that eats hay. I like oats and apples, too. I do not eat meat. What is the name for an animal like me?

3. I am a bear that eats mice, squirrels, and fish. Birds' eggs and worms are my favorite snacks. But I'm also famous for eating honey. I like berries, fruits, nuts, and the leaves and roots of plants. I guess you could say I'm an all-around eater. What is the name for an animal like me?

4. I'm a tiger. We are strict meat eaters. What is the name for an animal like me?

5. In a forest, squirrels eat seeds and nuts. A fox mother kills a squirrel for food for her babies, which are called kits. Later, a hawk steals a kit for its dinner. What is the name for this way of nature?

6. The bald eagle is the national bird of the United States. This bird eats small animals. What is the name of an animal with these eating habits?

7. What is a word for the small animals, such as squirrels, rabbits, and birds, that an eagle hunts?

8. Sheep, goats, and camels eat grass. What is the vocabulary word that describes all these animals?

9. Last night, I ate chicken, rice, and carrots. What word describes my eating habits?

10. Alligators eat water snakes that eat fish that eat worms that eat water plants. What is the way these living things are linked together called?



Create a Collage Cut pictures from magazines and put them in food chains. Label the pictures using vocabulary words and write a caption that describes the big idea to which all of your content words connect.

Review and Extend

carnivore

food chain

herbivore

omnivore

prey

BONUS WORDS Here are two new words about food chains. Remember that these words all deal with the same big idea as your vocabulary words. That means that even if you have never seen these words before, you do know one important thing—they both tell you something about how living creatures depend on one another for food.

predator an animal that lives by hunting other animals for food

Example: a shark

ecosystem a community of plants and animals that is affected by its environment, including the air, water, sunlight, and soil

Example: all the plants and animals in a lake

Directions Read each item below. Choose the vocabulary word or the new content word that best fits the context. Write it in the blank.

All the plants and animals that live in a forest form a(n) **(1)** _____.

The plants use sunlight, soil, and water to make their own food. Plant-eating birds and animals are called **(2)** _____. They eat grass, seeds, nuts, roots, and leaves. Larger and stronger animals often hunt these plant eaters. These **(3)** _____(s), or hunters, depend on the animals that are their **(4)** _____. Without them, the meat eaters, or **(5)** _____, would go hungry.

If there is a change in an **(6)** _____, all the members of the community are affected. If there is too little rain, some plants may die. Some of the animals that eat these plants will die also. Without **(7)** _____ to hunt, the **(8)** _____ will have to move elsewhere to find meat. They will need to join a new community or they will die.



Think About It Think about the teeth of lions and tigers. Why do you think that carnivores such as these need long, sharp teeth? Write in your personal word journal to explain your answer. Use as many vocabulary words as you can and other content words that connect to the big idea of how lions and tigers eat.

Check Your Mastery

Directions Read each question below. Circle the letter of the choice that best answers each question.

- Which vocabulary word best describes the eating habits of a cat that feeds on mice?
A. herbivore **B.** prey **C.** carnivore
- Which vocabulary word explains that humans eat a variety of plants and animals?
A. omnivore **B.** carnivore **C.** herbivore
- What do you call an animal that is hunted by another animal?
A. food chain **B.** prey **C.** carnivore
- The Venus flytrap is a plant that eats insects. Which word describes this plant's eating habits?
A. herbivore **B.** carnivore **C.** prey
- A flower makes a sweet juice called nectar. A hummingbird drinks the nectar. Which word describes the bird's eating habits?
A. herbivore **B.** carnivore **C.** omnivore
- A shrimp eats plants in the ocean. A fish eats the shrimp. Then a seal eats the fish. Finally, a polar bear kills the seal and eats it. What do you call this feeding sequence?
A. carnivore **B.** omnivore **C.** food chain
- An owl hunts for a mouse. The owl is called the predator. What do you call the mouse?
A. prey **B.** carnivore **C.** food chain
- Which word describes how sheep, goats, cows, and deer, which eat mostly grass and other plants, eat?
A. food chain **B.** omnivore **C.** herbivore
- A lizard in the desert eats insects. Then a snake eats the lizard. A coyote later kills and eats the snake. What name describes what occurs among this set of animals?
A. herbivore **B.** food chain **C.** prey
- A monkey in the rain forest will eat figs and bananas. It will also eat meat when it can. Which vocabulary word describes its eating habits?
A. carnivore **B.** herbivore **C.** omnivore

DEFINITIONS

The words in this program were chosen for their importance and to illustrate specific Word Learning Principles and Vocabulary Building Strategies.

The definitions of the words as they are used in the lessons are given below.

Lesson 18

carnivore (**kar**-nuh-*vor*) *noun*: a living creature that is only or mostly a meat eater

food chain (**food** *chayn*) *noun*: a chain of living beings in which smaller and weaker creatures are eaten by larger and stronger creatures

herbivore (**hur**-buh-*vor*) *noun*: a living creature that eats only or mostly plants

omnivore (**om**-ni-*vor*) *noun*: a living creature that eats a wide variety of plants and animals

prey (**pray**) *noun*: an animal that is hunted and eaten by another animal (or even by a meat-eating plant!)

There are no symbols used in this pronunciation system (*Scholastic Children's Dictionary*, copyright © 2002, 1996 Scholastic Inc.). Instead letters and letter combinations are used to stand for different sounds.

GLOSSARY

C

carnivore (**kar**-nuh-*vor*) *noun*: a living creature that is only or mostly a meat eater

F

food chain (**food** *chayn*) *noun*: a chain of living beings in which smaller and weaker creatures are eaten by larger and stronger creatures

H

herbivore (**hur**-buh-*vor*) *noun*: a living creature that eats only or mostly plants

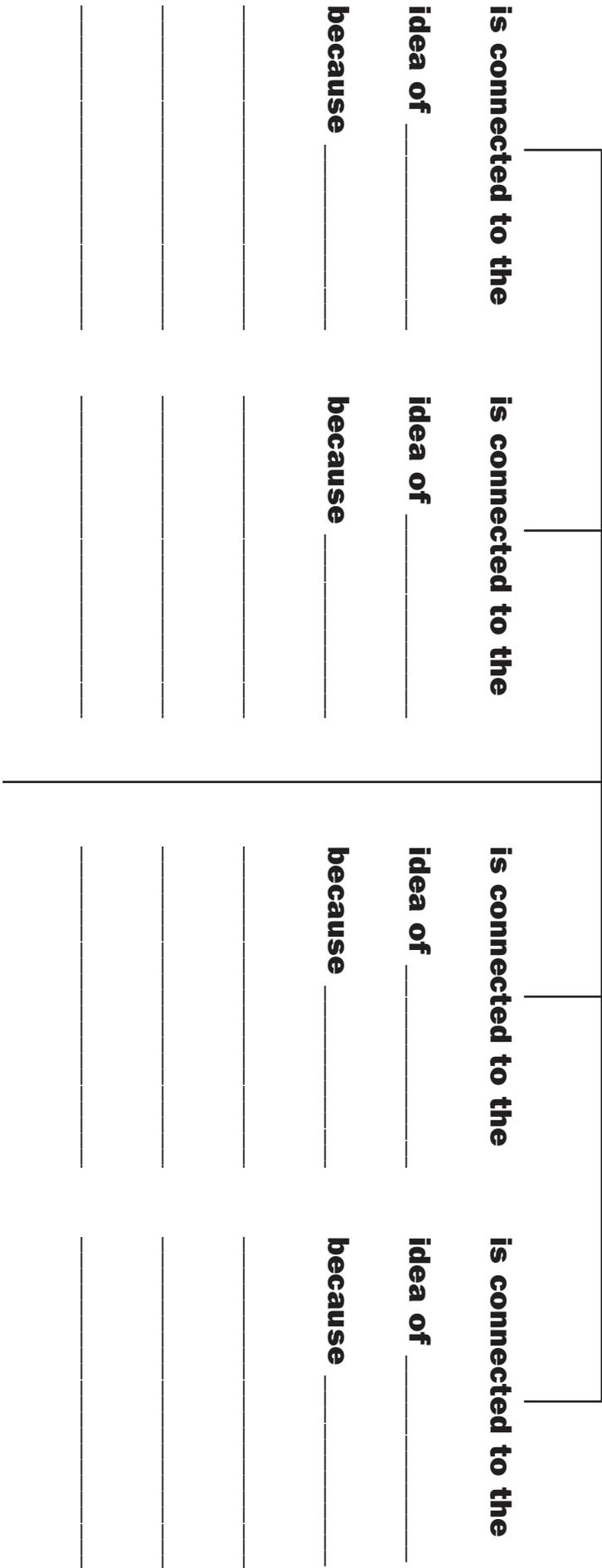
O

omnivore (**om**-ni-*vor*) *noun*: a living creature that eats a wide variety of plants and animals

P

prey (**pray**) *noun*: an animal that is hunted and eaten by another animal (or even by a meat-eating plant!)

Author's Big Idea or Subject is _____



is connected to the idea of

because _____

	<p>Lesson 18</p> <p>carnivore (kar-nuh-vor)</p>	<p>Lesson 18</p> <p>food chain (food chayn)</p>
<p>Lesson 18</p> <p>herbivore (hur-buh-vor)</p>	<p>Lesson 18</p> <p>omnivore (om-ni-vor)</p>	<p>Lesson 18</p> <p>prey (pray)</p>

noun: a chain of living beings in which smaller and weaker creatures are eaten by larger and stronger creatures

noun: an animal that is hunted and eaten by another animal (or even by a meat-eating plant!)

noun: a living creature that is only or mostly a meat eater

noun: a living creature that eats a wide variety of plants and animals

noun: a living creature that eats only or mostly plants