

Name Key Number \_\_\_\_\_

You MUST read the Spotlight book lessons BEFORE beginning the questions.

### Chapter 7 Ecosystem Spotlight Lesson 1 (pages 138-145)

1. What are three nonliving things in the environment around you right now?  
**Books, pencils, desks, tables, and water (Answers may vary)**
2. What are the two main parts of an environment?  
**Living and nonliving things**
3. What might you find in an ecosystem under a rock?  
**Wet soil, insects, worms (Answers may vary)**
4. An ecosystem has living parts and nonliving parts. Fill in the table using the picture on page 141.

<b>Living</b>	<b>Nonliving</b>
<b>Trees</b>	<b>Air</b>
<b>Worms</b>	<b>Stones</b>
<b>Flowers</b>	<b>Bits of wood</b>
<b>Grass</b>	<b>soil</b>

5. Is an alligator living in Georgia a part of the same population as an alligator living in Alabama? Explain in complete sentences why or why not?  
**No; individuals must be in the same ecosystem to be a part of the same population. The two alligators would be too far apart to be in the same ecosystem.**
6. All the living and nonliving things in an area form an **environment**.
7. An individual ladybug is part of a ladybug **population**.
8. Many different populations live in the same **community**.

**Main Idea:** *An ecosystem is made up of living and nonliving things.*

<b>Living</b>	<b>Nonliving</b>
<b>Possible answers: grass, water, lilies, trees, worms, birds.</b>	<b>Possible answers: water, rocks, climate, or temperature</b>
<b>Answers may vary.</b>	<b>Answers may vary.</b>

## Chapter 7 Ecosystem Spotlight Lesson 2

Use the vocabulary box on page 146 to fill in the box on the left.

omnivore	An animal that eats both plants and animals
producer	A living thing that makes its own food
herbivore	An animal that eats only plants
carnivore	An animal that eats other animals
decomposer	Living things that break down parts of dead animals
consumer	A living thing that must eat other living things to get energy

1. What do plants need from the sun? Why? **The plants need energy from the sunlight to make food.**
2. Why are plants called producers? **Plants have the ability to make their own food. They don't need to eat other living things to get energy.**
3. Why do some animals eat plants or other animals? **They can't make their own food, so they have to eat plants or other animals to get energy.**
4. Give two examples of an herbivore, a carnivore, and an omnivore that are found on page 150.
  - a. Herbivore – **horses, rabbits (Answers may vary.)**
  - b. Carnivore – **lions, frogs (Answers may vary.)**
  - c. Omnivore – **bears, many people (Answers may vary.)**
5. Jaguars eat tapirs and river hogs. What kind of consumer are jaguars? **Jaguars are carnivores.**
6. What kind of consumer is a tapir and where does it get its energy? **Tapirs are herbivores, so they get their energy from producers.**
7. What kind of consumer is a river hog and where does it get its energy? **River hogs are omnivores. They get their energy from producers, herbivores, carnivores, and other omnivores.**
8. Give two reasons why decomposers are important. **Possible answers: Decomposers break down waste. Without decomposers, dead plants and animals would cover Earth.**

9. Name three types of decomposers listed on page 152. Possible answers: earthworms, fungi, and bacteria are all decomposers.

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### Chapter 7 Ecosystem Spotlight Lesson 3 (pages 154 - 163)

1. A niche is a living thing's role in its ecosystem.
2. A food chain shows the flow of energy among living things.
3. An environment that meets the needs of living things is a habitat.
4. Overlapping food chains make up a food web.
5. An energy pyramid shows how much energy moves from producers to consumers in a food chain.
6. What are three types of organisms that might share a desert habitat?  
Sidewinders, tarantulas, and sagebrush (Answers may vary.)
7. What does a food chain show? The path of food energy; the direction energy flows
8. Why do all food chains begin with a producer? Possible answers; Only producers can make their own food from sunlight. The first consumer in a food chain has to eat a producer.
9. What are animals that are eaten called ? prey
10. What are consumers that eat other animals called ? predator
11. Look at the food web on page 160. Which consumers eat grasshoppers? The mouse, the sparrow, the heron
12. Use the picture on pages 160-161 to fill in the sequence chart below.

Producer	First-level consumer	Second-level consumer	Top-level consumer
Grass	Snail	Sparrow	hawk

13. A snake's niche helps make a balanced habitat.
14. Every food chain or food web starts with producers.
15. First level consumers are eaten by second-level consumers.
16. An energy pyramid ends with top-level consumers.

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### Chapter 7 Ecosystem Spotlight Lesson 4 (pages 164-171)

Biotic or Abiotic?	Parts of an Ecosystem
abiotic	water
biotic	fish
Abiotic	rocks
Biotic	trees
Biotic	horses
Abiotic	air
Abiotic	soil
Abiotic	sand
biotic	grass

1. How can plants affect animals? Possible answer; Plants provide food and homes for animals.
2. How can animals affect plants? Possible answer: Animals spread seeds, and animal droppings make the soil healthy.
3. Why are plants and animals biotic? They are living things.
4. List 4 ways that **nonliving**, **living**, or **climate** can affect an ecosystem.
  - a. Climate – by raining too much
  - b. (Answers may vary.)
  - c. Nonliving – plants need water to grow and animals need water to drink
  - d. Living – humans use the resources
5. Biotic factors, such as birds spreading seeds, affect the ecosystem.