

4.1 Studying Ecology

Levels of Ecological Organization

For Questions 1 and 2, circle the letter of the correct answer.

- 1 The most basic level of ecological organization is a(n)
 - A biosphere.
 - B individual.
 - C ecosystem.
 - D population.

- 2 The study of living and nonliving components of a system can best be described as a(n)
 - A abiotic factor.
 - B level hierarchy.
 - C ecosystem ecology.
 - D organism interaction.

- 3 Describe how a species is commonly defined.

- 4 What is community ecology? Give examples.

Biotic and Abiotic Factors

- 5 **Organize Information** Fill in the T-chart with three examples each

Frog Humidity Sunlight bacteria Mushroom pH

| Abiotic Factors | Biotic Factors |
|-----------------|----------------|
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |

6 Is a fallen, rotting tree considered an abiotic or biotic factor? Explain.

Habitat

For Questions 7 and 8, complete each statement by writing in the correct word.

8 Habitats provide organisms with the _____ they need to live, such as food, shelter, breeding sites, and mates.

9 Compare and contrast an ecosystem and a habitat.

10 Explain why organization is important to the study of ecology.

11 Why are dead or decaying organisms still considered important parts of an ecosystem?