## Communities, Biomes, and Ecosystems Before You Read

Before you read the chapter, respond to these statements.

1. Write an $\mathbf{A}$ if you agree with the statement.
2. Write a $\mathbf{D}$ if you disagree with the statement.

| Before You Read | Communities, Biomes, and <br> Ecosystems | After You Read |
| :--- | :--- | :--- |
|  | - Once an ecosystem is established, its <br> plant and animal species remain the <br> same. |  |
|  | - Over time, a forest can develop from <br> bare rock. |  |
|  | - Mountains are not a biome because <br> climate, plants, and animals change with <br> elevation. |  |
|  | - Most of Earth's freshwater is locked <br> in ice. |  |

## Science Journal

"Organisms in a community reflect the resources and climate of that community." Give some examples to illustrate this statement.

## Name

## Communities, Biomes, and Ecosystems

## Section 1 Community Ecology

## Main Idea

Review
Vocabulary abiotic factor New Vocabulary climax community community
ecological succession

## limiting factor

primary succession
secondary succession
tolerance

Details
Skim Section 1 of the chapter. List three facts you discovered about ecosystems.

1. $\qquad$
2. $\qquad$
3. $\qquad$

Use your book or dictionary to define abiotic factor.
$\qquad$

Use the new vocabulary terms to complete the following sentences
Your $\qquad$ includes the people, other animals, plants, bacteria, and fungi in your area. A $\qquad$ is any abiotic or biotic factor that restricts the numbers, reproduction, or distribution of organisms. The ability of any organism to survive when subjected to abiotic or biotic factors is its
$\qquad$ . Changing abiotic or biotic factors can trigger
$\qquad$ -the replacement of one community with another. $\qquad$ occurs when a community becomes established in an area of exposed rock without topsoil. Eventually, a stable, mature $\qquad$ can develop from bare rock. If a disturbance, such as fire, removes the community but not the soil, an orderly and predictable change called $\qquad$ restores the community over time.

## Name

Date

## Section 1 Community Ecology (continued)

## Main Idea

## Communities

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## Details

Predict how an unusually prolonged drought might affect a biological community.

Create a tolerance graph similar to the Tolerance of Steelhead Trout figure in your book. Title your graph Tolerance of Plant A. Label the zones. Then label the limits of each zone according to the facts about Plant A listed below.

- can live at an elevation between 1,000 and $2,000 \mathrm{~m}$
- can live at an elevation between 5,000 and 6,000 m
- cannot live above 6,000 m
- grows best between 2,000 and $5,000 \mathrm{~m}$
- cannot live below $1,000 \mathrm{~m}$

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Infer other abiotic factors that might limit the survival of Plant $A$.
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$\qquad$

## Section 1 Community Ecology (continued)

## Main Idea

## Ecological Succession

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## Connect

Suppose that a recent flood devastated a wildlife preserve in your area. Local leaders suggested organizing volunteers to plant trees in the damaged area. Evaluate your plan and support your reasoning.

Sequence the following steps in the primary succession of a forest by writing each step in the flowchart.

- perennial herbs and grasses - bare rock
- lichens
- shrubs and shade-intolerant trees
- shade-tolerant trees
- small annual plants Contrast primary succession and secondary succession. Give an example of each.
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Suppose that a recent flood devastated a
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