

CHAPTER 3**Practice Test****Communities, Biomes, and Ecosystems****Part A: Multiple Choice**

In the space at the left, write the letter of the term or phrase that best answers each question.

- _____ 1. Which defines a biological community?
- A. all organisms living within a type of biome
 - B. all the interacting populations in an area
 - C. many interacting ecosystems in an area
 - D. the living and nonliving things in a region
- _____ 2. Which is a characteristic of a savanna?
- A. areas of thick forests
 - B. grasses with trees intermixed
 - C. layer of frozen soil
 - D. sand and rocky terrain
- _____ 3. All of the following are examples of pioneering species except?
- A. lichens
 - B. moss
 - C. grasses
 - D. maple trees
- _____ 4. Which explains why secondary succession generally occurs more rapidly in an area than does primary succession?
- A. Average precipitation is higher.
 - B. Moderate climatic conditions exist.
 - C. Pioneer species are microscopic.
 - D. Soil formation has already occurred.
- _____ 5. Which would be the beginning of primary succession?
- A. a woodland area growing from a grassland
 - B. lichen growing on cooled lava
 - C. new plant species growing in a flooded area
 - D. trees sprouting after a forest fire
- _____ 6. Which explains why few animal species live in a fast-flowing river?
- A. Cold water prevents all organisms from surviving.
 - B. Slow currents prevent accumulation of most organic matter.
 - C. Few animals are adapted to withstand high-speed water.
 - D. Frothing water reflects sunlight away from autotrophs.
- _____ 7. All the populations living in a pond would be an example of a(n) _____?
- A. biome
 - B. community
 - C. ecosystem
 - D. population

Practice Test **A** CONTINUED

Part B: Matching

Matching Set 1 Write the letter of the correct forest biome on the line next to its description. Answers may be used only once.

- | | |
|--|---------------------------------|
| _____ 8. contains the greatest variety of organisms | A. boreal forest (Taiga) |
| _____ 9. has deciduous trees and four distinct seasons | B. temperate forest |
| _____ 10. is dominated by coniferous trees such as spruce | C. tropical rain forest |
| _____ 11. terrestrial biome with the greatest biodiversity is | D. desert |
| _____ 12. biome where we would find permafrost | E. tundra |
| _____ 13. the water stored in lakes, rivers, and streams | F. grassland |
| _____ 14. biome that contains the world's oceans | G. savanna |
| _____ 15. dominated by oak, maple, hickory, and beech trees | H. freshwater |
| _____ 16. where the rate of evaporation exceeds the rate of precipitation | I. marine |
| _____ 17. contains the greatest variety of organisms | |
| _____ 18. destination of an African safari tour | |
| _____ 19. found in the middle of the United States, plenty of flat, fertile farm land. | |
| _____ 20. contains the greatest variety of tree species | |

Part C: Using Media



21. How does the cartoon depict tolerance?

Bonus: What's wrong with this image?

Practice Test **A** CONTINUED

Part C: Interpreting Graphs

Write your response to each statement in the space provided.

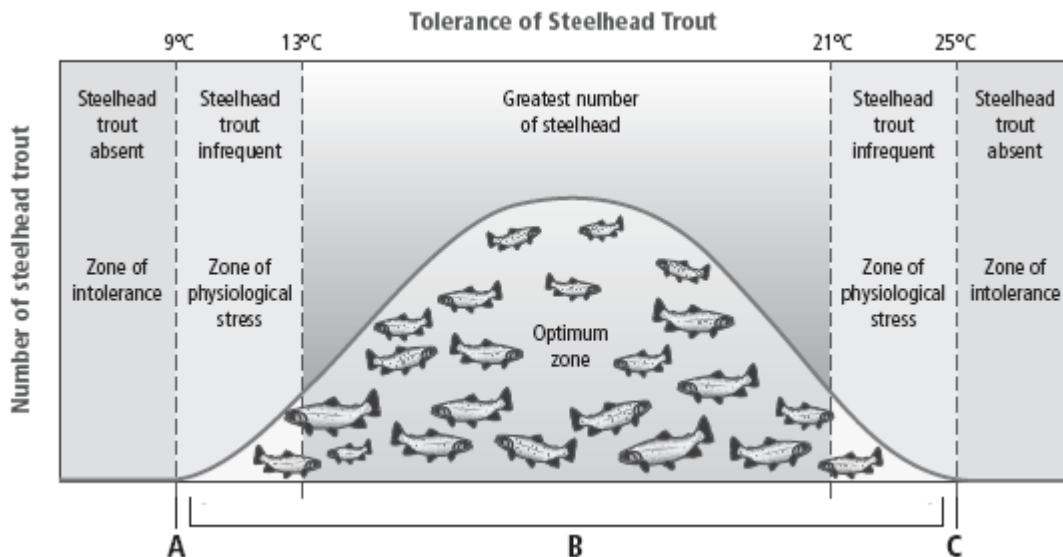
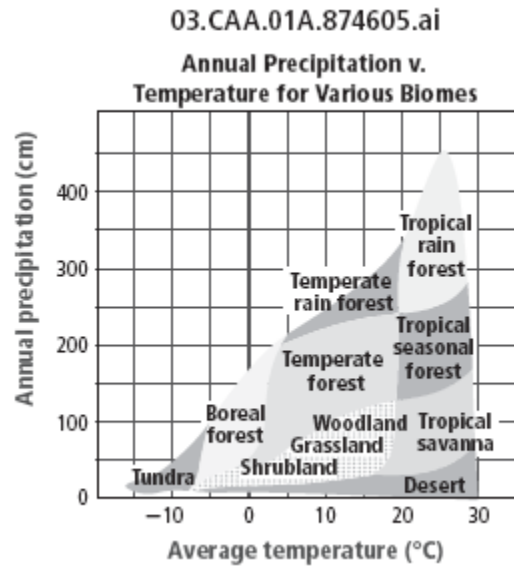
22. Study the graph to the right. **Interpret** the range of annual rainfall for temperate rain forest biomes.

23. **Identify** the lower limit of annual precipitation for a temperate forest.

24. **Infer** what the climate of a region would be like if it were transitioning from woodland grassland to savanna.

25. Biologists are surveying a biome with an average precipitation of 188 cm and an average temperature above 18°C. **Identify** the biome they are surveying.

26. Michigan's annual average temperature is about 9°C, with an average rainfall between 75-100 cm per year, which biome would Michigan belong to according to this chart?



27. Study the graph above. **Interpret** what this picture tells about temperature tolerance of the Steelhead trout.

- _____
- _____
- _____

Practice Test **A** CONTINUED

28. Study the graph above. **Hypothesize** the what would happen of a school of steelhead trout placed in water with a temperature of 10°C.

Part D: Short Answer

Write your response to each statement in the space provided.

29. **Contrast** primary and secondary ecological successions.

30. **Contrast** weather and climate.

31. **Identify** several factors that determine the climate of a region.

32. **Identify** traits/characteristics of a pioneering species.
