

Interactions of Populations and the Environment 2

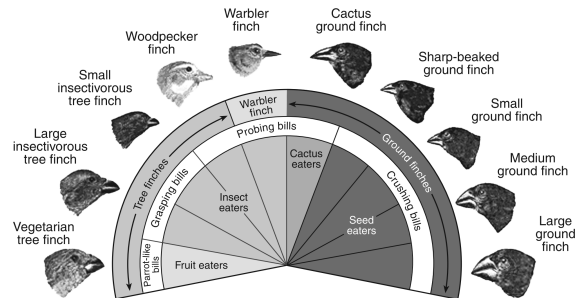
Name: _____

Date: _____

1. A fundamental concept of ecology is that living organisms
 - A. are independent and do not interact with each other or with the physical environment
 - B. do not interact with other living organisms, but do interact with the physical environment
 - C. interact with each other, but do not interact with the physical environment
 - D. interact with other living organisms and interact with the physical environment

2. Sugar maples and white pines are two different tree species that often grow side by side in the Adirondack Mountains. Which statement concerning these trees is correct?
 - A. Since they are both trees, they can interbreed.
 - B. Since they are not closely related, they do not compete with one another.
 - C. Even though they are both trees, each plays a different role in the ecosystem.
 - D. They utilize totally different abiotic resources.

3. Base your answer(s) to the following question(s) on the diagram below and on your knowledge of biology.

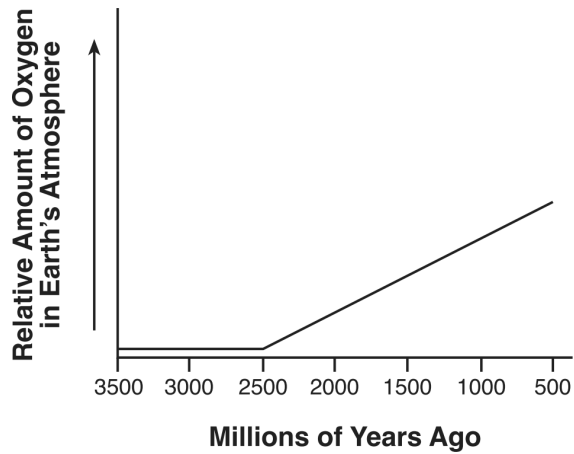


Source: www.pbs.org

Which two finches could temporarily occupy the same niche?

- A. large ground finch and warbler finch
- B. vegetarian tree finch and medium ground finch
- C. large insectivorous tree finch and woodpecker finch
- D. small insectivorous tree finch and cactus ground finch

4. The relative amount of oxygen in the atmosphere of Earth over millions of years is shown in the graph below.



At what point in the history of Earth did autotrophs most likely first appear?

- A. 3500 million years ago
- B. 2500 million years ago
- C. 1500 million years ago
- D. 500 million years ago

5. In a certain ecosystem, rattlesnakes are predators of prairie dogs. If the prairie dog population started to increase, how would the ecosystem most likely regain stability?

- A. The rattlesnake population would start to decrease.
- B. The rattlesnake population would start to increase.
- C. The prairie dog population would increase rapidly.
- D. The prairie dog population would begin to prey on the rattlesnakes.

1.
Answer: D
2.
Answer: C
3.
Answer: C
4.
Answer: B
5.
Answer: B