



Science Toolkit: Grade 6 Objective 3.D.1.a

Student Handout: Science: Grade 6 Objective 3.D.1.a

Standard 3.0 Life Science

Topic D. Evolution

Indicator 1. Explain that in any particular environment, the growth and survival of organisms and species depend on the physical conditions.

Objective a. Cite examples and describe that small differences between parents and offspring can accumulate (through selective breeding) in successive generations so that descendants are very different from their ancestors.

Selected Response (SR) Item

Question

Use the information below to answer the following question.

Pine trees are vascular plants. There are more than 100 species of pine trees. The loblolly pine is native to Maryland and is found in forests near the Chesapeake Bay. This tree grows rapidly. An interesting feature of the loblolly pine tree is the presence of both male and female structures on one tree. The loblolly pine is a member of a group of cone-bearing plants called conifers. These plants do not produce flowers. The conifers slowly separated from a group of flowering plants approximately 100,000,000 years ago.

What most likely resulted in the separation of the conifer group from the flowering plant group?

- A. a sudden climate change
- B. a gradual decrease in insect populations
- C. a gradual increase in genetic differences
- D. a sudden decrease in the amount of available sunlight

Correct Answer

C. a gradual increase in genetic differences

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