

## Chapter 15 Reading Guide

### 15-1 The Puzzle of Life's Diversity



1. The variety of living things is called \_\_\_\_\_
2. What is evolution?  
\_\_\_\_\_
3. A scientific theory is a well-\_\_\_\_\_ testable \_\_\_\_\_ of phenomena that have occurred in the natural world.
4. Where was Charles Darwin born? \_\_\_\_\_ What year? \_\_\_\_\_
5. During his travels, Darwin made numerous \_\_\_\_\_ and collected \_\_\_\_\_ that led him to propose a hypothesis.
6. Look at the map in Fig 15-1, After New Zealand, Darwin stopped where?? \_\_\_\_\_  
Darwin used the Cape of Good Hope to pass what continent? \_\_\_\_\_  
The Galapagos Islands are located to the west of what continent? \_\_\_\_\_
7. Darwin collected plant and animal \_\_\_\_\_ at each location and added them to his collection.
8. What did Darwin collect in the Brazilian rainforest? \_\_\_\_\_
9. Darwin wondered why there were no \_\_\_\_\_ in Australia and no \_\_\_\_\_ in England.
10. The glyptodont resembles what living animal? \_\_\_\_\_ (fig 15-2)
11. Define fossil: \_\_\_\_\_
12. Which tortoise had the longest neck? (fig 15-3) \_\_\_\_\_
13. Which of the Galapagos Islands had rich vegetation? \_\_\_\_\_
14. What part of the tortoise could be used to determine what island it came from? \_\_\_\_\_
15. He noted that many of the birds on the islands had differently shaped \_\_\_\_\_
16. Darwin wondered if the animals living on the islands were once members of the same \_\_\_\_\_

### 15-2 Ideas That Shaped Darwin's Thinking

1. Most people in Darwin's day believed the earth was only a few \_\_\_\_\_ years old.
2. Most Europeans believed that neither the planet nor its living species had \_\_\_\_\_.
3. Fossil evidence caused some scientists to conclude that there were several periods of \_\_\_\_\_.
4. Based on Hutton and Lyell's work, the earth's age is thought to be \_\_\_\_\_ of years old.
5. Name two natural forces that can shape valleys and mountains: \_\_\_\_\_
6. Lyell stressed that scientists must explain past events in terms of processes they can \_\_\_\_\_
7. Darwin thought that if the earth could change over time, then why not \_\_\_\_\_

Biology and History --- Match the scientist with the discovery or proposal.

8. \_\_\_\_\_ Estimates Earth to be millions of years old.
9. \_\_\_\_\_ Set sail on the H.M.S. Beagle
10. \_\_\_\_\_ Proposed the idea of inheritance by acquired traits.
11. \_\_\_\_\_ Predicted that humans would outgrow their space and food.
12. Lamarck was the first to recognize what? \_\_\_\_\_
13. Describe Lamarck's hypothesis: \_\_\_\_\_  
\_\_\_\_\_
14. According to Lamarck's hypothesis, what would happen to a bird that did not use its wings?  
\_\_\_\_\_
15. Lamarck's hypothesis was proven to be [correct / incorrect].
16. What did Malthus note about babies? \_\_\_\_\_
17. What would happen if the human population continued to grow unchecked? \_\_\_\_\_
18. Why is the world not covered in maple trees and oysters? \_\_\_\_\_

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