

Name _____ Date _____ Per _____
Biology

Ch 15 Guided Reading: Darwin's Theory of Evolution

Read the summary for chapter 15 and answer the following questions.

15-1 The Puzzle of Life's Diversity

1. What is evolution?
2. What is a scientific theory?
3. Who contributed most to our understanding of evolution?
4. List four things that Darwin did while on his trip on the *Beagle*.
 - a.
 - b.
 - c.
 - d.
5. What is a fossil?
6. Where did Darwin go in his journeys that influenced him the most?
7. What did Darwin notice about the organisms in this place?

15-2 Ideas That Shaped Darwin's Thinking

8. During Darwin's time, what did most Europeans believe about life on earth?
9. In what ways did Hutton and Lyell influence Darwin's thinking?
10. How did Lamarck explain evolution?
11. According to Lamarck, if a parent worked out a lot and became a body builder, would his child be born with bigger muscles?
12. Is the scenario above likely to happen? Why or why not?

13. In what way did Thomas Malthus influence Darwin's thinking?

15-3 Darwin Presents His Case

14. What was the name of the book Darwin published discussing his ideas **and** when was this book published?

15. Why was Darwin reluctant to publish his ideas?

16. On what did Darwin base his theory of evolution?

17. Explain artificial selection.

18. Why did Darwin call his explanation of evolution "natural selection"?

19. Natural selection is often referred to as "survival of the fittest" due to a "struggle for existence." What is meant by "fittest" **and** what are organisms "struggling" for?

20. How does an organism become more fit than another?

21. Darwin believed in the "principle of common descent." What does this mean?

22. Using your book (page 382-385) name the four types of evidence for evolution **and** give an example of each.

a.

b.

c.

d.