

Writing About the Book

On a separate sheet of paper, write the answer to each of the following.

Extending the Book

1. Charles Darwin did not discuss how his theory of natural selection applied to humankind. Write a supplement to *The Origin of Species* that sets forth the reasons why the theory is applicable to human origins.

Thinking About Assumptions

2. Darwin knew that gaps in the geological record did not support his theory. He assumed that subsequent research would reveal that the gradual, intermediate stages of change that he proposed had occurred. Modern paleontology, however, shows that forms are often abruptly, not gradually, replaced. Does this prove or disprove Darwin's theory? Why or why not?

Responding to a Review

3. In his preface to *The Darwin Reader* (W.W. Norton & Co., Inc. New York, 1987), Mark Ridley states that "Darwin remains one of . . . the most profoundly original and important of thinkers. And I know, from experience, how he can delight the modern reader coming to him for the first time." Write an essay in which you react to this last statement. Did you enjoy reading the book? Did you find it difficult to understand? Explain.

Evaluating Characters

4. Although Mr. St. George Mivart is seen only through the author's eyes, compare and contrast the character and backgrounds of Mivart and Darwin. Whose arguments do you find the most convincing? Why?

Writing a Journal Entry

5. Imagine that you are aboard the H.M.S. *Beagle* serving as an assistant to Charles Darwin. One of your duties is to keep your own record of the various fauna and flora encountered on your voyage. Write a journal entry describing plants or animals you observed, and explain your observations in relation to the origin of species.

Analyzing Scientific Observations

6. Darwin chose the domestic pigeon to study as a special group. What species would you have chosen? Why? Based on the subchapter on domestic pigeons, write an analysis of Darwin's findings. Do you think Darwin's conclusions were correct? Why or why not?

Testing on the Book

On a separate sheet of paper, write the answer to each of the following.

Critical Thinking and Writing

1. The Doctrine of Malthus is cited by Darwin to support his observations regarding the struggle of life. Malthus actually believed that social reforms would increase suffering by increasing the general population and that war, starvation, and disease should be allowed to take their normal course. As a Malthusian, explain why natural selection supports your views.
2. In 1867, Fleeming Jenkin maintained that a favorable variation would disappear as the changed individual interbred with unchanged members of the same species, because the genetic factors would be distributed in ever-decreasing amounts. How would this affect natural selection if true? Are genetic factors divisible or indivisible? How does your answer affect natural selection?
3. Creationism has enjoyed a resurgence in recent years. Write an essay entitled “We Are Not Monkeys,” in which you discuss the major objections cited by Darwin in order to support your creationist point of view. What would be Darwin’s reply?
4. What are the leading facts about embryos noted by Darwin in the field of embryology? How are these facts explained by natural selection?
5. In Chapter IV, Darwin presents a diagram that demonstrates the action of natural selection on descendants of a common ancestor. What does the diagram resemble? Use this image to explain Darwin’s view of evolution.

