



Name

Period

Date

SECTION
10.1

EARLY IDEAS ABOUT EVOLUTION

Study Guide

KEY CONCEPT

There were theories of biological and geologic change before Darwin.

VOCABULARY

evolution	fossil	gradualism
species	catastrophism	uniformitarianism

MAIN IDEA: Early scientists proposed ideas about evolution.

In a phrase, tell what each scientist did to help develop evolutionary theory.

Scientist	Contribution to Evolutionary Theory
1. Linnaeus	
2. Buffon	
3. E. Darwin	
4. Lamarck	

5. What two conditions must be true for a group of animals to be considered the same species?

6. Lamarck's ideas of evolution are known as the inheritance of acquired characteristics. What was incorrect about his theory of how organisms evolve?

7. In the 1700s, many people believed that species were fixed and did not change. How did plant hybridization—a type of crossing that could be observed in experiments—help change this view?

Section 10.1 STUDY GUIDE CONTINUED

MAIN IDEA: Theories of geologic change set the stage for Darwin's theory.

8. Write a description of each theory in the space provided.

Geologic Theory	Description
catastrophism	
gradualism	
uniformitarianism	

Vocabulary Check

9. What word refers to traces of an organism that existed in the past?
- _____
10. What is the process of biological change by which descendants come to differ from their ancestors?
- _____
11. Events such as volcanoes, floods, and earthquakes are the basis of what geologic theory?
- _____
12. What geologic theory can be summarized by the phrase "the present is the key to the past"?
- _____

Who's Who

Linnaeus	Lamarck	Buffon	E. Darwin
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- _____ 13. Charles Darwin's poetic grandfather
- _____ 14. Thought that a giraffe's long neck evolved from reaching high in trees
- _____ 15. Grouped living organisms into categories based on what they looked like
- _____ 16. Wrote *Historie Naturelle* (Natural History) in 1749