

Name _____ Period _____ Date _____

A. Similarities in Structure and Similarities in Development

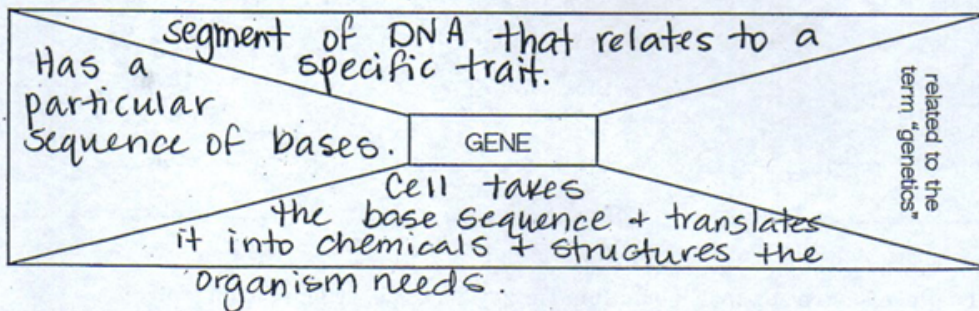
4. Fill in the main idea and detail notes for the main idea shown.

Main Idea	Detail Notes
1. Vestigial organs help scientists see how modern organisms are related to earlier ancestors.	A. vestigial organs: physical structures that were fully developed + functional in an ancestral group of organisms but are reduced + unused in the later species.
2. Scientists have noticed that many different species share similar structures.	A. A similarity in structure indicates that organisms shared a common ancestor. B. Natural selection caused variations in form + function. C. Different environments caused different pressures.
3. Adult stages of many species do not look similar.	A. Earlier stages of many species do look similar. B. Embryo-early stage of development.

CHAPTER 6
The History of Life on Earth

IV. Genetic evidence supports evolution.

5. Fill in the frame game for gene.



Copyright © by McDougal Littell, a division of Houghton Mifflin Company

16

Name _____ Period _____ Date _____

CHAPTER 6
The History of Life on Earth

SECTION MANY TYPES OF EVIDENCE SUPPORT EVOLUTION.
6.3 Reinforcing Key Concepts

BIG IDEA Living things, like Earth itself, change over time.

KEY CONCEPT Many type of evidence support evolution.

1. **Observations provide evidence for theories.** A scientific theory is a statement based on observation and testing. Why do you think the theory of natural selection is not called the law of natural selection?

2. **Fossil evidence supports evolution.** The idea of common ancestors is important to the theory of natural selection. Scientists comparing modern plants and modern algae to fossil algae can tell that they shared a common ancestor. Many scientists also believe that birds and reptiles share a common ancestor. If this were true, what would it indicate?

3. **Biological evidence supports evolution.** Scientists studying the anatomy of living things have noticed that many different species share similar structures. But these structures are used differently by each species. The forelimb of three organisms—a lizard, a bat, and a manatee—are shown below. In the space provided, describe the function of the forelimb for each organism.



Lizard

Forelimb Function _____



Little Brown Bat

Forelimb Function _____



Manatee

Forelimb Function _____

4. **Genetic evidence supports evolution.** The key to explaining the relationship between ancestors and their offspring lies in the study of genetics. Scientists can tell how closely related two organisms are by studying the order in which the pieces of a gene are arranged. Why do you think genetic evidence was not used 50 years ago to support evolution?

Copyright © by McDougal Littell, a division of Houghton Mifflin Company