

Name \_\_\_\_\_ Date \_\_\_\_\_ Per \_\_\_\_\_

**READING GUIDE: 16.1 – Darwin’s Voyage of Discovery (p. 450-453)**

**Darwin’s Epic Journey**



1) Define **EVOLUTION**: \_\_\_\_\_  
\_\_\_\_\_

2) What ideas were changing in the scientific community (in geology & biology) at the time of Darwin’s travels? \_\_\_\_\_  
\_\_\_\_\_

3) What 3 patterns of biodiversity did Darwin note on his 5 year voyage on the Beagle? Give an example of each.

- a. \_\_\_\_\_
- b. \_\_\_\_\_
- c. \_\_\_\_\_

4) What are **FOSSILS**? \_\_\_\_\_

5) Examine the picture in Figure 16.3. What are the similarities and differences between the armadillo and the glyptodont.

**READING GUIDE: 16.2 – Darwin’s Voyage of Discovery (p. 454-458)**

1) Complete the table below about scientists who contributed to the development of the explanation / theory of evolution by natural selection.

<b>Scientist</b>	<b>Contribution to Darwin’s thinking</b>
James Hutton	
Charles Lyell	
Jean-Baptiste Lamarck	
Thomas Malthus	

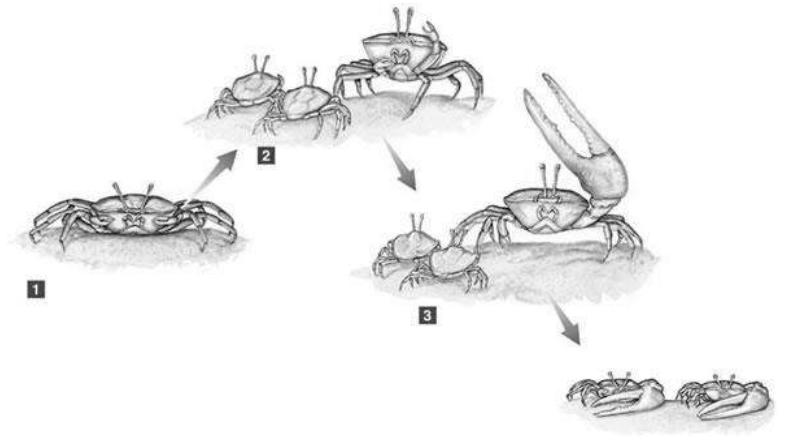
2) Describe Lamarck's 2 hypotheses about evolution.

a. Acquired characteristics: \_\_\_\_\_  
\_\_\_\_\_

b. Inheritance of acquired characteristics: \_\_\_\_\_  
\_\_\_\_\_

3) Describe why Lamarck's 2 hypotheses were NOT supported.

4) a. Use the picture to the right. According to Lamarck's hypothesis, what occurs between steps 2 and 3 to make the fiddler crab's claw grow larger? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



b. Which step in the diagram show the **inheritance of acquired traits** as proposed by Lamarck?  
\_\_\_\_\_

5) Define **ARTIFICIAL SELECTION**: \_\_\_\_\_  
\_\_\_\_\_

6) What is artificial selection's role in evolution? \_\_\_\_\_  
\_\_\_\_\_