GRS 6.1

Name _____ Date ____ Class _____

Changes Over Time Guided Reading and Study

Darwin's Theory

This section discusses Charles Darwin and his theories of evolution, which are based on what he saw during his trip around the world.

Darwin's Observations

- 1. Is the following sentence true or false? Charles Darwin was not surprised by the variety of living things he saw on his voyage around the world.
- 2. A group of similar organisms that can mate with each other and produce fertile offspring is called a(n) ______.
- 3. A(n) is the preserved remains or traces of an organism that lived in the past.
- 4. Is the following sentence true or false? Darwin observed the greatest diversity of organisms on the Galápagos Islands.

Galápagos Organisms

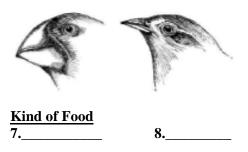
- **5.** Circle the letter of each sentence that is true about Darwin's observations.
 - **a.** Many Galápagos organisms were similar to organisms on mainland South America.
 - b. Iguanas on the Galápagos Islands had small claws for climbing trees.
 - **c.** Darwin thought the ancestors of Galápagos animals and plants came from main-land South America.
 - d. All tortoises living in the Galápagos Islands looked exactly the same.
- 6. Darwin noticed many differences among similar

_____ as he traveled from one

Galápagos island to the next.

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Look at the bird beaks below. Match the bird beaks with the kind of food the bird eats.



9. A trait that helps an organism survive and reproduce is a(n)

Evolution

- **10.** Circle the letter of each sentence that is true about Darwin's conclusions.
 - **a.** Darwin understood immediately why Galápagos organisms had many different adaptations.
 - **b.** Darwin thought that Galápagos organisms gradually changed over many generations.
 - c. Darwin believed that evolution had occurred on the Galápagos Islands.
 - **d.** Selective breeding helped Darwin understand how evolution might occur.
 - **11.** Circle the letter of the term that means a well-tested concept that explains many observations.
 - a. idea
 - **b.** evolution
 - **c.** scientific theory
 - d. hypothesis

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Natural Selection

- 12. In his book, The Origin of Species, Darwin explained that evolution occurs by means of-
- Is the following sentence true or false? Individuals with variations that 13. make them better adapted to their environment will not survive.

Match the factors that affect the process of natural selection with their definitions.

Definitions **- 14.** Effect caused by limited food and other resources. **15.** Differences between individuals of the same species

- 16. Effect caused by species producing more offspring than can survive.
- **17.** Is the following sentence true or false? Only traits that are controlled by genes can be acted upon by natural selection.

18. Is the following sentence true or false? Darwin knew all about genes and mutations. -

- **Factors**
- **a.** overproduction
- **b.** competition
- c. variations