9TH GRADE BIOLOGY

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Notes 13.1-13.18

13.1 A sea voyage helped Darwin frame his theory of evolution

- A. Charles Darwin's cultural and scientific context
 - a. Fascinated with nature as a child; loved fishing, hunting, and collecting insects
 - b. Father was a physician
 - c. Set sail on HMS Beagle at the age of 22
- B. Darwin's sea voyage
 - a. 5 year voyage
 - b. Spent most of his time on land collecting fossils and living plants/animals
 - c. He noted the characteristics of plants and animals that made them well suited to such diverse environments as the jungles of Brazil, the grasslands of Argentina, the towering peaks of the Andes, and the desolate and frigid lands at the southern tip of South America
 - Very interested in the geographic distribution of organisms on the Galapagos Islands
 - Strongly influenced by the Principles of Geology, by Scottish geologist Charles Lyell
 - f. He called evolution "descent with modification"
- C. Natural selection
 - A process in which individuals with certain inherited traits are more likely to survive and reproduce than are individuals that do not have those traits.
- D. Adaptations
 - An inherited character that enhances an organism's ability to survive and reproduce in a particular environment

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