CH. 15 Darwin’s Theory of Evolution

1. The Puzzle of Life’s Diversity
2. Voyage of the *BEAGLE*

1.

1. Darwin’s observations
2. Patterns of diversity

a.

1. Living organisms and fossils

a.

1. The Galapagos Islands

a.

1. The Journey Home
2. The Ideas that Shaped Darwin’s Thinking
3. An Ancient, Changing Earth
4. Hutton and Geological Change

a.

1. Lyell’s Principles of Geology

a.

1. Lamarck’s Evolution Hypotheses
2. Tendency toward perfection

a.

1. Use and disuse

a.

1. Inheritance of acquired traits

a.

4. Evaluating Lamarck’s Hypotheses

a.

1. Population Growth

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1. Darwin Presents his Case
2. Publication of *On the Origin of Species*

1.

1. Inherited Variation and Artificial Selection

1.

1. Evolution by Natural Selection
2. The struggle for existence

a.

1. Survival of the Fittest

a.

1. Descent with Modification

a.

1. Evidence of Evolution
2. The Fossil Record

a.

1. Geographic Distribution of Living Species

a.

1. Homologous Body Structures

a.

1. Similarities in Embryology

a.

E. Summary of Darwin’s Theory

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2.

3.

4.

5.

1. Strengths and Weaknesses of Evolutionary Theory

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2.

NOTES, FIGURES, KEY CONCEPTS