Biology Chapter 15 Notes Outline

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Darwin’s Theory of Evolution – Pages 369-389**

15.1 The Puzzle of Life’s Diversity-

 **Evolution-**

 **Theory-**

Voyage of the Beagle-

Darwin’s Observations-

 Patterns of Diversity-

 Living Organisms and Fossils-

 **Fossils-**

 The Galapagos Islands-

The Journey Home-

15.2 Ideas that Shaped Darwin’s Thinking-

An Ancient, Changing Earth-

 Hutton and Geological Change-

 Lyell’s Principles of Geology-

Lamarck’s Evolution Hypotheses-

 Tendency toward Perfection-

 Use and Disuse-

 Inheritance of Acquired Traits-

 Evaluating Lamarck’s Hypotheses-

Population Growth-

**SECTION QUESTIONS**

**1.) What two ideas from geology were important to Darwin’s thinking?**

**2.) According to Malthus, what three factors limited population growth?**

15.3 Darwin Presents His Case-

Publication of *On the Origin of Species-*

Inherited Variation and Artificial Selection-

 **Artificial Selection-**

Evolution by Natural Selection-

 **The Struggle for Existence-**

Survival of the Fittest-

 **Fitness-**

 **Adaptation-**

 **Survival of the Fittest-**

 **Natural Selection-**

**Descent with Modification-**

 **Common Descent-**

Evidence of Evolution-

 The Fossil Record-

 Geographic Distribution of Living Species-

 Homologous Body Structures-

 **Homologous Structures-**

 **Vestigial Organs-**

Similarity in Embryology-

Summary of Darwin’s Theory-

 1.

 2.

 3.

 4.

 5.

Evolutionary Theory Since Darwin-

**SECTION QUESTIONS**

**1.) The theory of evolution by natural selection explains, in scientific terms, how living things evolve over time. What is being selected in this process?**

**2.) What types of evidence did Darwin use to support his theory of change over time?**