**VOCABULARY:**

Species Fossil Adaptation

Evolution Scientific theory Natural selection

Variation Homologous structure Branching tree

Petrified fossil Vestigial structure Overproduction

Relative dating Radioactive dating Competition

Half-life Fossil record Extinct

I. The Theory of Evolution:

1. Who developed a Theory of evolution and what hypothesis did he make to explain the differences between similar species?
2. What important observations did Darwin make on his voyage?
3. What are examples of traits that organisms possess?
4. What are the parts to Natural Selection and how does it lead to evolution? Be able to cite examples.

II. Evidence of Evolution:

1. Adaptations can be structures or behaviors. What is an example?
2. What are the different pieces of evidence that support evolution?
3. How are branching trees used? Be able to read a branching tree.
4. What evidence do scientists examine to determine how closely species are related?
5. How do new species form?
6. How can one species evolve into another species?

III. The Fossil Record:

1. How are fossils usually formed?
2. How does the different layers of the Earth’s crust determine which fossil is older/younger?
3. What are the different methods scientists use to date fossils?