**Biology Study Guide**

**Chapter 2-Evolution: Change Over Time**

Be able to use the **ALL** vocabulary appropriately!

1. Lucy Activity
   1. What is the only evidence we have of Lucy’s existence?
   2. Name at least 3 inferences scientists made about Lucy.
   3. Why is it appropriate to use the term hominid when referring to Lucy?
   4. How does she fit into our family tree? Make a drawing to show the relationship among modern humans, Lucy and chimpanzees.
2. Modeling the Earth’s History Activity
   1. Why did we construct a model of Earth’s history
   2. How old is the Earth?
   3. Where are the most events occurring on the timeline?
   4. List at least 3 patterns observed from the Time Line
3. Evidence for Change over Time (Specialists)- for each specialist be able to:
   1. Describe the job responsibilities.
   2. Explain in detail one activity
      1. What was done
      2. Observations or results
      3. How this information supports the idea of change over time (evolution)
4. Darwin’s Voyage
   1. When did he go?
   2. What was the name of the ship?
   3. How long was the voyage?
   4. What was one of them most important locations he visited?
   5. What did he notice about the tortoises and finches on each island? Why was this important?
5. Natural Selection
   1. What was the name of the book Darwin wrote about Natural Selection?
   2. List and describe the four major parts of this theory.
   3. Define “fitness”.
   4. What is the difference between the meanings of the words adaptation (noun) and adapt (verb)? Which is the one that is important in the theory of Natural Selection? Why?
   5. Why is it important the individuals with the best adaptations not only survive but live long enough to reproduce?
   6. Why was Lamark’s idea about evolution incorrect?
6. General Information
   1. What is the difference between Direct and Indirect (Relative) methods of dating fossils?
   2. What is the difference between Artificial Selection and Natural Selection?
   3. What type of rock generally contains fossils? Why?
   4. Place any other information in this section that you feel is important to this chapter.