BSC 1005: Life Science

Activity 8: Chapter 9 Natural Selection *Name(s)\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*

Complete the following problems. Use your class notes to help find the answers.

1. Why is it important to understand antibiotic resistance in TB?
2. List the 4 Observations made by Darwin, and explain how they are related to evolution by natural selection.
3. Stripes in zebras help them survive by making it harder for lions to see them in the wild. This is an example of an adaptation that arose through natural section. Using Darwin’s observations, explain how zebras got their stripes.
4. In evolutionary terms, what does “fitness” mean? How might you determine if an organism is “fit”?
5. What role does flower color play in flower evolution?
6. Explain the fruit fly/alcohol experiment. How do you account for the change in alcohol metabolism in flies from the high-alcohol laboratory environment?
7. What role do mutations in DNA have in natural selection?
8. Why are chimpanzees not evolving into humans?
9. Would you consider the following examples to be directional, disruptive or stabilizing selection? Why?
10. Yearly evolution of Influenza virus in humans
11. The fact that most human babies have a birth weight between 3-4 kg (6.6-8.8 lbs), and babies much smaller or much larger suffer higher mortality rates