Mechanisms of Evolution Test Review

1. Define adaptation and fitness. Describe how adaptations maximize fitness within a species.
2. Differentiate between artificial selection and natural selection.
3. Define Evolution. Explain how Natural Selection and Evolution are related?
4. Explain why bacteria are well suited to become immune to antibiotics; and insects readily become resistant to pesticides.
5. Name and describe the FIVE MECHANISMS OF EVOLUTION.
6. What is the primary unit of evolution? A) Genes, B) Populations C) Individuals
7. What term describes the total number of all inheritable genes found in a population? What is the term that describes how often a particular allele occurs within a population?
8. When there was a change in the environment of our toothpick fish what else changed?
9. According to Darwin, what 3 factors are necessary for natural selection to occur?
10. What variation among the finches did Darwin observe on the Galapagos Islands? How did these variations contribute to the finch’s ability to survive on any specific island? What did Darwin conclude about the different species of finches, based on their similarities that he observed?
11. How does fitness relate to natural selection? What is “survival of the fittest”?
12. Give an example in nature of a trait that has helped an animal adapt to its environment.
13. If Ms. Desmond gets her arm chopped off, then meets the man of her dreams and has kids what is the chance that her kids will be missing an arm? Would it be due to her “ACQUIRED” missing arm or a genetic mutation?