Evolution Unit Studyguide

On the Galapagos islands, Charles Darwin observed...

- The species of tortoises that Darwin found on the Galapagos Islands displayed different structural adaptations, such as...
- Darwin began to formulate his concept of evolution by natural selection after...
- One scientist who attempted to explain how rock layers form and change over time... Lamarck proposed that organisms...
- When lions prey on a herd of antelope, some antelope are killed and some escape. Which part of Darwin's theory can describe this situation...
- According to Darwin's theory of natural selection, the individuals that tend to survive are those that have...
- Darwin's theory of evolution was NOT influenced by ...
- The number and location of bones of many fossils vertebrates are similar to those in living vertebrates. Most biologists would probably explain this fact on the basis of...
- Darwin viewed the fossil record as...
- Darwin's theory of evolution is based on the idea(s) of...
- Which concept is NOT included in the modern theory of evolution...
- James Hutton's and Charles Lyell's work suggested that...
- Darwin was prompted to publish his theory of evolution by...
- When a farmer breeds only his/her best livestock, the process involved is...
- An adaptation is an inherited characteristic that can be...
- Darwin called the ability of an organism to survive and reproduce in its environment...
- In humans, the pelvis and the femur are involved in walking. IN whales, the pelvis and femur are...

Darwin's theory of evolution suggests...

- Determine which statement is in agreement with Darwin's theory...
- Determine which statement describes what all members of a population share...
- Determine which statement about gene pools is typically true...
- If an allele makes up one-fourth of a population's alleles for a given trait, its relative frequency is...
- Gene shuffling includes the independent movement of chromosomes during meiosis as well as...
- A single-gene trait that has two alleles and that shows a simple dominant-recessive pattern will result in...
- When individuals at only one end of a bell-shaped curve of phenotype frequencies have high fitness, the result is...

When individuals with an average form of a trait have the highest fitness, the result is... Genetic drift tends to occur in populations that...

- The type of genetic drift that follows the colonization of a new habitat by a small group of individuals is called...
- The genetic equilibrium of a population can be disturbed by ...
- The allele frequencies of a population are more likely to remain unchanged if...
- What situation might develop in a population having some plants whose flowers open midday and other plants whose flowers open late in the day?
- The Galapagos finch species are an excellent example of...

The combined genetic information of all members of a particular population is the population's...

A change in a sequence of DNA is called...

Two main sources of genetic variation are...

The distribution of phenotypes for a typical polygenic trait can often be expressed as... Natural selection acts directly on...

What are some ways natural selection affects the distribution of phenotypes...

In genetic drift, allele frequencies change because of...

The situation in which allele frequencies of a population remain constant is called...

One of the conditions required to maintain genetic equilibrium is...

The separation of populations by barriers such as rivers, mountains, or bodies of water is called...

A factor that is necessary for the formation of a new species...

Sedimentary rock is formed from...

- What proportion of all species that ever lived has become extinct...
- To be useful as an index fossil, a species must have existed for...

The basic divisions of the geologic time scale...

- The Cambrian Explosion resulted in the evolution of the first...
- The process by which two species, for example, a flower and a pollinating insect, evolve in response to each other is called...
- In the past, mass extinctions encouraged the rapid evolution of surviving species...

Examples of fossils include...

Most fossils form in...

- The length of time required for half of the radioactive atoms in a sample to decay is...
- To compare the relative ages of fossils, scientists sometimes use an easily recognized species called...

Earth's eras are...

- A very large mass extinction in which trilobites and amphibians disappeared occurred at the end of...
- During the Jurassic and Cretaceous periods, the dominant land animals were...
- A single species that has evolved into several different forms that live in different ways has undergone...

Sharks, dolphins, and penguins all have streamlined bodies and appendages that enable them to move through water. These similarities are the result of...

An analysis of derived characteristics is used to generate a...

The procedure of grouping organisms based on their evolutionary history is called... What do scientists consider when they perform cladistic analysis...

Science Skills sections:

You will interpret/compare organisms from the Galapagos Islands.

- You will analyze/interpret bell-shaped curves of phenotypes.
- You will analyze/interpret a radioactive decay curve.

You will analyze/interpret a table about the Geologic time scale.