BIOLOGY - 4th Quarterly Study Guide

**Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_\_\_  
Note:** NOT everything on the quarterly is contained in this study guide. You MUST also study your notes and handouts from class in order to completely cover all of the items on the quarterly.

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| **Question/Definitions** | **Answer** |
| 1. Who was Charles Darwin? |  |
| 1. What is ***EVOLUTION***? |  |
| 1. What observations did Darwin make on The Galapagos Islands? |  |
| 1. What was Lamarck’s theory of theory of evolution? What it correct? |  |
| 1. What is ***ARTIFICIAL SELECTION***? |  |
| 1. Whose theory was based on the ***use or disuse*** of a body structure? |  |
| 1. What is ***NATURAL SELECTION***? |  |
| 1. Differences in beak shape of finches on the Galapagos Islands was due to what? |  |
| 1. What did Darwin call the ability of an organism to survive and reproduce in its specific environment? |  |
| 1. What are ***HOMOLOGOUS structures***? |  |
| 1. Give some examples of homologous structures. |  |
| 1. What is ***EMBRYOLOGY***? |  |
| 1. Why is embryology important evidence for the Theory of Evolution? |  |
| 1. What are ***ANALOGOUS structures***? |  |
| 1. Give some examples of analogous structures. |  |
| 1. A \_\_\_\_ is supported by much evidence. It is not a guess. |  |
| 1. What is a ***FOSSIL***? |  |
| 1. Why is the fossil record important for the Theory of Evolution? |  |
| 1. What was the process used to create the huge diversity of dogs on Earth? |  |
| 1. Darwin published his book immediately upon his return from his trip on the HMS *Beagle*. | **TRUE or FALSE** |
| 1. What is a ***VESTIGIAL*** structure or organ? |  |
| 1. Give some examples of vestigial structures. |  |
| 1. Darwin’s finches were an example of \_\_\_ evolution. | CONVERGENT or DIVERGENT |
| 1. Discuss what happened to the peppered moths in England after the start of the Industrial Revolution in the 1850’s. \_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. What is ***ECOLOGY***? |  |
| 1. What is an***ORGANISM***? |  |
| * 1. Give an example 🡪 |  |
| 1. What is a ***POPULATION***? |  |
| * 1. Give an example 🡪 |  |
| 1. What is a ***COMMUNITY***? |  |
| * 1. Give an example 🡪 |  |
| 1. What is an ***ECOSYSTEM***? |  |
| * 1. Give an example 🡪 |  |
| 1. What is a ***BIOME***? |  |
| 1. What is the ***BIOSPHERE***? |  |
| 1. Plants are \_\_\_. | CONSUMERS, PRODUCERS, CARNIVORES |
| 1. What is the original source of all energy in most ecosystems? |  |
| 1. What is a ***CONSUMER***? |  |
| 1. What is another name for a ***PRODUCER***? |  |
| 1. What is another name for a ***CONSUMER***? |  |
| 1. What is a ***BIOTIC*** factor? |  |
| * 1. Examples? |  |
| 1. What is an***ABIOTIC*** factor? |  |
| * 1. Examples? |  |
| 1. What is a ***habitat***? |  |
| 1. What is a ***niche***? |  |
| 1. What is the ***WATER CYCLE***? |  |
| 1. What is the process called by which ***clouds are formed***? |  |
| 1. What is the process called when ***rain falls*** from the clouds? |  |
| 1. What is it called when ***water is released from plant leaves*** into the atmosphere? |  |
| 1. What is the term for when ***a tree sucks up water***from the ground? |  |
| 1. What is the term for when water turns from a ***liquid into a gas*** from a lake? |  |
| 1. What is the ***Greenhouse Effect***? 2. What is ***GLOBAL WARMING***? | **GREENHOUSE EFFECT**  Earth's atmosphere does the same thing as the greenhouse (a glass building used to grow plants). Gases in the atmosphere, such as **carbon dioxide**, do what the roof of a greenhouse does. During the day, the Sun shines through the atmosphere. Earth's surface warms up in the sunlight. At night, Earth's surface cools, releasing the heat back into the air. But some of the heat is trapped by the greenhouse gases in the atmosphere. That's what keeps our Earth a warm and cozy 59 degrees Fahrenheit, on average. ***GLOBAL WARMING*** is caused by the unnatural excess accumulation of greenhouse gases from burning fuels, raising animals in factory farms, and burning of rain forests. |
| 1. What are the four ***biogeochemical cycles***? | * 1. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   2. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   3. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_   4. \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. What biogeochemical cycle does this diagram show?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
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| 1. What biogeochemical cycle does this diagram show?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. What cycle does this diagram show?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. What biogeochemical cycle does this diagram show?  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |
| 1. What is ***MUTUALISM***? |  |
| 1. What is ***COMMENSALISM***? |  |
| 1. What is ***PARASITISM***? |  |
| 1. What is ***PREDATION***? |  |

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| 1. What is a ***FOSSIL FUEL***? |  |
| * 1. What are some examples of fossil fuels? |  |
| * 1. Are fossil fuels renewable? |  |
| 1. What types of energy are renewable? |  |
| 1. Sustainable development is the process of using ***natural*** resources while ensuring that are not depleted. | **TRUE or FALSE** |
| 1. What is ***BIODIVERSITY***? |  |
| 1. This diagram is an example of a FOOD CHAIN or FOOD WEB? 2. EXPLAIN the difference between a food chain and food web. |  |