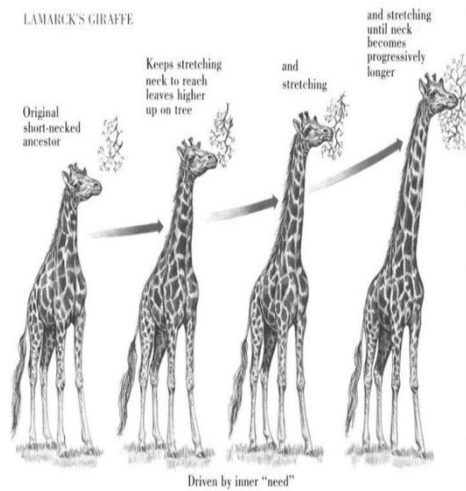


Notes – Natural Selection

1. Lamarck

- a. Lamarck (early 1800s) believed organisms evolved through inheritance of _____ characteristics.
- b. However, the inherited characteristics were _____ during your lifetime and the modifications could be passed onto your offspring.



2. Darwin

- a. Observed the world during his voyage on the _____
- b. Published " _____ " in 1859
- c. *Darwin's ideas are the basis of the theory of _____. He not only provided _____ for how organisms change throughout time but _____ they change.

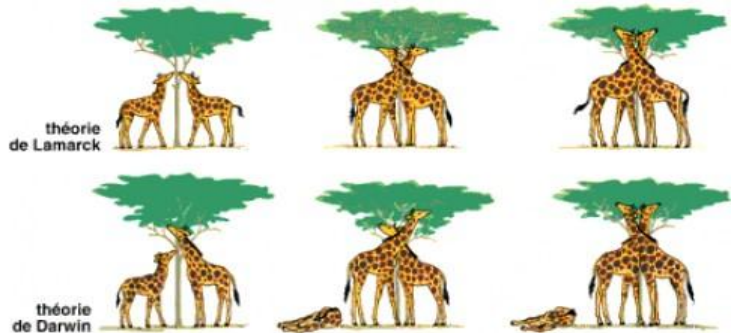
3. Darwin's Four Postulates:

- a. Individuals in a population differ from one another. (Diversity or _____)
- b. Some differences are due to characteristics that are passed down from parent to child. (_____ variation)
- c. More offspring are produced than can survive, so some will _____ and reproduce and others will not.
- d. Survival and reproduction depend on advantageous _____. Those with traits that give them an _____ will survive and have _____ offspring than those that do not have advantageous traits.

4. Natural Selection

- a. Natural Selection is also known as _____ because each species has descended with changes from other species over time.
- b. Natural Selection is also known as " _____ " meaning that the most fit organism in the environment will survive.
- c. _____ refers to an organism's ability to survive and reproduce.
- d. Adaptations are _____ characteristics that give organisms an _____ in their environments.
- e. Over _____ (_____) adaptations can change.
- f. Natural Selection explains the changes in _____

_____ over time.



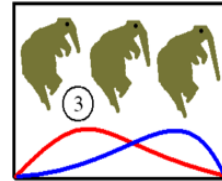
- g. Natural selection is a _____ of evolution, meaning it causes evolution.
- h. It causes changes in _____ over time.
- i. Remember that natural selection selects/works on _____.
- j. For, evolution to occur the _____ must change over time.
- k. Meaning the individuals must pass their traits on to the next _____.
- l. Remember that natural selection chooses traits that are best for a particular environment. Nature does not create _____ individuals nor does it give organisms what they need.
- m. Individual's _____ when selected.
- n. By passing on genes that confer an advantage, they can cause the population to _____.
- o. The number of the advantageous _____ becomes more frequent.

5. Artificial Selection

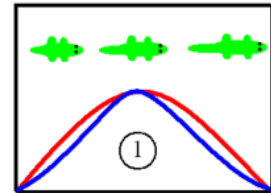
- a. _____ breeding
- b. _____ provides minor variations
- c. _____ select which variations are desirable

6. Patterns of Natural Selection

- a. _____ Selection
 - i. Selects _____ value
 - ii. Example: Longer nose of anteater is selected for.



- b. _____ Selection
 - i. Favors _____ value
 - ii. Example: Small lizards can't defend territory and large lizards are easily eaten, so average size lizards are selected for.



- c. _____ Selection
 - i. Favors _____ extremes

- d. Example: Light and dark clams survive better in light and dark sand. The yellow can't blend.

