

Vocabulary Review

1. Genetic Variation - Any difference among individuals of the same species.
2. Adaptation - Any heritable trait that increases an organism's fitness.
3. evolution - changes in genetic frequencies over time (change in alleles over time).
4. evolution (2nd time) (oops) - The change in genetic traits (allele frequency) of a species over many generations.
5. Convergent - unrelated organisms independently evolve similar traits as a result of having to adapt to similar environments.
6. species - a group of organisms that shares enough genetic information to make offspring.
7. Fitness - The ability to survive and reproduce.
8. natural selection - Survival of an individual that is genetically fit for its environment.
9. mutation - errors in a DNA sequence can give rise to new traits.
10. half life - The amount of time it takes for half of the parent element to decay into a different element.
11. geologic time - A record of living organisms over the history of the Earth.
12. radiometric dating - calculating the exact age of a fossil or rock by comparing the original form of an element to the form after decay.
13. analogous - Structures that have closely related functions but do not derive from the same ancestral structure.
14. relative dating - Using the order of the layers of sedimentary rock to estimate the age of any fossils in the rock.
15. vestigial - Nonfunctional remains of organs that were functional in ancestral species.
16. allopatric - Speciation that occurs in a different geographical areas.
17. law of superposition - Sediments and rocks pile on top of each other over time. Younger - top. Older - bottom.
18. Sympatric - Speciation that occurs in the same geographical area.
19. homologous - variations on a structural theme that was present in their common ancestor
20. Convergent (2nd time) (oops) - organisms independently evolve similar traits as a result of having to adapt to similar environments or ecological niches.

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| 1. Vestigial Structures | 8. Sympatric speciation | 15. Natural Selection |
| 2. Homologous Structures | 9. Mutation | 16. Fitness |
| 3. Analogous Structures | 10. Radioactive Dating | 17. Law of Superposition |
| 4. Half-life | 11. Geologic time | 18. Genetic Variation |
| 5. Convergent Evolution | 12. Evolution | 19. <u>Speciation - not on there</u> |
| 6. <u>Divergent Evolution - not on there</u> | 13. Species | 20. Relative Dating |
| 7. Allopatric speciation | 14. Adaptation | |