

Evolution Webquest

Answer the following questions on a separate sheet of paper using the website
http://evolution.berkeley.edu/evolibrary/article/evo_01

Introduction to Evolution

1. Define evolution.
2. What is the central idea of biological evolution?

Patterns:

The family tree

3. What is phylogeny?
4. Name the 3 main Domains of life.

Trees, not ladders

5. What are the misconceptions about human evolution?

Homologies and analogies

6. What is the difference between homologous and analogous structures?
7. What is convergent evolution?

Mechanisms:

Descent with Modification

8. What is being modified in descent with modification?
9. Which of the two examples of change in beetle populations is an example of evolution?

Mechanisms of change

10. What are the main mechanisms of change for evolution?

Genetic variation – Read

Mutations – Read

The causes of mutations

11. What are some causes of mutations?

Skip: Gene flow, sex and genetic shuffling, and development

Genetic drift

12. What is genetic drift?
13. How does genetic drift change a population?

Natural Selection

14. What did Darwin observe about natural selection?

Natural Selection at work – Read

What is fitness?

15. Describe fitness in your own words.

16. What is sexual selection?

Sexual selection – Read

Artificial selection – Read

Adaptation

17. What is an adaptation?

18. What is a vestigial structure?

Misconception about natural selection

19. What are the major misconceptions about natural selection?

Coevolution

20. What is coevolution?

21. Give an example of coevolution.

22. What type of community species interaction is involved in coevolution?

A case study of coevolution – Read

Microevolution

23. What is microevolution?

24. How does microevolution occur?