

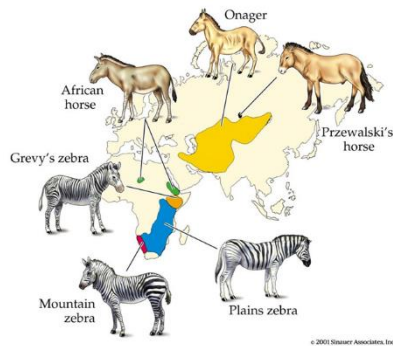
Name: _____

Date: _____

What I need to know and be able to do for Evidence for Evolution:

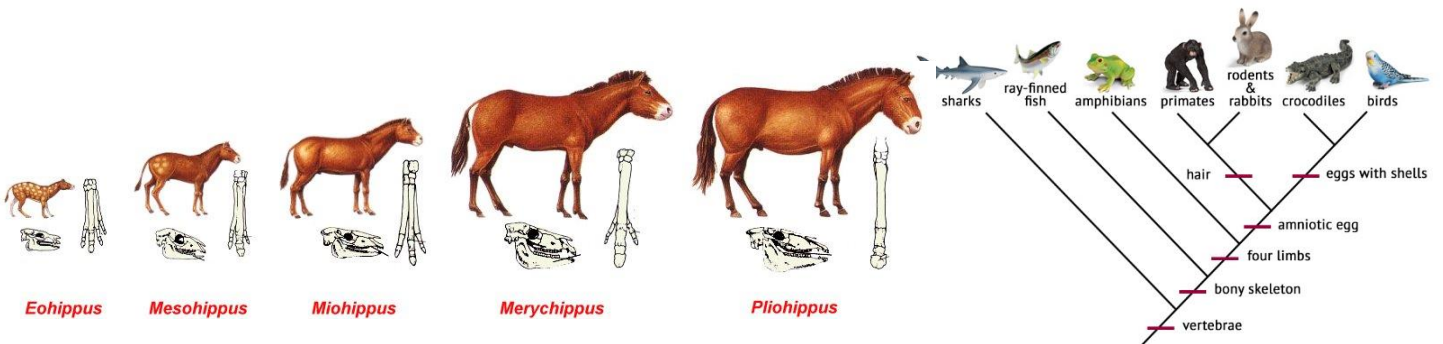
Key words: common ancestor, homology, homologous structure, fossil record, natural selection, extinction, adapt

Key pictures:



THE NUMBER OF AMINO ACID DIFFERENCES IN CYTOCHROME *c* AMONG FIVE SPECIES

| | <i>E. ferus</i> | <i>D. polylepis</i> | <i>G. gallus</i> | <i>A. forsteri</i> | <i>E. africanus</i> |
|---------------------|-----------------|---------------------|------------------|--------------------|---------------------|
| <i>E. ferus</i> | 0 | 21 | 11 | 13 | 1 |
| <i>D. polylepis</i> | | 0 | 18 | 17 | 20 |
| <i>G. gallus</i> | | | 0 | 3 | 10 |
| <i>A. forsteri</i> | | | | 0 | 12 |
| <i>E. africanus</i> | | | | | 0 |



B.7(A) – analyze and evaluate how evidence of common ancestry among groups is provided by the fossil record, biogeography, and homologies, including anatomical, molecular, and developmental

- What type of evidence can we use to show organisms are related?
- What type of evidence is the strongest evidence?
- What does it mean if organisms have a “common ancestor?”
- What is the difference between homologous and analogous structures?
- How does the number of differences in DNA tell you the relationship between two species?
- Explain how fossils are organized within rock layers.
- What is biogeography?

Evolution and Taxonomy Review Reflection

What I Should Be Able To Do

- analyze and evaluate how evidence of common ancestry among groups is provided by the fossil record, biogeography, and homologies, including anatomical, molecular, and developmental
- define taxonomy and recognize the importance of a standardized taxonomic system to the scientific community
- categorize organisms using a hierarchical classification system based on similarities and differences among groups

Content Knowledge From Today

1. Explain how to interpret a cladogram to identify common ancestry, the relationship of species, and derived characteristics.
2. Define taxonomy and discuss the need of a standardized naming system to the scientific community.
3. Explain how to use a dichotomous key.
4. Describe how the taxonomic groups are organized from the broadest (domain) to the most specific (species).

How I Feel About Content After Today

- I know everything about this topic. I will get every question on this topic right on the exam.
- I know most of the information over this topic. I will get most questions on this topic right on the exam.
- I know some of the information over this topic. I will get some of the questions right on the exam.
- I know nothing over this topic. I will need to guess when I see a question over this topic on the exam.

What Are My Next Steps To Master the Content Before the Exam

What can I do at school?

What can I do at home?