Evidence for Evolution WebQuest

Theodosius Dobzhansky, a geneticist whose work influenced 20th century research on evolutionary theory, said, "Nothing in biology makes sense, except in light of evolution." This quote emphasizes the role of evolution as the most important unifying principle in biology. Living things might, at first, seem very diverse, but closer inspection reveals a surprising unity. This unity, or common ancestry, can be explained by evolutionary theory. With such an important theory at stake, it is essential to understand the evidence upon which it is based.

The Task

In this Evolution WebQuest you will investigate a variety of types of evidence for evolution. Your team will be responsible for learning about fossil evidence, structural evidence, and genetic evidence for evolution and presenting this information to your groups and with the class.

The Process

- 1. You will be assigned to a group of three researchers.
- Each group will have specialists in anatomy and physiology, paleontology, and molecular biology. Anatomists study the structure of organisms, physiologists study the function of organisms, molecular biologists study genetics, and paleontologists study fossils.
- 3. Review the sites that apply to your specialty.
- 4. Find four to five examples of evidence for evolution. Try to find specific examples so that when you present to the class you will all have different examples to share. Also, try to find the date on which the evidence was discovered.
- 5. The recommended sites are just examples. Feel free to search for your own. To find links to the recommended sites go to <u>http://smithclassroom.tripod.com</u>, click on Biology, and then on Daily Agenda and Homework. Scroll down to find the needed link. Or go to: <u>http://www.pbs.org/wgbh/evolution/educators/lesson3/act2.html</u>

Evidence of Evolution	
Evidence (Description and/or Drawings)	Significance (What does it show & when was it discovered)
	discovered)

Evidence of Evolution	
As a Molecular Biologist	
Evidence (Description and/or Drawings)	Significance (What does it show & when was it
	discovered)

Evidence of Evolution	
As a Paleontologist	
Evidence (Description and/or Drawings)	Significance (What does it show & when was it
	discovered)