## **Evolution Study Questions**

Field Biology

**Individually**, research information regarding the following questions.

Do NOT use Wikipedia as a source for this information.

The following Internet sites might be good sources:

http://evolution.berkeley.edu/evolibrary/search/topicbrowse2.php?topic\_id=41 http://www.mnsu.edu/emuseum/biology/evolution/ http://serendip.brynmawr.edu/sci\_edu/waldron/evolution.html http://www.law.umkc.edu/faculty/projects/ftrials/conlaw/evolution.htm http://www.ncseweb.org/resources/articles/3117\_evolution\_creation\_and\_scien\_12

7 2000.asp

Type up your answers in a Microsoft Word document. E-mail them to your instructor with the subject line "Per *X Your Name* Ev SQ).

- 1. What is the scientific definition of evolution? Is this a fact (something that can be and is observable) or is it a theory?
- 2. What is speciation? Briefly describe how speciation might occur through evolution.
- 3. What is natural selection? How does it work?
- 4. What is creationism? How is creationism different from "creation science"? Is creation science truly a scientific theory? Why or why not?
- 5. Based on your answer to question #1, evaluate the accuracy of the following statement.

"Evolution ... refers to the theory that the first living organism developed from nonliving matter. Then, as it reproduced, it is said to have changed into different kinds of living things, producing ultimately all forms of life that have ever existed on earth, including humans."

- 6. Does the following statement make a case that evolution did NOT occur in this particular circumstance? Explain your reasoning.
  - "...the darker variety of peppered moth, which is said to be a mutant, survived better because it was difficult for birds to see them ... the darker variety rapidly became the dominant type. But was the peppered moth evolving into some other type of insect? No, it was still exactly the same peppered moth, merely having a different coloration."