

Questions for discussion 5

The answers to these questions may be found in the reading, but occasional outside references may be needed. These questions are due Tuesday, May 9, in class.

1. a. On page 63 are the four major parts of the theory of evolution by natural selection, as stated by Charles Darwin. List the four parts:

b. On page 64 are listed two further facets of evolution that helped round out Darwin's theory (he never used these arguments, simply because he did not have our current understanding of chemistry and paleontology). List the two further facets.

2. How do each of the following events play a role in evolution?

a. Mutation

b. Isolation

c. Extinction

3. Identify as homologous feature or analogous feature:

a. Bones of the forelimb in a bird and in a reptile

b. Wing of an insect and of a bird

4. Give an example of:

a. A corridor for Ice Age humans

b. A “sweepstakes route” for finches (a type of bird)

c. A filter bridge for pandas

5. Explain the following quote from the text, page 106: “Thus, warmer seawater tends to have more ^{18}O than colder water.” Why is this sentence in the same part of the chapter as the word “paleothermometer”?