

Name: _____

Dr. Reichler's Bio 325-uex Fall 2008 Quiz 11/25

- 1) Would an individual's age be a good measure of their evolutionary success?
- 2) Why are some Neanderthal fossils inappropriate for collecting data about their DNA?
- 3) What evidence indicates that Neanderthals and humans did not interbreed? What happened to the Neanderthals?
- 4) How was the lack of successful PCR used to show differences between Neanderthals and humans?

Answers:

- 1) No, reproduction is the key to evolutionary success.
- 2) The DNA may be degraded and/or highly contaminated with modern human DNA.
- 3) No Neanderthal mtDNA sequences have been identified in humans. They went extinct.
- 4) The human specific primers would amplify from many different samples indicating contamination from the handling of the samples, but the Neanderthal specific primers only amplified DNA from fossils identified as Neanderthal.