Circle the letter of the one best answer **ANTH A105 quiz # 8 Winter 2008**

1. In order for a species to become more than one species (adaptive radiation or speciation), there must be: A. No genetic drift B. Genetic, reproductive isolation
C. islands for the species to live on D. Volcanoes E. Lots of gene flow

2. Your textbook has an illustration of amphioxus, an animal with a simple notochord; what is a notochord?
A. Rod of cartilage running along the back
B. The evolutionary precursor of the vertebrae
C. An adaptation for survival: swim faster, get more food.
D. All of the above

3. Migrations of individuals from one population of a species to another are called:
A. Gene flow B. Random genetic drift C. Natural selection D. Mutations

4. Statistical sampling errors, such as from one generation of a species to another, or the founder effect , are called:
A. Gene flow B. Random genetic drift C. Natural selection D. Mutations

5. Natural selection does NOT include:
A. Variation B. Environment C. Differential reproduction
D. Changes that happen to individuals during their lifetimes, such as giraffes stretching their necks to reach food.

6. The first tetrapods (="four legs") were the common ancestors of:
A. all animals
B. all animals with backbones
C. all birds, mammals, reptiles, and amphibians.
D. only humans
E. only primates and birds.

7. The concept of punctuated equilibrium emphasizes that:
A. evolution is the result of constant gradual change due only to natural selection
B. evolutionary change occurs only in species with many large populations that are spread over many diverse environments
C. most evolutionary change occurs during occasional rapid bursts when new species break off
D. newly created species have no ancestors
E. random genetic drift does not happen

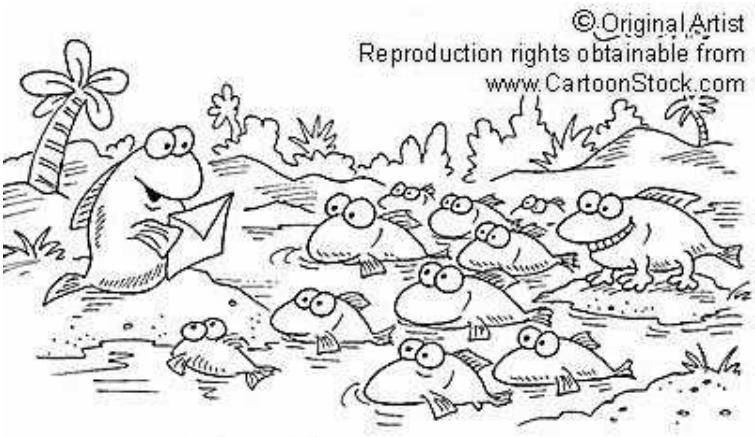
8. Which is true about earlier stages of evolution and geological history?
A. The earth is roughly 5 billion years old
B. The beginning of sexual reproduction greatly increased the variation found in species
C. In the Paleozoic, about 400 mya, the first tetrapods evolved from lobe-finned fish
D. Multicellular organisms appeared before sexual reproduction did.
E. All of these seem to be True

9. The pattern of the leg bones of birds, mammals, reptiles, and amphibians is:
A. A homology B. An analogy C. Different in each of these groups D. A notochord

10. In the evolution of vertebrate animals, which came FIRST?
A. Backbones and ribs B. Legs C. Lungs D. Living on land not in sea

NAME _____

BONUS Q: how was it possible for the first tetrapods to evolve lungs?



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