

NAME \_\_\_\_\_

DATE \_\_\_\_\_



## KNOWLEDGE QUIZ

1. Which of the following can be used as evidence that all living things are related (and descended from a common ancestor)?
  - a. Similarities among living species such as a similar skeletal structure in mammalian limbs.
  - b. Transient structures during embryonic development like limb buds in snake embryos.
  - c. Organisms share the same basic biochemistry including cell membranes and DNA.
  - d. Fossils or organisms that were intermediate forms between fish and land animals.
  - e. The relative complexity of organisms.
  
2. Sometimes the process of evolution involves the loss of a trait.
  - a. True
  - b. False
  
3. A population of fully-armored stickleback fish moved from the ocean to a nearby uninhabited freshwater lake. In the course of several generations, low-armored stickleback fish appeared and their numbers rapidly increased in the population. Eventually, very few fully-armored fish remained. Choose the best explanation for this phenomenon:
  - a. The environment in the lake favored a naturally occurring variant of low-armored fish.
  - b. Conditions in the lake dissolved the armor of the fish.
  - c. Some parent fish shed their armor, and the offspring of those fish hatched without it.
  
4. A dog is bred for its ability to retrieve. This is an example of:
  - a. Artificial Selection
  - b. Natural Selection

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5. A drought kills 95% of plant species in a particularly hard- hit area. This is an example of:
  - a. Artificial Selection
  - b. Natural Selection
  
6. Humans have been genetically modifying food for millennia.
  - a. True
  - b. False
  
7. The main sources of variation between individuals in a population are:
  - a. Genetic mutations
  - b. recombination of genes on chromosomes
  - c. Parental care
  - d. Action of enzymes in a developing embryo
  - e. Physical changes acquired by parents and passed to offspring.
  
8. Genetic mutations can be helpful.
  - a. True
  - b. False
  
9. Genetic mutations can have no effect at all.
  - a. True
  - b. False

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