

Assessment

# Chapter Test A

---

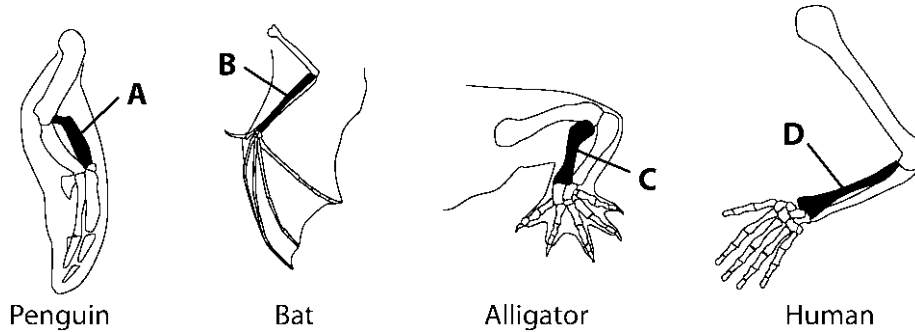
## Evolutionary Theory

In the space provided, write *T* if the statement is true or *F* if it is false.

- \_\_\_\_\_ 1. Structures of organisms that share a common ancestry are not related.
- \_\_\_\_\_ 2. Gradualism refers to the hypothesis that the evolution of species happens at a slow rate.
- \_\_\_\_\_ 3. A trait that helps a species survive and reproduce in its environment is an adaptation.

In the space provided, write the letter of the term or phrase that best completes each statement.

- \_\_\_\_\_ 4. According to Darwin, evolution happens
- by chance.
  - over a half-life of 5,730 years.
  - by natural selection.
- \_\_\_\_\_ 5. The hypothesis that evolution of a species happens in periods of fast change separated by periods of little or no change
- was supported by Darwin.
  - is punctuated equilibrium.
  - was proposed by Lyell.
- \_\_\_\_\_ 6. The process in which organisms with traits well suited to an environment are more likely to survive and to produce offspring is
- origin of species.
  - natural selection.
  - genetic principles.
- \_\_\_\_\_ 7. There is fossil evidence that whales evolved from
- dolphins.
  - four-legged mammals.
  - three-legged mammals.
- \_\_\_\_\_ 8. Small-scale change in the genes of a population is
- microevolution.
  - natural selection.
  - macroevolution.

Chapter Test A *continued*

Questions 9 and 10 refer to the figures above. In the space provided, write the letter of the term or phrase that best completes each sentence or answers each question.

- \_\_\_\_\_ 9. Because the bones labeled A–D are so similar, the bones are thought to be \_\_\_\_\_ structures.
- extinct
  - fossil
  - homologous
- \_\_\_\_\_ 10. Homologous structures exist in organisms that
- have a common ancestor.
  - all grow at different rates.
  - live for a long time.

**Circle the term or phrase that best completes each sentence.**

11. When species live in close contact and affect each other's evolution, this is called (coevolution, extinction, or convergent evolution).
12. A change in species over time is called (artificial selection, mutation, or evolution).
13. Structures that share a common ancestry are (not related, homologous, or young in origin).
14. When a species permanently disappears, the species is said to be (extinct, isolated, or mutated).
15. The process by which new species form is called (biological change, reproduction, or speciation).

**Chapter Test A *continued***

---

**Using the word bank below, fill in each blank provided.**

ancestor                      fossils                      survive  
environment                      mate choice

16. The \_\_\_\_\_ can drive the direction and amount of evolutionary change in a species.
17. \_\_\_\_\_ that is selective and nonrandom can lead to evolution.
18. Homologous structures are similar between species because they are inherited from a common \_\_\_\_\_.
19. Organisms produce more offspring than can \_\_\_\_\_.
20. The records of past life forms that have been preserved are called \_\_\_\_\_.