

## Skills Worksheet

# Test Prep Pretest

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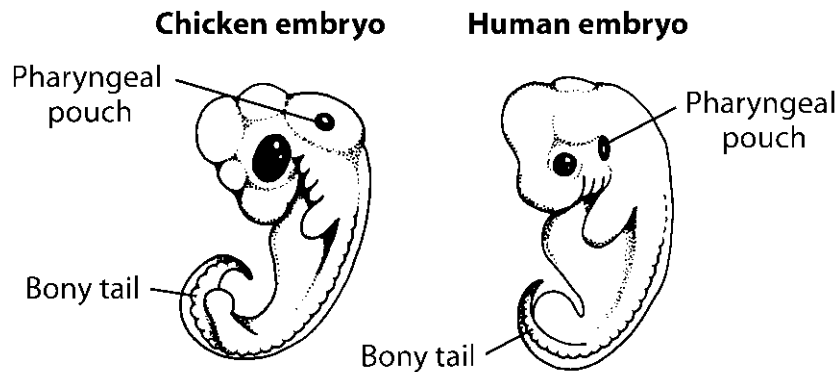
In the space provided, write the letter of the term or phrase that best completes each statement or best answers each question.

- \_\_\_\_\_ 1. On the Galápagos Islands, Darwin saw that the plants and animals closely resembled those found
- on islands off the coast of North America.
  - in South America.
  - on islands off the coast of Africa.
  - in South Africa.
- \_\_\_\_\_ 2. Which of the following is a factor in natural selection?
- Individuals of a population overproduce.
  - All populations are genetically diverse.
  - Individuals better able to adapt to changes leave more offspring.
  - All of the above
- \_\_\_\_\_ 3. When a population of a species is split in two and the two groups separate for a long period of time, the two groups may become
- different families.
  - different species.
  - the same species.
  - unrelated.
- \_\_\_\_\_ 4. The fossil record provides evidence that
- older species from the past gave rise to more-recent species.
  - all species were formed during Earth's formation and have changed little since then.
  - the fossilized species have no connection to today's species.
  - fossils cannot be dated.
- \_\_\_\_\_ 5. Comparing human hemoglobin with the hemoglobin of gorillas, mice, chickens, and frogs reveals that humans have the fewest amino acid differences with
- gorillas.
  - mice.
  - chickens.
  - frogs.
- \_\_\_\_\_ 6. Individuals that are better able to cope with the challenges of their environment tend to
- decrease in population over time.
  - leave more offspring than those more suited to the environment.
  - leave fewer offspring than those less suited to the environment.
  - leave more offspring than those less suited to the environment.

**Test Prep Pretest *continued***

- \_\_\_\_\_ 7. Which factor does *not* play a role in natural selection?
- a. overproduction
  - b. variation
  - c. Lamarckian inheritance
  - d. adaptation
- \_\_\_\_\_ 8. Different populations of the same species
- a. always become different species over time.
  - b. may change enough to become different species.
  - c. can no longer interbreed successfully.
  - d. will never diverge to become different species.

**Questions 9 and 10 refer to the figures below.**



- \_\_\_\_\_ 9. Which of the following statements best reflects the evolutionary importance of the figures above?
- a. New genetic instructions have been disregarded in the evolution of vertebrates.
  - b. In parts of development, vertebrate embryos show evidence of common ancestry.
  - c. The evolutionary history of organisms is seen in transitional embryos.
  - d. All adult vertebrates retain tails.
- \_\_\_\_\_ 10. Which of the following statements is *not* true about anatomy and evolution?
- a. Homologous structures indicate common ancestry of organisms.
  - b. The bone patterns making up the forelimbs of tetrapods are similar.
  - c. Internal similarities do not indicate shared evolutionary history.
  - d. Most vertebrates have four limbs.

Test Prep Pretest *continued*

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**Complete each statement by writing the correct term or phrase in the space provided.**

11. Evolution is the process by which \_\_\_\_\_ may change over time.
12. While on the *Beagle*, Darwin read Lyell's book, which contained a detailed account about \_\_\_\_\_ changes that occur in geological processes on Earth.
13. A trait in a species that results in it being better suited to survive and reproduce in its environment is called a(n)\_\_\_\_\_.
14. A(n) \_\_\_\_\_ is a group of individuals that belong to the same species, live in a defined area, and breed with others in the group.
15. The formation of a new species is called \_\_\_\_\_.
16. Species that shared a common ancestor in the recent past have many \_\_\_\_\_ or \_\_\_\_\_ sequence similarities.
17. Given that the forelimbs of all vertebrates share the same basic arrangement of bones, forelimbs are said to be \_\_\_\_\_ structures.
18. Populations evolve, but \_\_\_\_\_ do not evolve.
19. Some whales have tiny \_\_\_\_\_ bones as evidence of their land-dwelling mammalian ancestors.
20. Darwin felt that fossils of extinct armadillos that resembled living armadillos were evidence of \_\_\_\_\_ with \_\_\_\_\_.
21. A type of evolution with small scale changes in genes is called \_\_\_\_\_.

**Test Prep Pretest *continued***

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**Read each question, and write your answer in the space provided.**

22. What was Lamarck's incorrect hypothesis regarding inheritance?

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23. Briefly explain the importance of Thomas Malthus's essay on the growth of the human population to Darwin's theory of evolution by natural selection.

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24. State three ways Darwin's theory has been updated.

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