

- a. to crack open seeds c. to reach nectar in flowers
b. to dig through tree bark for insects d. to scoop up fish
- ____ 8. Upon close examination of the skeleton of an adult python, a pelvic girdle and leg bones can be observed. These features are an example of ____.
- a. homologous structures c. comparative embryology

- _____ b. artificial selection d. vestigial structures
9. The theory of continental drift hypothesizes that Africa and South America slowly drifted apart after once being a single landmass. The monkeys on the two continents, although similar, show numerous genetic differences. Which factor is probably the most important in maintaining these differences?
- a. comparative embryology c. fossil records
b. geographic isolation d. comparative anatomy
- _____ 10. Natural selection can best be defined as the _____.
a. survival and reproduction of the organisms that occupy the largest area
b. survival of the biggest and strongest organisms in a population
c. elimination of the smallest organisms by the biggest organisms
d. survival and reproduction of the organisms that are genetically best adapted to the environment
- _____ 11. Structures that have a similar evolutionary origin and structure but are adapted for different purposes, such as a bat wing and a human arm, are called _____.
a. embryological structures c. homologous structures
b. homozygous structures d. analogous structures
- _____ 12. The structures shown in Figure 15-5 are _____.

Figure 15-5

- ☐ 13. A pattern of evolution that results when two unrelated species begin to appear similar because of environmental conditions is _____.
a. directional selection c. divergent evolution
b. convergent evolution d. disruptive selection
- ☐ 14. Within a decade of the introduction of a new insecticide, nearly all of the descendants of the target pests were immune to the usual-sized dose. The most likely explanation for this immunity to the insecticide is that _____.
a. it destroyed organisms that cause disease in the insects, thus allowing them to live longer
b. the pests developed physiological adaptations to the insecticide
c. eating the insecticide caused the bugs to become less resistant to it
d. eating the insecticide caused the bugs to become resistant to it
- ☐ 15. The average individuals of a population are favored in _____ selection.
a. natural c. stabilizing
b. directional d. disruptive
- ☐ 16. In _____ selection, individuals with both extreme forms of a trait are at a selective advantage.
a. stabilizing c. disruptive
b. directional d. natural

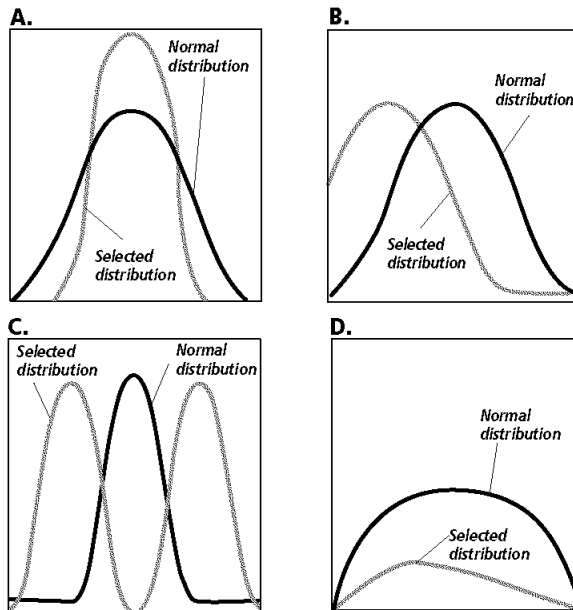


Figure 15-6

- ___ 17. Which type of natural selection shown in Figure 15-6 would favor giraffes that need to reach the tallest branches to eat?
- B
 - A
 - C
 - D
- ___ 18. Which type of natural selection showed in Figure 15-6 favors average individuals?
- B
 - A
 - D
 - C
- ___ 19. Which of the following is not a factor that causes changes in the allelic frequencies of individuals in a population?
- directional selection
 - stabilizing selection
 - random selection
 - disruptive selection
- ___ 20. Natural processes such as speciation and gradualism provide the genetic basis for ____.
- biogenesis
 - sexual reproduction
 - spontaneous generation
 - evolution
- ___ 21. ____ selection favors one extreme form of a trait in a population.
- Disruptive
 - Stabilizing
 - Directional
 - Natural
- ___ 22. Which combination of characteristics in a population would provide the greatest potential for evolutionary change?
- large population, many mutations
 - large population, few mutations
 - small population, few mutations
 - small population, many mutations
- ___ 23. The founder of modern evolution theory is considered to be ____.
- Alexander Oparin
 - Lynn Margulis
 - Charles Darwin
 - Stephen Jay Gould

- ____ 24. When checking shell color for a species of snail found only in a remote area seldom visited by humans, scientists discovered the distribution of individuals that is shown in the graph in Figure 15-1. Based on the information shown in the graph, the snail population is undergoing ____.

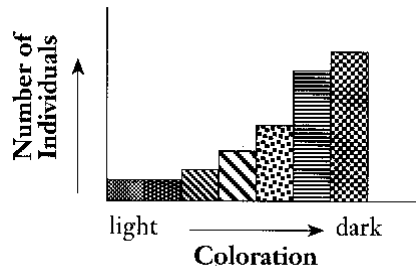


Figure 15-1

- a. disruptive selection
b. directional selection
c. artificial selection
d. stabilizing selection
- ____ 25. What type of adaptation is shown in Figure 15-4?

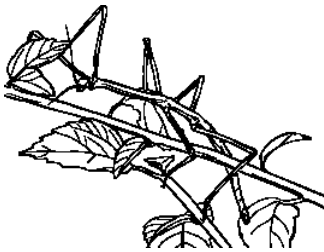


Figure 15-4

- a. mimicry
b. homologous structure
c. artificial selection
d. camouflage

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