

Name: _____ Period: _____ Date: _____

Evolution/Natural Selection

True/False

Indicate whether the statement is true or false.

- _____ 1. Hawks eat more dark lizards if they are on dark soil.
- _____ 2. The organisms that are alive today are best suited to their surroundings.
- _____ 3. Natural selection is a change in the hereditary traits of a species over a period of time.
- _____ 4. Darwin's theory of evolution stated that organisms could develop traits they needed for survival.
- _____ 5. A change in climate may bring about the development of a new species.
- _____ 6. One group of Homo sapiens became extinct. The other group evolved into modern humans.
- _____ 7. Comparing embryos of different animals provides evidence for evolution.
- _____ 8. Some fossils are found in sedimentary rocks.
- _____ 9. All finches on the Galapagos Islands are the same species.
- _____ 10. Macaws may be of different species when they cannot breed and form fertile offspring.
- _____ 11. Many chordate embryos look very much alike because their parents shared a common habitat.
- _____ 12. The first life forms were made of cells. Later life forms are not.
- _____ 13. Vestigial structures are body parts that no longer have a job.
- _____ 14. Vestigial structures are evidence of common ancestry.
- _____ 15. Your appendix is an example of a fossil.

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- _____ 16. The structure of a bird's toes is an example of _____.
 - a. selection
 - b. adaptation
 - c. survival
 - d. development
- _____ 17. The most important advantage an adaptation gives a living thing is to help it to survive in order that it may _____.
 - a. kill
 - b. reproduce
 - c. eat
 - d. grow
- _____ 18. Albino (white-haired) deer that are born in forest surroundings will probably _____.
 - a. survive better
 - b. reproduce
 - c. be eaten
 - d. adapt
- _____ 19. A trait that makes an individual different from others in its species is _____.
 - a. a variation
 - b. competition
 - c. an adaptation
 - d. Selection

- ___ 20. A mutation is helpful depending on whether it makes the living thing ____.
- a. larger
 - b. smaller
 - c. better adapted
 - d. another color
- ___ 21. The theory of evolution by natural selection was developed by ____.
- a. Pasteur
 - b. Mendel
 - c. Darwin
 - d. Hooke
- ___ 22. Many scientists believe that, over time, the horse changed from a small animal to the large one we know today. These scientists would say that the horse ____.
- a. evolved
 - b. cloned
 - c. fossilized
 - d. did not adapt
- ___ 23. Rabbits are rivals for food and shelter. This is an example of ____.
- a. selection
 - b. mutation
 - c. competition
 - d. evolution
- ___ 24. Animals that are most fit for their surroundings usually ____.
- a. are killed
 - b. survive
 - c. do not reproduce
 - d. kill other animals
- ___ 25. A mutation is a change in the ____ of an organism.
- a. color
 - b. DNA code
 - c. environment
 - d. birthrate
- ___ 26. If animals of a species become separated in different environments, the animals in each environment may develop into different ____.
- a. mutations
 - b. fossils
 - c. species
 - d. clones
- ___ 27. One kind of evidence that life existed in the past is a ____.
- a. mutation
 - b. fossil
 - c. variation
 - d. selection
- ___ 28. Living things that are well suited to their surroundings will usually ____.
- a. feed
 - b. survive
 - c. die off
 - d. improve their appearance
- ___ 29. An owl that feeds on certain mice is doing the choosing of who will survive. This is an example of ____.
- a. natural selection
 - b. adaptations
 - c. mutations
 - d. passing on
- ___ 30. Offspring that are fertile can form ____.
- a. adaptations
 - b. environments
 - c. egg and sperm
 - d. mutations

Matching

Examine the diagram in Figure 29-1 of rock layers with fossils as they might be found. Choose the letter of the layer that best answers each question.

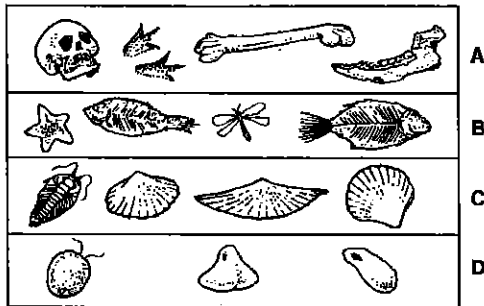


Figure 29-1

31. Which layer has the simplest life forms?
 32. Which layer has more life forms still alive today?
 33. Which layer is the oldest layer?
 34. Which layer has the most complex life forms?
 35. Which layer formed last?

Choose one of the four points of Darwin's theory of evolution from the following list that best matches each statement below.

- a. Living things overproduce.
 b. There is variation among offspring.
 c. There is a struggle to survive.
 d. Individuals that have desirable traits are more fit.
36. An oyster produces millions of eggs.
 37. Wheat seeds sprout and grow into either tall, thin plants or short, thick plants.
 38. Foxes use the same food and dens.
 39. A pine tree produces more than 100 000 seeds each year.
 40. Low-growing plants are able to live on windy seashores.
 41. Young plants die when taller plants keep sunlight from them.
 42. You are different from your sisters and brothers.
 43. Some bacteria cannot be killed with antibiotics.

Choose the word or phrase from the following list that best matches each statement below.

- a. adaptation
 b. competition
 c. natural selection
44. Two robins will struggle over a worm.
 45. The long beak of a hummingbird is used to sip nectar.
 46. The mud-colored frog will survive and reproduce in a muddy pond.
 47. The hollow bones of a bird help it fly.
 48. Oak seedlings are rivals for sunlight.
 49. The hard, cone-shaped beak of the cardinal is used for eating seeds.

- ___ 50. The white rabbit will not survive in a forest environment.
- ___ 51. The flippers of a dolphin are used in swimming.

Choose the phrase from the following list that best matches each statement below.

- a. fossil evidence
- b. embryo comparison
- c. cell makeup
- d. vestigial structure

- ___ 52. pink lump in corner of our eye
- ___ 53. animal trapped in ice
- ___ 54. a developing fish looking like a developing bird
- ___ 55. DNA makes up all chromosomes
- ___ 56. nitrogen bases in DNA are all the same
- ___ 57. a footprint of an animal in rock
- ___ 58. usually an extinct form
- ___ 59. seeing what life forms in the past looked like
- ___ 60. a body part that no longer has a needed function