Bio-10-Q3W3--Arthropods-Test

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

____ 1. The fact that horseshoe crabs have remained relatively unchanged for 500 million years indicates that
a. their environment has changed very little.
b. they must reproduce by parthenogenesis.
c. natural selection has not taken place.
d. they have very little genetic diversity.

____ 2. How many pairs of jointed appendages do arachnids have?
a. three
b. six
c. two
d. four

____ 3. Crabs, lobsters, shrimps, and pill bugs are members of the class _____.
a. Chilopoda
b. Insecta
c. Crustacea
d. Arachnida

____ 4. What clue tells you immediately that the organism shown in Figure 28-4 is not an arthropod?

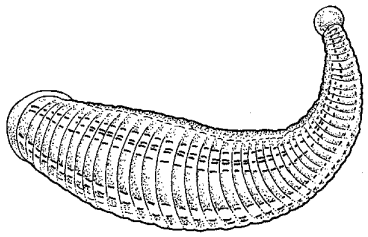

Figure 28-4

a. it has no jointed appendages
b. there are too many segments
c. it has no endoskeleton
d. its gas exchange is inefficient

____ 5. The appendages of a spider that function as sense organs are
a. its pedipalps.
b. its spinnerets.
c. its legs.
d. its chelicerae.

____ 6. In spiders, chelicerae are highly modified appendages that are adapted for
a. mating and reproduction.
b. spinning silk and weaving webs.
c. holding food and injecting poison.
d. chewing food.

____ 7. The characteristic that most distinguishes arthropods from other invertebrates is _____.
a. bilateral symmetry
b. jointed appendages
c. the coelom
d. the endoskeleton

____ 8. When a spider bites, it uses its _____.
a. mandibles
b. chelicerae
c. pedipalps
d. silk glands

____ 9. Grasshoppers have _____.
a. three compound eyes and two simple eyes
b. two compound eyes and two simple eyes
c. two compound eyes and three simple eyes
d. none of these

____ 10. Aquatic arthropods exchange gases through _____.
a. book lungs
b. gills
c. tracheal tubes
d. their exoskeleton

____ 11. An animal that is not a member of the class Arachnida is
a. a walking stick.
b. a dust mite.
c. a deer tick.
d. a spider.

____ 12. What clue tells you immediately that the organism shown in Figure 28-2 is not an arthropod?

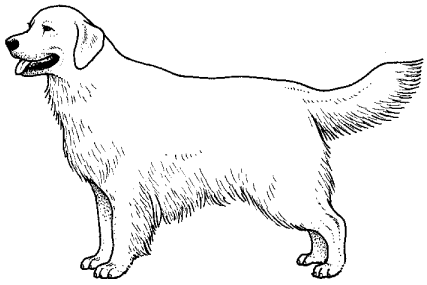

Figure 28-2

a. it is warm blooded
b. it has no open circulation system
c. it has no jointed appendages
d. it has no exoskeleton

____ 13. After catching their prey and injecting it with poison, spiders
a. lay their eggs in the prey.
b. eat the prey whole.
c. chew the prey into small pieces.
d. suck up the prey's contents, which have been liquified with enzymes.

____ 14. Before an arthropod molts, a new exoskeleton _____.
a. must be found
b. grows on top of its old one
c. cannot grow
d. grows beneath its old one

____ 15. What clue tells you immediately that the organism shown in Figure 28-3 is not an arthropod?

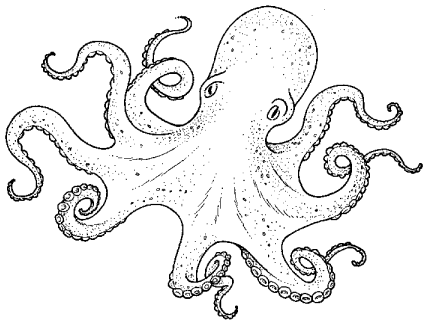

Figure 28-3

a. it has more than 6 legs
b. it cannot fly
c. it doesn't molt
d. it has no jointed appendages

____ 16. Most insects have one pair of _____ that are used to sense vibrations, food, and pheromones in the environment.
a. pedipalps
b. wings
c. antennae
d. eyes

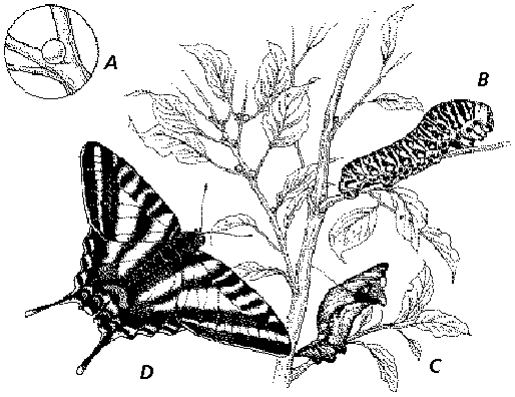

Figure 28-6

____ 17. In what stage of metamorphosis shown in Figure 28-6 does the organism have recognizable insect characteristics like three segments and jointed appendages?
a. D
b. B
c. C
d. A

____ 18. What stage of metamorphosis shown in Figure 28-6 does the most eating take place?
a. B
b. A
c. D
d. C

____ 19. What stage of metamorphosis shown in Figure 28-6 contains the youngest organism?
a. B
b. C
c. D
d. A

____ 20. What type of metamorphosis is shown in Figure 28-6?
a. incomplete
b. partial
c. nymph
d. complete

____ 21. What stages of metamorphosis shown in Figure 28-6 have no exoskeleton?
a. C and D
b. B and C
c. A and B
d. A and C

____ 22. What stage of metamorphosis shown in Figure 28-6 has characteristics of chilopoda and diplopoda?
a. A
b. D
c. C
d. B

____ 23. The stages of incomplete metamorphosis are _____.
a. egg, larva, pupa, adult
b. egg, nymph, adult
c. egg, larva, adult
d. larva, pupa, adult

____ 24. The typical tick body consists of _____ segment(s).
a. four
b. two
c. three
d. one

____ 25. In spiders, the exchange of gases takes place in _____.
a. lungs
b. book lungs
c. spiracles
d. gills

____ 26. In ticks and mites, the head, thorax, and abdomen

a. are well-defined.
b. are all the same size.
c. are fused into one section.
d. are absent.

____ 27. No one has ever seen a living trilobite. From this fossil picture in Figure 28-5, how can you tell it was an arthropod?

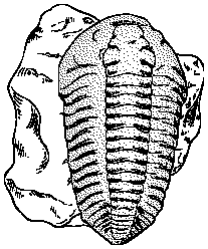

Figure 28-5

a. it had segments
b. it produced asexually
c. it molted
d. it had Malpighian tubules

Matching

Match each item with the correct statement below.

a. mandible
b. appendage
c. spinneret
d. pheromone
e. tracheal tubes
f. Malpighian tubule
g. parthenogenesis
h. spiracles
i. book lung
j. cephalothorax
k. molting

____ 28. openings through which air enters and leaves the tracheal tubes
____ 29. chamber that contains leaflike plates that serve for gas exchange
____ 30. movable structure used by a spider to turn silk into thread
____ 31. any structure, such as a leg, that grows out of the body of an animal
____ 32. chemical odor signal given off by an animal
____ 33. jaw of an arthropod
____ 34. shedding of the old exoskeleton
____ 35. branching networks of hollow passages that carry air throughout the body
____ 36. fused head and thorax region in some arthropods
____ 37. form of asexual reproduction in which an organism develops from an unfertilized egg
____ 38. excretory organ of terrestrial arthropods

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