



Chapter Test

Invertebrate Animals

I. Testing Concepts

Directions: Match the terms in Column II with the descriptions in Column I. Write the letter of the correct term in the blank at the left. Some terms may not be used.

Column I

- _____ 1. soft-bodied invertebrates that usually have shells
- _____ 2. animal without a backbone
- _____ 3. structures that grow out from the body
- _____ 4. body parts arranged around a central point
- _____ 5. invertebrates with jointed legs
- _____ 6. change in form some animals go through as they develop and mature
- _____ 7. body plan that is shaped like a tube or vase
- _____ 8. spiny-skinned invertebrates that live on the ocean bottom
- _____ 9. body plan that is bell-shaped

Column II

- a. appendages
- b. arthropods
- c. bilateral symmetry
- d. echinoderms
- e. free-living
- f. invertebrate
- g. medusa
- h. metamorphosis
- i. mollusks
- j. molting
- k. polyp
- l. radial symmetry
- m. sessile
- n. vertebrate

Directions: In the blank at the left, write the letter of the term that best completes each sentence.

- _____ 10. An animal with _____ has identical body parts on both sides of its body.
 - a. asymmetrical form
 - b. bilateral symmetry
 - c. radial symmetry
 - d. spherical symmetry
- _____ 11. The body of a sponge is covered with small openings called _____.
 - a. swimmerets
 - b. setae
 - c. flagella
 - d. pores
- _____ 12. A system in which blood is **NOT** contained in vessels, but spreads over the organs is a(n) _____.
 - a. closed circulatory system
 - b. fluid-filled system
 - c. open circulatory system
 - d. water-vascular system
- _____ 13. Like mollusks, segmented worms have a _____.
 - a. complete digestive system
 - b. setae
 - c. mantle cavity
 - d. siphon
- _____ 14. Early scientists classified sponges as _____.
 - a. fungi
 - b. parasites
 - c. plants
 - d. protists
- _____ 15. Unlike other arthropods, arachnids have _____ legs.
 - a. 4
 - b. 6
 - c. 8
 - d. 10

Chapter Test (continued)

- _____ 16. Bivalves are different from other mollusks because they have _____.
a. no shell b. two shells c. a muscular foot d. 2 muscular feet
- _____ 17. Many mollusks have a _____, a tonguelike organ that works like a file.
a. crop b. radula c. polyp d. spiracle
- _____ 18. Heartworm is a disease in dogs caused by _____.
a. flatworms b. planarians c. roundworms d. tapeworms
- _____ 19. All cnidarians have _____.
a. asymmetrical form c. radial symmetry
b. bilateral symmetry d. spherical symmetry
- _____ 20. Water-dwelling mollusks have _____ in the mantle cavity.
a. gills b. radula c. lungs d. flagella
- _____ 21. Mollusks are **NOT** classified according to _____.
a. the kind of foot they have c. the kind of shell they have
b. whether they have a shell d. how they reproduce
- _____ 22. _____ make up the largest group of complex invertebrates.
a. Arachnids b. Insects c. Annelids d. Crustaceans
- _____ 23. Because the blood of earthworms and cephalopods is contained in vessels, they have a(n) _____.
a. closed circulatory system c. open circulatory system
b. fluid-filled system d. water-vascular system
- _____ 24. The bodies of many sponges contain sharp structures called _____.
a. spiracles b. pores c. collar cells d. spicules
- _____ 25. Sponges reproduce _____.
a. only asexually c. only sexually
b. only by regeneration d. asexually and sexually
- _____ 26. Segmented worms have bristlelike structures called _____ that help them move.
a. gills b. appendages c. setae d. tube feet
- _____ 27. Flatworms and roundworms have _____.
a. asymmetrical form c. radial symmetry
b. bilateral symmetry d. spherical symmetry
- _____ 28. Echinoderms have a(n) _____ that allows them to move, eat, get oxygen, and get rid of wastes.
a. cephalothorax c. water-vascular system
b. tube within a tube digestive system d. exoskeleton
- _____ 29. All arthropods have _____.
a. antennae b. spiny skin c. 3 body segments d. jointed legs
- _____ 30. Polyp forms of cnidarians can reproduce _____.
a. asexually and sexually c. only sexually
b. by budding d. by regeneration

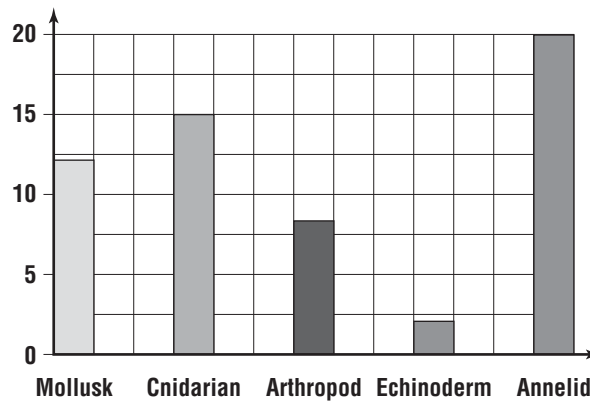
Chapter Test (continued)

II. Understanding Concepts

Skill: Graphing

Directions: Enter the data in the graph provided.

On a field trip, a group of students collected the following invertebrates: 3 hydra, 4 snails, 10 earthworms, 2 butterflies, 1 sand dollar, 3 spiders, 6 slugs, 5 corals, and 2 centipedes. They added these to the 4 jellyfish, 3 sea anemones, 1 sea star, 6 leeches, 1 crayfish, 4 marine worms, and 2 clams they already had in class. Use the axes below to draw a bar graph showing the total number of organisms belonging to each group shown.



Skill: Comparing and Contrasting

Directions: Write whether the descriptions below are of a **flatworm** or a **roundworm**.

- _____ 1. tube within a tube body
- _____ 2. tapeworms
- _____ 3. long, flattened body
- _____ 4. digestive tract has mouth and anus
- _____ 5. heartworms
- _____ 6. lacks a digestive system

Skill: Interpreting Scientific Illustrations

Directions: Label the parts of the insect shown below.



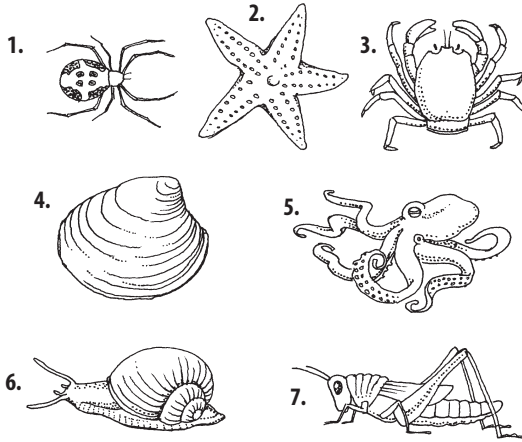
Chapter Test (continued)

III. Applying Concepts

Directions: Match each organism shown below with a term in Column II. Write the correct letter in the blank at the left.

Column I

- _____ 1.
 _____ 2.
 _____ 3.
 _____ 4.
 _____ 5.
 _____ 6.
 _____ 7.



Column II

- a. gastropod mollusk
 b. arachnid arthropod
 c. bivalve mollusk
 d. cephalopod mollusk
 e. crustacean arthropod
 f. echinoderm
 g. insect arthropod

Directions: List the four stages of metamorphosis a butterfly undergoes in the order of development.

8. _____ 10. _____
 9. _____ 11. _____

Directions: List the three stages of metamorphosis a grasshopper undergoes in the order of development.

12. _____ 14. _____
 13. _____

IV. Writing Skills

Directions: Answer the following question in complete sentences on the lines provided.

1. What is the difference between a free-living organism and a parasitic organism?

2. Suppose you found a strange new creature that seemed to be growing out of the ocean floor. Describe what characteristics would determine whether it was an animal.

3. Describe how a sea star gets and digests food.

