

Skills Worksheet

Directed Reading

Section: Mollusks

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

1. Mollusks and annelids were probably the first organisms to develop a(n) _____ .
2. Mollusks and annelids have a larval stage called a(n) _____ .

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

3. What is one of the evolutionary advantages of having a true coelom?

4. What are the characteristics of a trochophore?

In the space provided, write the letter of the description that best matches the term or phrase.

- | | |
|------------------------|--|
| _____ 5. visceral mass | a. tonguelike organ located in the mouth |
| _____ 6. mantle | b. muscular region used primarily for locomotion |
| _____ 7. foot | c. tubular structures used to recover useful materials from coelomic fluid before fluid waste is discharged |
| _____ 8. radula | d. central section containing organs |
| _____ 9. nephridia | e. heavy fold of tissue that forms the outer layer of the body |

Directed Reading *continued*

In the space provided, write the letter of the description that best matches the term or phrase.

- | | |
|-----------------------------------|--|
| _____ 10. gastropods | a. two thick muscles that connect the valves (shells) of bivalves |
| _____ 11. nudibranchs | b. class of mollusks that includes oysters, clams, and scallops |
| _____ 12. bivalves | c. class of mollusks that includes snails and slugs |
| _____ 13. adductor muscles | d. hollow tubes used to carry water to and from gills |
| _____ 14. siphons | e. class of mollusks that includes squids and octopuses |
| _____ 15. cephalopods | f. sea slug, a type of gastropod |

Answer Key

Directed Reading

SECTION: MOLLUSKS

1. true coelom
2. trochophore
3. The advantage of having a true coelom is that the gut and other internal organs are suspended from the body wall and are cushioned by the fluid within the coelom.
4. The trochophore is a free-swimming larva that propels itself through the water by movement of cilia on its surface.
5. d
6. e
7. b
8. a
9. c
10. c
11. f
12. b
13. a
14. d
15. e

SECTION: ANNELIDS

1. e
2. a
3. f
4. c
5. d
6. b
7. Annelids have a circulatory system, which transports nutrients and other materials between segments.
8. Each segment contains digestive, excretory, circulatory, and locomotor organs. Some segments are specialized for functions such as feeding.
9. Annelids were the first animals to evolve with a body plan based on repeating body segments. Mollusks do not have segmented bodies.
10. Polychaeta
11. parapodia
12. tube
13. jaws
14. Oligochaeta

15. parapodia, setae
16. head
17. gizzard
18. castings
19. hydrostatic
20. circular, longitudinal
21. Hirudinea
22. setae, parapodia
23. segments

Active Reading

SECTION: MOLLUSKS

1. a. mantle
b. mantle cavity
c. visceral mass
d. foot
2. foot
3. visceral mass
4. mantle
5. a

SECTION: ANNELIDS

1. digestive, excretory, circulatory, and locomotor
2. It provides information about the meaning of the word that precedes it—locomotor.
3. reproduction, feeding, or sensation
4. b

Vocabulary Review

1. trochophore
2. visceral mass
3. mantle
4. foot
5. radula
6. nephridia
7. adductor muscles
8. siphons
9. cerebral ganglion
10. septa
11. setae
12. parapodia