

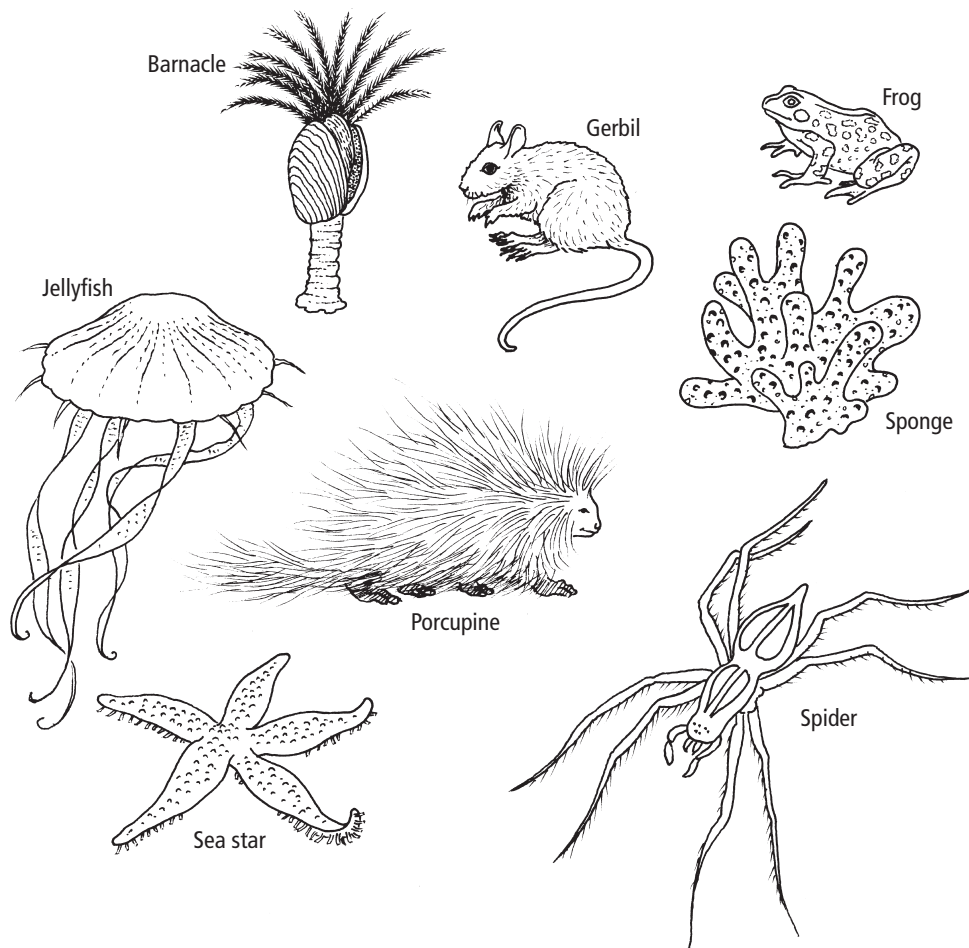
CHAPTER 24

Study Guide

Section 1: Animal Characteristics

In your textbook, read about animal characteristics.

Refer to the illustration. Respond to each statement.



1. Identify the characteristics of all animals.

2. List the three organisms that are vertebrates.

Study Guide, Section 1: Animal Characteristics continued

In your textbook, read about reproduction in animals.

Use each of the terms below only once to complete the passage.

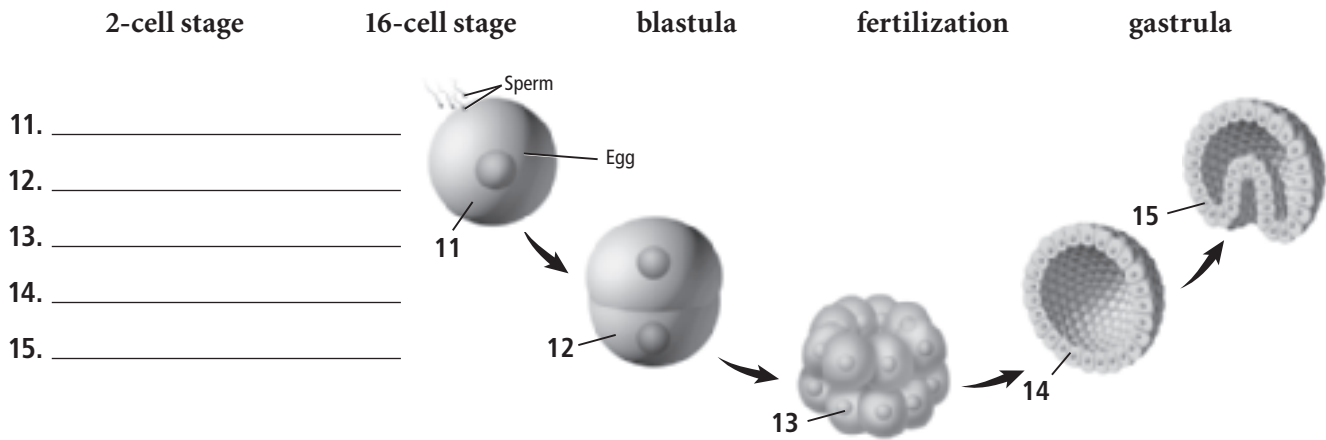
- | | | | |
|----------------|-----------|----------|---------------|
| asexually | budding | external | fragmentation |
| hermaphrodites | identical | internal | single |

Many animals reproduce sexually, but some reproduce (3) _____. In the process of sexual reproduction, the male usually produces sperm and the female produces eggs. Some species produce both sperm and eggs. They are called (4) _____, and fertilization can be (5) _____ or (6) _____.

Asexual reproduction occurs when a(n) (7) _____ parent produces offspring that are (8) _____ to the parent. Two types of asexual reproduction are (9) _____ and (10) _____.

In your textbook, read about early development.

Label the diagram. Use these choices:



In your textbook, read about tissue development.

Complete the table by checking the correct column(s) for each description.

Description	Endoderm	Mesoderm	Ectoderm
16. Gives rise to digestive tract			
17. Becomes nervous tissue and skin			
18. Gives rise to muscles			
19. Inner layer of cells in the gastrula			
20. Continues to grow and divide			

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Section 2: Animal Body Plans

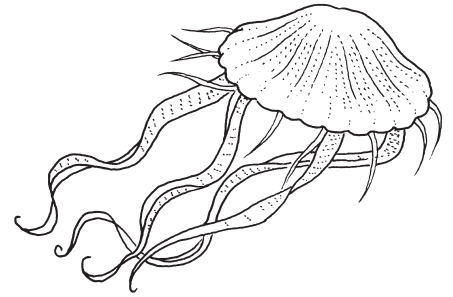
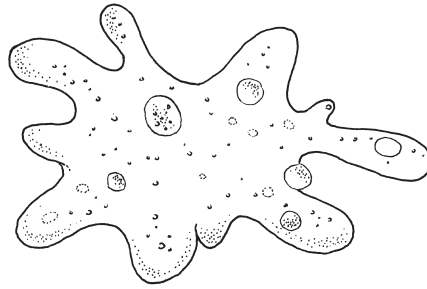
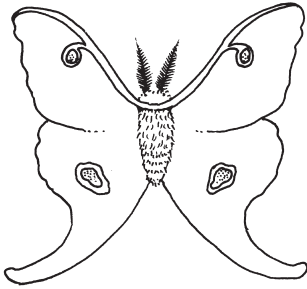
In your textbook, read about symmetry.

Label the organism with the type of symmetry it shows. Use these choices:

asymmetrical

bilateral

radial



1. _____

2. _____

3. _____

In your textbook, read about body cavities.

Identify the following as being either coelomates, pseudocoelomates, or acoelomates.

4. fish _____

7. planaria _____

5. roundworms _____

8. humans _____

6. snails _____

9. earthworms _____

In your textbook, read about development in coelomate animals.

Complete the table by checking the correct column(s) for each description.

Description	Protostomes	Deuterostomes
10. Will not develop normally if a cell is removed		
11. Top four cells aligned directly on the bottom four cells		
12. Are coelomates		
13. Include snails, earthworms, and spiders		
14. Develop mouth from the opening in the gastrula		

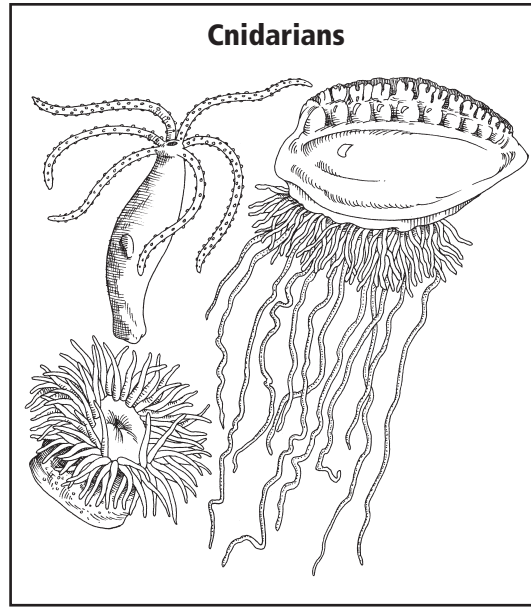
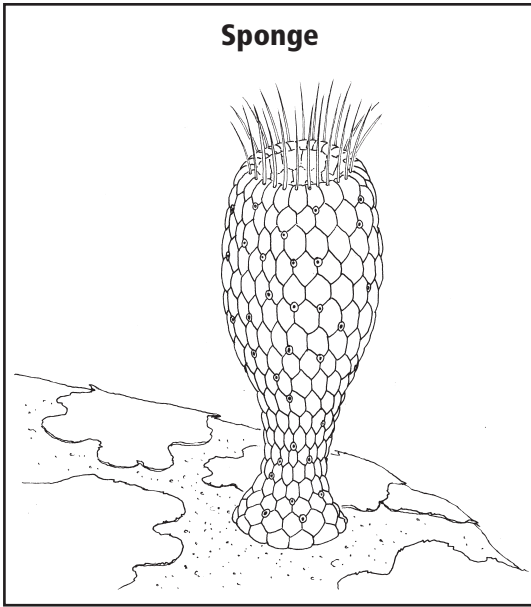
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Section 3: Sponges and Cnidarians

In your textbook, read about sponges and cnidarians.

Refer to the illustrations. Respond to each statement.



1. **Recall** how sponges obtain food.

2. **Tell** how the body structure of cnidarians is different from the body structure of sponges.

3. **Explain** how cnidarians capture prey.

For each answer below, write an appropriate question.

4. **Answer:** They are capsules that hold coiled, threadlike tubes containing poison and barbs.

Question: _____

5. **Answer:** They reproduce asexually by fragmentation, budding, and producing gemmules.

Question: _____

6. **Answer:** The two forms are polyp and medusa.

Question: _____