

Chapter 30 Nonvertebrate Chordates, Fishes, and Amphibians

Section 30-1 The Chordates (pages 767-770)

Key Concepts

- What characteristics do all chordates share?
- What are the two groups of nonvertebrate chordates?

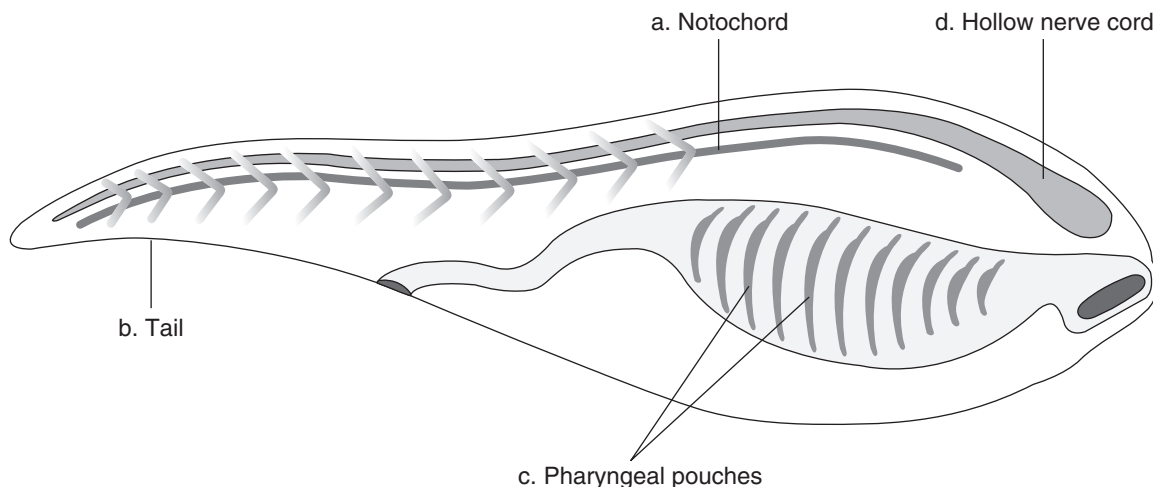
What Is a Chordate? (page 767)

1. List the four key characteristics of a chordate.

- a. _____
- b. _____
- c. _____
- d. _____

Use the diagram below to match the description of the chordate characteristic with its structure.

Structure



Description

- _____ 2. Connects nerves to internal organs, muscles, and sense organs
- _____ 3. Long supporting rod located just below the nerve cord
- _____ 4. Paired structures in the throat region
- _____ 5. Contains bone and muscle

Most Chordates Are Vertebrates (page 768)

- 6. What structure do most vertebrates have? _____
- 7. What chordate structure becomes the spinal cord in vertebrates? _____

8. The backbone is made of individual segments called _____ that enclose and protect the spinal cord.
9. Circle the letter of each sentence that is true about vertebrates.
 - a. A vertebrate's backbone is part of an endoskeleton.
 - b. The endoskeleton supports and protects the animal's body.
 - c. The endoskeleton must be shed as the animal grows.
 - d. The endoskeleton is made entirely of nonliving material.

Nonvertebrate Chordates (pages 769–770)

10. How are tunicates and lancelets similar to each other? _____

11. What evidence indicates that vertebrates and nonvertebrate chordates evolved from a common ancestor? _____

12. Circle the letter of each characteristic found only in tunicate larvae and not in tunicate adults.
 - a. tunic
 - b. tail
 - c. hollow nerve cord
 - d. notochord
13. Is the following sentence true or false? Both larval and adult tunicates are filter feeders.

14. Circle the letter of each characteristic found in lancelets.
 - a. definite head region
 - b. jaws
 - c. notochord
 - d. fins
15. Is the following sentence true or false? Lancelets use the pharynx for feeding and gas exchange. _____
16. How is blood moved through the body of a lancelet? _____

Reading Skill Practice

A Venn diagram is a useful tool to compare and contrast two things. Construct a Venn diagram to compare and contrast the characteristics of tunicates and lancelets. See Appendix A in your textbook, for more information about Venn diagrams. Do your work on a separate sheet of paper.