

Chapter 30 Nonvertebrate Chordates, Fishes, and Amphibians

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

This section describes the characteristics shared by all chordates. It also tells about the two groups of nonvertebrate chordates.

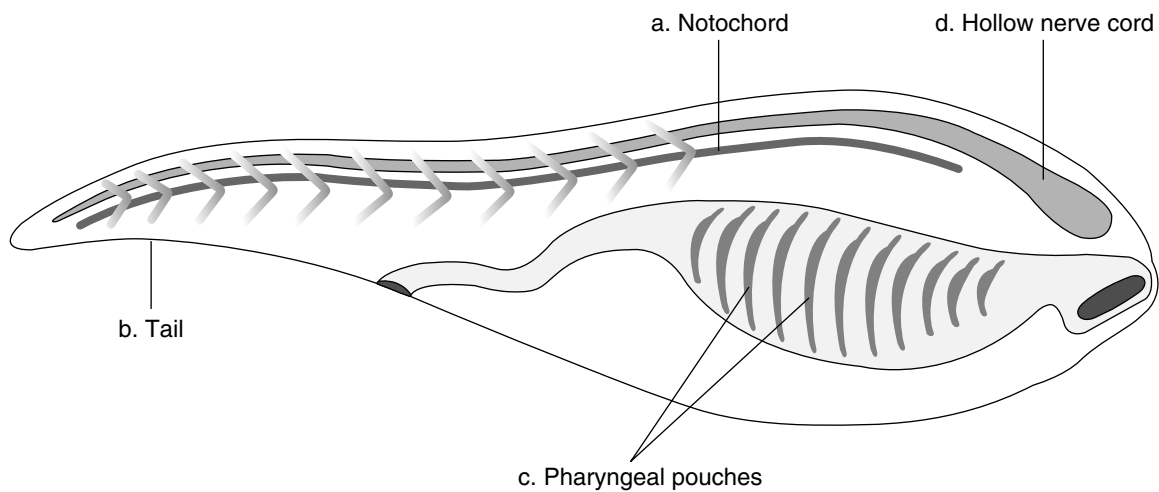
What Is a Chordate? (page 767)

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 for more information about Venn diagrams. Do your work on a separate sheet of paper.