

**Chapter 26 Sponges and Cnidarians**

**Section 26–1 Introduction to the Animal Kingdom (pages 657–663)**



**Key Concepts**

- What characteristics do all animals share?
- What essential functions do animals carry out?
- What are the important trends in animal evolution?

**What Is an Animal? (page 657)**

1. Is the following sentence true or false? The cells that make up animal bodies are eukaryotic. \_\_\_\_\_
2. What characteristics do all animals share? \_\_\_\_\_  
\_\_\_\_\_
3. Complete the table about animals.

**CATEGORIES OF ANIMALS**

Category	Percentage of Species	Description	Examples
		Animals without backbones	
		Animals with backbones	

**What Animals Do to Survive (pages 658–659)**

4. What are seven essential functions that animals carry out?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
  - e. \_\_\_\_\_
  - f. \_\_\_\_\_
  - g. \_\_\_\_\_
5. Complete the table about types of feeders.

**TYPES OF FEEDERS**

Type of Feeder	Description
	Feeds on plants
Carnivore	
Filter feeder	
	Feeds on decaying plant and animal material

- 6. Explain the difference between a parasite and a host. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 7. What does an animal do when it respire? \_\_\_\_\_  
\_\_\_\_\_
- 8. What does the excretory system of most animals do? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 9. Animals respond to events in their environment using specialized cells called \_\_\_\_\_.
- 10. What are receptors, and what is their function? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 11. What does it mean that an animal is motile? \_\_\_\_\_  
\_\_\_\_\_
- 12. What enables motile animals to move around? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
- 13. Circle the letter of the process that helps a species maintain genetic diversity.
  - a. asexual reproduction
  - b. movement
  - c. response
  - d. sexual reproduction
- 14. What does asexual reproduction allow animals to do? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Trends in Animal Evolution (pages 660–663)**

- 15. What are four characteristics that complex animals tend to have?
  - a. \_\_\_\_\_
  - b. \_\_\_\_\_
  - c. \_\_\_\_\_
  - d. \_\_\_\_\_
- 16. How have the cells of animals changed as animals have evolved? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

17. Groups of specialized cells form \_\_\_\_\_, which form organs, which form \_\_\_\_\_.
18. After a zygote undergoes a series of divisions, it becomes a(an) \_\_\_\_\_
19. What is a protostome? \_\_\_\_\_  
\_\_\_\_\_
20. What is a deuterostome? \_\_\_\_\_  
\_\_\_\_\_
21. Is the following sentence true or false? Most invertebrates are deuterostomes.  
\_\_\_\_\_
22. In the development of a deuterostome, when is the mouth formed? \_\_\_\_\_  
\_\_\_\_\_
23. Complete the table about germ layers.

**GERM LAYERS**

Germ Layer	Location	Develops Into These Body Structures
	Innermost layer	
	Middle layer	
	Outermost layer	

24. Complete the table about body symmetry.

**BODY SYMMETRY**

Type of Symmetry	Description	Examples
	Body parts that repeat around the center	
	A single plane divides the body into two equal halves	

25. In an animal with radial symmetry, how many imaginary planes can be drawn through the center of the animal that would divide the animal in half? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Match the term with its meaning.

- | Term                | Meaning       |
|---------------------|---------------|
| _____ 26. anterior  | a. Upper side |
| _____ 27. posterior | b. Back end   |
| _____ 28. dorsal    | c. Front end  |
| _____ 29. ventral   | d. Lower side |
30. A body that is constructed of many repeated and similar parts, or segments, exhibits \_\_\_\_\_.
31. What is cephalization? \_\_\_\_\_  
\_\_\_\_\_
32. How do animals with cephalization respond differently to the environment than animals without cephalization? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
33. What is a body cavity? \_\_\_\_\_  
\_\_\_\_\_
34. Why is having a body cavity important? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### Reading Skill Practice

An outline can help you remember the main points of a section. Write an outline of Section 26–1. Use the section’s blue headings for the first level of your outline and the section’s green headings for the second level. Support your headings with details from the section. Do your work on a separate sheet of paper.