

## Section 27–2 Roundworms (pages 689–693)

*This section describes the defining features of roundworms. It also identifies which roundworms are important in human disease.*

### What Is a Roundworm? (page 689)

1. Circle the letter of each sentence that is true about roundworms.
  - a. Parasitic roundworms live in plants and in animals.
  - b. All roundworms are parasitic.
  - c. Some roundworms are a meter in length.
  - d. All roundworms develop from three germ layers.
2. A body cavity that is lined only partially with tissue derived from the mesoderm is called a(an) \_\_\_\_\_.
3. How is a roundworm's digestive tract like a tube-within-a-tube? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
4. The posterior opening of the digestive tract is called the \_\_\_\_\_.
5. Circle the letter of each feature that a roundworm has.
  - a. pseudocoelom
  - b. mouth
  - c. anus
  - d. coelom

### Form and Function in Roundworms (page 690)

6. Which have more complex body systems, free-living or parasitic roundworms?  
\_\_\_\_\_  
\_\_\_\_\_
7. Is the following sentence true or false? Many free-living roundworms are predators.  
\_\_\_\_\_
8. Roundworms exchange gases and excrete metabolic wastes through their  
\_\_\_\_\_.
9. What can roundworms' sense organs detect? \_\_\_\_\_  
\_\_\_\_\_
10. Do roundworms reproduce sexually or asexually? \_\_\_\_\_

### Roundworms and Human Disease (pages 690–692)

11. How do *Trichinella* roundworms cause pain in their hosts? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

12. Complete the table about roundworms and human disease.

**DISEASE-CAUSING ROUNDWORMS**

Roundworm	Disease or Condition Caused	How Disease Is Spread
<i>Trichinella</i>		
	Elephantiasis	
Ascarid worms		
	Weakness and poor growth	

13. What is elephantiasis? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

14. Circle the letter of each sentence that is true about the life cycle of *Ascaris*.

- a. Larvae in the lungs are coughed up and swallowed.
- b. The eggs develop into larvae in the lungs.
- c. Fertilized eggs leave the host's body in feces.
- d. The host ingests *Ascaris* eggs in contaminated food or water.

15. How are ascarid worms commonly spread? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

16. Where do hookworm eggs hatch and develop? \_\_\_\_\_

\_\_\_\_\_

**Research on *C. elegans* (page 693)**

17. Circle the letter of each sentence that is true about *C. elegans*.

- a. It is a free-living roundworm.
- b. Its DNA was the first of any multicellular animal's to be sequenced completely.
- c. It feeds on rotting vegetation.
- d. Its DNA has 30 times the number of base pairs that human DNA has.