

# Worms and Mollusks

## Section 2 Roundworms and Rotifers

Main Idea \_\_\_\_\_

Details \_\_\_\_\_

**Scan** Section 2 of the chapter. Use the checklist as a guide.

- Read all the section titles.
- Read all boldfaced words.
- Look at all illustrations and read the captions.
- Think about what you already know about worms.

Write three facts that you discovered about roundworms and rotifers.

1. **Accept all reasonable responses.** \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

**Review Vocabulary**

Use your book or dictionary to define cilia.

*cilia*

**short, numerous projections that look like hairs**  
\_\_\_\_\_  
\_\_\_\_\_

**New Vocabulary**

Use your book or dictionary to define each term. Then write a sentence using the word to show its scientific meaning.

*hydrostatic skeleton*

**fluid within a closed space that provides rigid support for muscles to work against**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

*trichinosis*

**a disease caused by the roundworm *Trichinella* that can be ingested in raw or undercooked pork, pork products, or wild game**  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Section 2 Roundworms and Rotifers (continued)**

**Main Idea**

**Details**

**Body Structure of Roundworms**

I found this information on page \_\_\_\_\_.

SE. pp. 731–733  
RE, pp. 298–299

**Organize** information about roundworms by filling in the chart below. **Accept all reasonable responses.**

|   |  |
|---|--|
| Phylum: <b>Nematoda</b>   | Symmetry: <b>bilateral</b>             |
| Habitats: <b>everywhere from marine and freshwater habitats to land; some are parasites on plants and animals</b>                       |  |
| Body shape: <b>cylindrical, unsegmented, tapered at both ends</b>   |  |
| Food: <b>some are predators on tiny invertebrates, others feed on decaying plant and animal matter, some feed on living hosts</b>       |  |
| Digestive tract of free-living forms: <b>one way, with food entering the mouth and wastes exiting through the anus at the other end</b> |  |
| Circulatory and respiratory organs: <b>none, they depend on diffusion for moving nutrients and gases throughout the body</b>            |  |
| Stimuli they can detect: <b>touch and chemicals, some can detect differences between light and dark</b>                                 |  |
| Reproduction method: <b>sexual</b>  | Type of fertilization: <b>internal</b> |

**Analyze** the movement of roundworms.

| <b>Roundworm Movement</b> |   |
|---------------------------|---|
| Thrashing Movement        | <b>They have muscles that run the length of their bodies. As one muscle contracts, another relaxes, causing a thrashing movement.</b> |
| Role of Pseudocoelom      | <b>It acts as a hydrostatic skeleton. The fluid within the pseudocoelom provides rigid support for the muscles to work against.</b>   |

**Section 2 Roundworms and Rotifers (continued)**

**Main Idea**

**Diversity of Roundworms**

I found this information on page \_\_\_\_\_.  
**SE, pp. 733–735**  
**RE, pp. 299–300**

**Details**

Identify the roundworm that matches each description.

| Animal        | Description                                     |
|---------------|---|
| pinworm       | most common worm parasite in humans in the U.S. |
| hookworm      | enters the human body through bare feet         |
| Ascaris       | world's most common roundworm infection         |
| Trichinella   | carried by infected, undercooked pork           |
| nematode      | causes plant diseases                           |
| filarial worm | mosquito acts as intermediate host              |

Identify a negative and a positive effect of nematodes on plants.

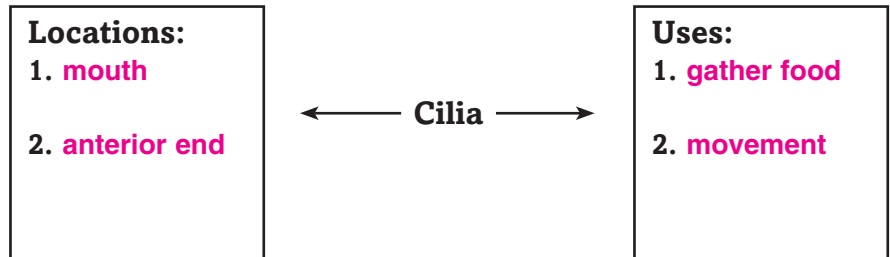
Negative: **By attaching themselves to plant roots, nematodes can cause the plants to sicken.**

Positive: **If added to soil infected with crop pests, nematodes can control the spread of the pest insects.**

**Rotifers**

I found this information on page \_\_\_\_\_.  
**SE, p. 736**  
**RE, p. 300**

Analyze the cilia of rotifers by completing the graphic organizer below.



**CONNECT**

Compare the digestive tracts of roundworms with those in free-living flatworms. What does the comparison suggest about the probable evolutionary history of roundworms?

**Accept all reasonable responses. Free-living flatworms have a digestive tract with only one opening; wastes are ejected through the mouth. Roundworms have digestive tracts with two openings; wastes are ejected through the anus. The digestive tract of roundworms is more complex, so roundworms probably appeared later than flatworms.**