# Section 20–2 Animallike Protists: Protozoans (pages 499–505)

This section describes the distinguishing features of the major phyla of animallike protists. It also explains how animallike protists harm other living things.

#### Introduction (page 499)

- 1. At one time, what were all animallike protists called?
- 2. How are the four phyla of animallike protists distinguished from one another?

#### Zooflagellates (page 499)

3. What kind of protists are classified in the phylum Zoomastigina?

4. How many flagella does a zooflagellate have?

- 5. Zooflagellates reproduce asexually by means of \_\_\_\_\_
- **6.** Is the following sentence true or false? Some zooflagellates have a sexual life cycle.

#### Sarcodines (page 500)

7. Sarcodines are members of the phylum \_\_\_\_\_\_.

8. What are pseudopods?

9. What do sarcodines use pseudopods for? \_\_\_\_\_

**10.** The best known sarcodines are the \_\_\_\_\_ 11. What is amoeboid movement?

12.	What is a food vacuole?	

13. How do amoebas capture and digest food?

14. Amoebas reproduce by means of \_\_\_\_\_

**15.** Circle the letter of each example of a sarcodine.

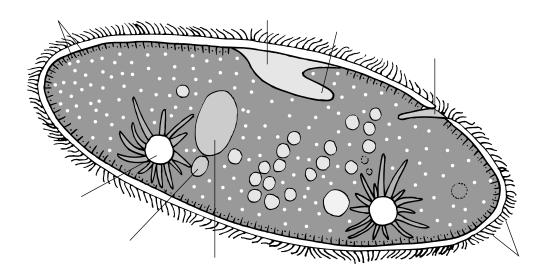
a. foraminiferan b. paramecium c. amoeba d. heliozoan

Name	Class	Date
Ciliates (pages 501–502)		
<b>16.</b> Ciliates are members of the phylum _		
<b>17.</b> What are cilia?		
<b>18.</b> What do ciliates use cilia for?		

Match the ciliate structure with its description.

Structure	Description	
19. Trichocysts	a. Indentation on one side of a ciliate into which	
<b>20.</b> Macronucleus	food is swept	
<b>21.</b> Micronucleus	<ul><li>b. Smaller nucleus containing a "reserve copy" of the cell's genes</li><li>c. Small, bottle-shaped structures used for defense</li></ul>	
<b>22.</b> Gullet		
<b>23.</b> Anal pore	d. Region of cell membrane where waste-	
<b>24.</b> Contractile vacuole	containing food vacuoles fuse	
	<ul> <li>e. Larger nucleus containing multiple copies of most of the cell's genes</li> </ul>	

- **f.** Cavity in cytoplasm specialized to collect and pump out water
- **25.** Label the illustration of a paramecium.



- **26.** What is conjugation?
- 27. Within a large population, how does conjugation benefit ciliates?

Name	Cla	ass	Date	
Sporozoans (page 502)				
<b>28.</b> Sporozoans are members of the phylum				
<b>29.</b> Circle the letter of each sentence that is true about sporozoans.				
<b>a.</b> They are parasitic.	c.	All have only one host.		
<b>b.</b> They do not move on their own.	d.	They reproduce by mea	ns of sporozoites.	

### Animallike Protists and Disease (pages 503–504)

- **30.** What causes malaria?
- **31.** Complete the flowchart about the cycle of malarial infection.

An infected Anopheles mosquito bites a human and deposits Plasmodium spores into the				
· · · · · · · · · · · · · · · · · · ·				
The spores travel to the				
Infected liver cells burst, releasing parasites that infect cells.				
The human experiences the symptoms of				
↓				
A mosquito bites the infected human and picks up the cells.				

## Ecology of Animallike Protists (page 505)

- **32.** Is the following sentence true or false? Some animallike protists recycle nutrients by breaking down dead organic matter. \_\_\_\_\_
- 33. How does the zooflagellate *Trichonympha* make it possible for termites to eat wood?