

UNIT  
8

## ACTIVITY

*Paramecium Observation Lab**Purpose:*

- To observe paramecium and how they move
- To identify the parts of an paramecium

*Procedure*

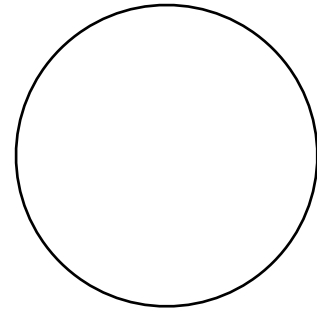
1. Obtain your slide materials from the back of the room (well slide and cover slip).
2. Bring this materials to the front. Ensure that the well side is facing in up so the water drop will be placed correctly on the slide.
3. Find a paramecium on low power and work your way to high power.
  - a. Helpful hint: Try to find a slow moving paramecium or one trapped in a space. These organisms move quickly and it will be difficult to work with one that is moving.
4. Sketch a drawing of the paramecium on medium or high power.

Title \_\_\_\_\_

Mag \_\_\_\_\_

5. Observe the outer part of the paramecium. The paramecium is surrounded by a part called the pellicle. What is the pellicle (pg. 83)?  
\_\_\_\_\_

6. Adjust your fine focus up and down. You should observe movement on the outside of the paramecium. These are its cilia. According to your textbook (pg. 83), what are cilia?  
\_\_\_\_\_



7. The cilia have three functions, what are they?  
\_\_\_\_\_

8. Look inside the organism, you should be able to observe a faint, star-shaped organelle. This is known as the contractile vacuole. What is its function?  
\_\_\_\_\_

9. Locate the nucleus. It should be a large circle, slightly different in color from the rest of the organelles. What is the function of the large nucleus?  
\_\_\_\_\_

10. The paramecium also has a small nucleus (you may not be able to see this). What is its function? \_\_\_\_\_

11. As the paramecium spins and twirls you should notice that one side of it looks indented. This is where material enters the paramecium. What is this opening called? \_\_\_\_\_  
What is its function? \_\_\_\_\_

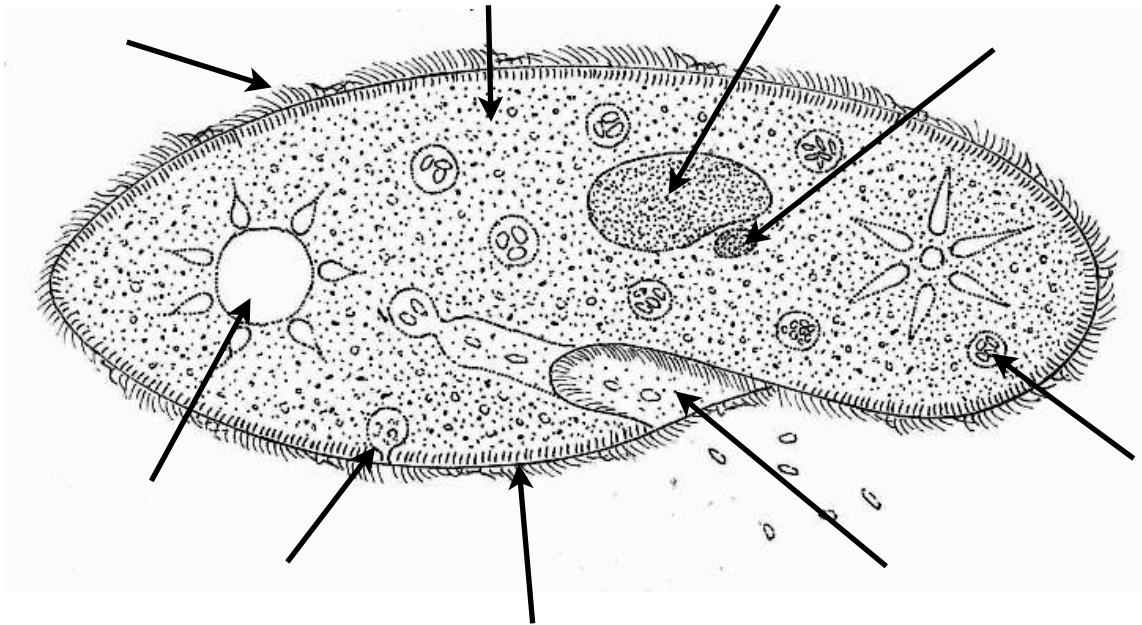
12. Locate the food vacuoles. Throughout the cells you should find small packages that come in a variety of colors. What is the function of the food vacuole?

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13. In the paramecium, waste leaves through the \_\_\_\_\_. Are you able to observe this in the organism? (Note: it will be difficult to find this, if you don't move on!)

#### Diagram

Label the following diagram with these parts: *anal pore*, *contractile vacuole*, *cytoplasm*, *cilia*, *food vacuole*, *oral groove*, *pellicle*, *large nucleus*, *small nucleus*.



#### Questions

1. Which group of protist (protozoa, algae, decomposers) do paramecium belong to?

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2. What subgroup of protist are paramecium (sarcodines, zooflagellates, etc.)?

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3. Are paramecium heterotrophs or autotrophs? Explain how you know.

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4. Paramecium have a pellicle. Do they have a cell membrane? \_\_\_\_\_  
How do you know (what source verifies this for you)? \_\_\_\_\_

5. What are two ways paramecium are able to reproduce?

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