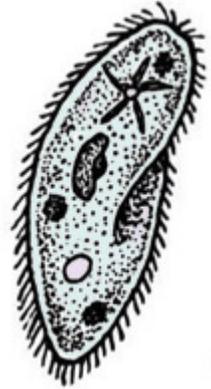


Paramecium

By Cindy Grigg

¹ Some "animals" are one single cell, or unicellular. This one cell must contain everything needed for survival. They are too small to be seen without a microscope, but they are fun and interesting to look at. One of these is a paramecium (pair-ah-me-see-um.) A paramecium does not become much larger than 0.3 mm.



² A paramecium (plural: paramecia) is called a ciliate. Ciliates (silly-ates) are named for the very small hair-like organelles they have on the outside of their cell. Paramecia have hundreds of cilia.

³ Why cilia? When you are less than a millimeter in body size, water is like thick syrup. Swimming like a fish would not be very efficient! If you want to swim fast and be able to maneuver, you need cilia. These tiny hairs act like many oars that push through the water.

⁴ Most ciliates like the paramecium are wonderful swimmers. Their speed of motion is about four times their own length per second. Some species are so fast that you must add a thickening agent to the water to slow the organism down enough to study it.

⁵ One thing that makes paramecia so interesting to study is their defense against predators. If another unicellular organism tries to eat it, the paramecium fires little stinging filaments called **trichocysts** (trick-o-sists) at the enemy.

⁶ Another interesting behavior is their way of escape. If the paramecium comes across an obstacle, it stops and reverses the beating of the cilia. This causes it to swim backward. It backs away from the obstacle or the predator at an angle and starts off in a new direction.

⁷ The cilia also are used in feeding. Paramecia feed on other microscopic organisms like bacteria. As the paramecium moves through the water, it rotates because of the action of the cilia. Small particles of food are swept into the gullet.

⁸ Paramecia are plentiful in freshwater ponds throughout the world. At least eight species have been identified. One species lives in sea water. Paramecia usually reproduce by fission, or splitting into two. Under suitable conditions, they may divide two or three times a day, and so large numbers may build up.

Name _____

Science Pd: _____

Paramecium

<p>1. What is unicellular?</p> <p><input type="radio"/> A Made of many cells</p> <p><input type="radio"/> B Made of only one cell</p>	<p>2. A paramecium is _____.</p> <p><input type="radio"/> A Very small</p> <p><input type="radio"/> B Very large</p> <p><input type="radio"/> C A plant</p> <p><input type="radio"/> D Bacteria</p>
<p>3. A ciliate is _____.</p> <p><input type="radio"/> A Something that has cilia</p> <p><input type="radio"/> B Something that cannot move</p> <p><input type="radio"/> C Something that has flagella</p> <p><input type="radio"/> D Something that has pseudopodia</p>	<p>4. Cilia are _____.</p> <p><input type="radio"/> A Silly bones</p> <p><input type="radio"/> B Very small hair-like organelles</p> <p><input type="radio"/> C The way a paramecium moves</p> <p><input type="radio"/> D Both b and c</p>
<p>5. What are trichocysts?</p> <p><input type="radio"/> A Little stinging filaments used as weapons</p> <p><input type="radio"/> B Little food storage vacuoles</p> <p><input type="radio"/> C Little hairs used for movement</p>	<p>6. What happens when a paramecium meets an obstacle?</p> <p><input type="radio"/> A It starves to death.</p> <p><input type="radio"/> B It reverses and goes in another direction.</p> <p><input type="radio"/> C It can't go farther.</p>
<p>7. Where are paramecia usually found?</p> <p><input type="radio"/> A In the dirt</p> <p><input type="radio"/> B In freshwater</p> <p><input type="radio"/> C In ocean water</p>	<p>8. How do paramecia reproduce?</p> <p><input type="radio"/> A They split in two.</p> <p><input type="radio"/> B They lay eggs.</p> <p><input type="radio"/> C First they get married, and then they have babies.</p>