

Name: _____

Class: _____

Date: _____

Single Celled Organism Function

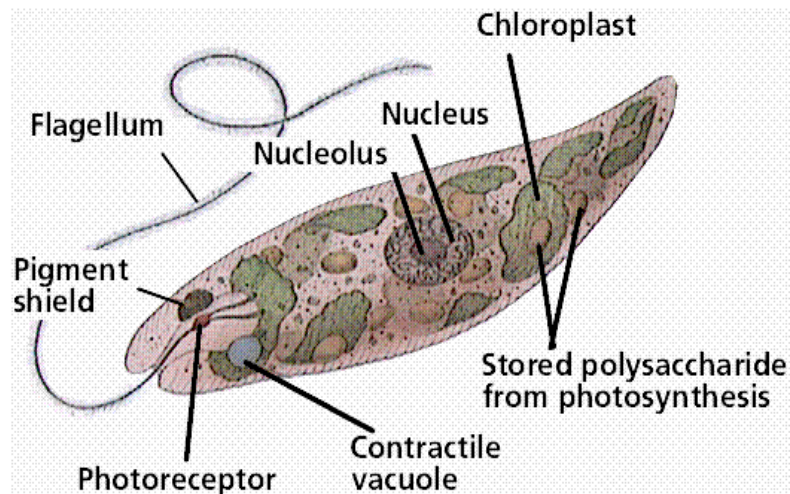
Just like humans, single celled organisms have to carry out the requirements (characteristics) of life in order to live, however, instead of using trillions of cells to do it they use 1.

In the following activity you are going to explain how single celled organisms complete these functions with just one cell.

1. In your body, your **brain** controls the function of your body. Identify the organelle that performs this function in a single celled organism.

2. What material is in the organelle from question 1 that allows it to complete this function?

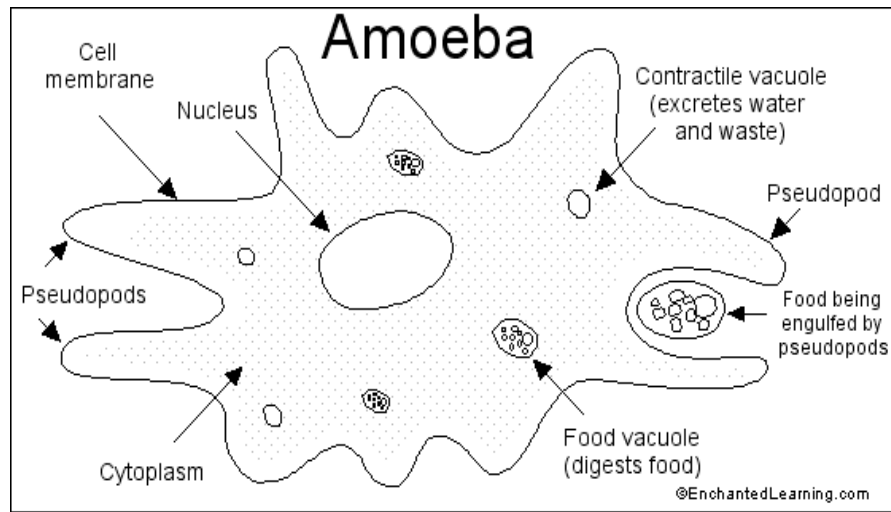
3. In your body, your hands allow you to make food that your body will need to get energy. Look at the picture below, what organelle allows this single-celled organism to get its food?



4. What is the name of the process by which this single-celled organism makes its food?

5. BONUS: What is the term for an organism that can make its own food?

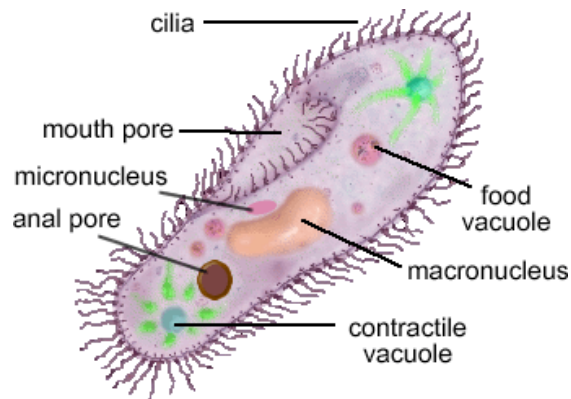
6. Look at the picture below, what organelle allows this single-celled organism to get its food?



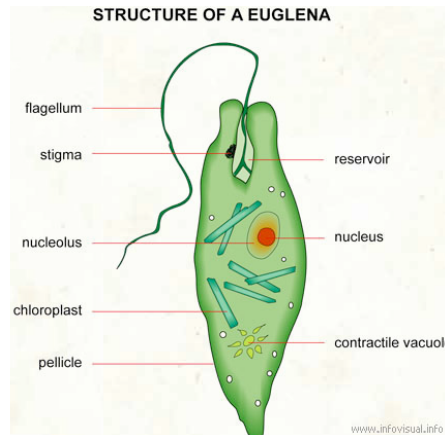
7. What is this process called? (cell eating)

8. In both of the situations above (#3 and #6) the organism is getting food. What organelle is needed to break down that food (glucose) into ENERGY for either of the cells?

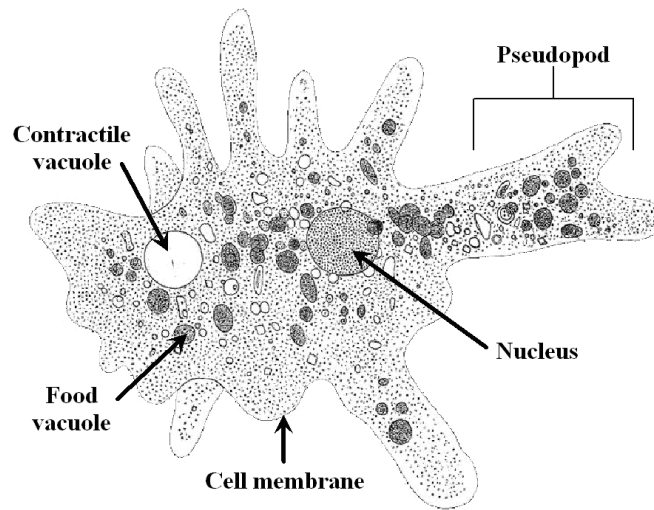
9. In your body, your muscle cells contract and relax when you need to move. In the following 3 pictures identify what part of the cell performs this function in the single celled organism pictured below **and** explain how it does this.



<http://www.biologycorner.com/resources/paramecium.gif>



http://www.infovisual.info/02/img_en/001%20Structure%20of%20a%20euglena.jpg



<http://shs.westport.k12.ct.us/mjvl/biology/cells/amoeba.gif>

10. In your body, extra glucose and other things like fluids, vitamins, and minerals are stored in tissues such as adipose tissue (fat tissue). Identify what part of the cell performs this function in the single celled organism.

11. In your body, your skin separates the inside for your body from the environment around it. Identify what part of the cell performs this function in the single celled organism and **explain how it does this**. (Hint: you will probably use the word semi-permeable in this explanation.)

12. In your body, most of your cells produce proteins, what part of the cell is responsible for this?
