Name Date Per

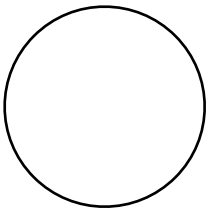
UNIT 8 | ACTIVITY | *Amoeba Observation Lab*

Purpose:

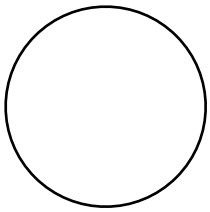
- To observe amoeba and how they move
- To identify the parts of an amoeba

Procedure

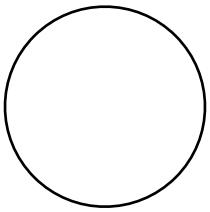
1. Obtain your slide materials from the back of the room (well slide and cover slip).
2. Bring this materials to the front. Ensure that the well side is facing in up so the water drop will be placed correctly on the slide.
3. Find an amoeba on lower power and work your way to high power.
   a. To verify you have found an amoeba, look for movement within the cell.
   b. Have Mr. Ower initial to verify you found an amoeba. _____
4. Sketch a drawing on the amoeba on high power in the first space below. Then, every 2 minutes after that, draw it again. Draw an arrow indicating the direction the cytoplasm is moving.



Amoeba at 0 min



Amoeba at 2 min



Amoeba at 4 min

5. You should have observed the cytoplasm moving. This is a process called protoplasmic streaming. What do you think is the purpose of protoplasmic streaming?

   _____

6. Locate a pseudopod. The pseudopods are the bulges that appear as the amoeba moves. What are two functions of the pseudopod?

   _____

7. Locate the contractile vacuole. It appears as a bubble within the amoeba. Use your book to write the definition (function) of the contractile vacuole.

   _____

8. Locate the nucleus. It looks similar to the contractile vacuole but has a rough texture to it. Use your book to write the definition (function) of the nucleus.

   _____

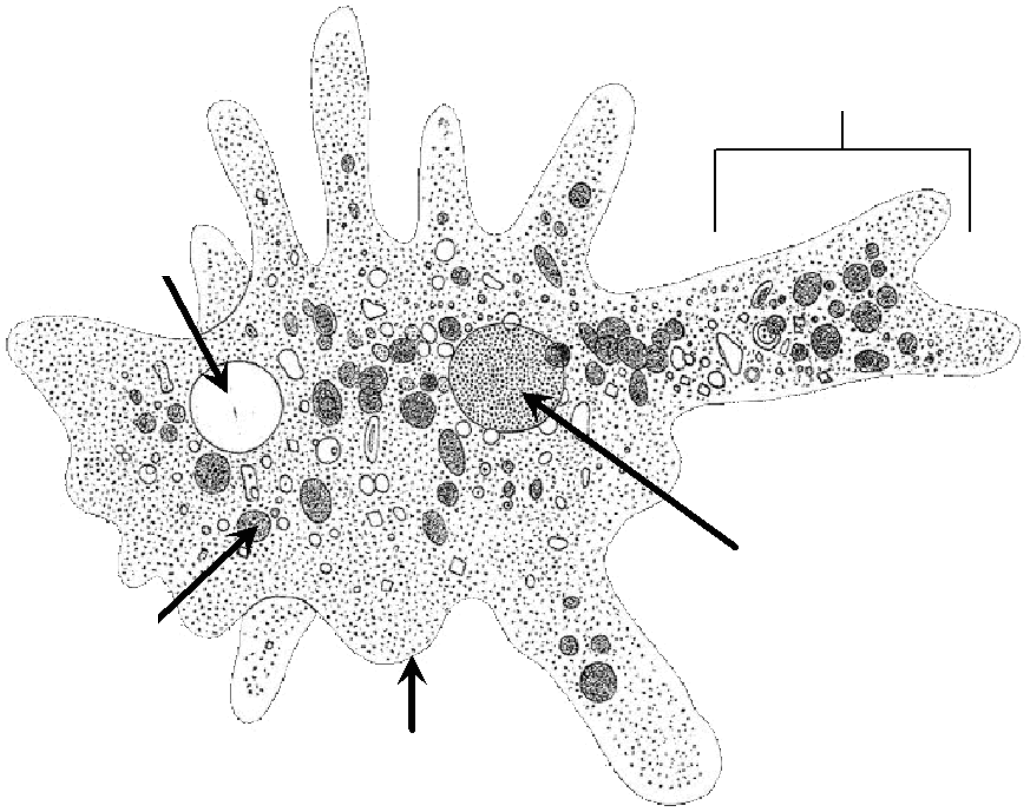
9. The amoeba obtains its food through endocytosis. It surrounds a food particle with its pseudopods and brings it into its cell. *This is just information. Move on!*

10. 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?

_____

Diagram

Below is a diagram of an amoeba. Based on what you learned, label the diagram with the following parts: *cell membrane*, *contractile vacuole*, *food vacuole*, *nucleus*, and *pseudopod*.



Questions

1. Which group (protozoa, algae, or decomposer) of protist do amoeba belong to?

_____

2. What is the technical name of amoebas (see notes!)? _____

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

_____

4. Why do amoebas have a contractile vacuole? Your answer must include the following words: osmosis, water, high concentration, and low concentration.

_____

_____

_____