

Name: _____ Community: _____ Date: _____

Single-Celled Organisms (aka Protists) Lab

The objective of this lab is to examine each type of single-celled organism under a microscope so that you can learn about the general shape and structures of movement for each.

Materials:

- Slides of each type of single-celled organism (amoeba, paramecium, euglena and volvox)
- Microscope

Basic Microscope Rules:

- Start with the stage all the way down (you should do this every time you put it away)
- Be sure it is focused on the lowest magnification (you should return it to this setting before you put it away)
- Clean the lenses with lense cleaning paper if needed
- Turn the light on before focusing
- Use the coarse focus (big knobs) to initially focus (remember to go past point of focus and then back to be sure your focus is exact)
- You can then tweak it with the fine focus knobs (the tiny knobs)
- Always remember to focus the slide on the lowest magnification before you try a higher magnification

Observations of Single-Celled Organisms:

Characteristics	Amoeba	Paramecium	Euglena	Volvox
General Observations (what do you see?)				
Structures for Movement (cilia, flagella, etc)				
Sketch of Slide Observation				
What Makes This Special (what does it have that the others don't?)				

Protist (Single Celled Organism) Video Lab

This lab is unique in that you will be using videos of the 4 main types of single celled organisms that we are studying to learn about the general shape, overall colors, structures for movement and food gathering mechanisms for each. You may need to do some additional research to determine specifics about each characteristic.

1. "Amoeba in Motion" <http://bit.ly/AmoebaInMotion>
2. "Paramecia Up Close and Personal" <http://bit.ly/ParameciumUpClose>
3. "Euglena in Darkfield at 100x, 200x and 400x" <http://bit.ly/EuglenaInDark>
4. "Flexible Movement in Euglena 2" <http://bit.ly/EuglenaFlagellum>
5. "Volvox 2" <http://bit.ly/Volvox2>

Making Predictions:

1. Which method of motility do you think is faster (cilia or flagella) and why?

Observations of Protists:

Characteristics	Amoeba	Paramecia	Euglena	Volvox
General Shape				
Overall Colors				
Structures for Movement				
Food Gathering Mechanisms				
Sketch of Single Celled Organisms:				