

Comparing Cells

Background:

In this lab, various parts of cells were observed and recorded. In addition, we also saw common parts of cells reappear throughout animal and plant cells.

Materials:

- Prepared Slides
- Light Microscope

Methods:

First, we reset the light microscope by switching to the low power lens. After that, the lens assembly was 'zoomed out' all the way so we could fit our first prepared slide (Frog blood) could fit on the stage. *We repeated this procedure for each individual slide until we had examined each prepared slide.*

Results:

See attached results sheet

Discussion: Part 1

1. Without microscopes, we wouldn't be able to find cures for diseases, examine the general cell structure. Without microscopes, we wouldn't have been able to prove the cell theory. Microscopes are a **key part** in Biology. Although they may seem simple, they provide us with an insight of things still to be seen.
2. Prokaryotic cells are much smaller than Eukaryotic cells. Prokaryotes lack a nucleus, so their DNA and RNA is contained in the chloroplast. In addition, Prokaryotic cells lack organelles, which contribute to its reduced size. In most cases, the only prokaryotic organism you will see will be algae or bacteria.
3.
 - 1) Cell membrane (or in the case of plants, the cell wall)
 - 2) Chloroplast
 - 3) (?) Vacuole (?)
 - 4) (?) Vesicles (?)

Discussion: Part 2

What new tools or techniques did you learn in this lab? Write a description of these tools and techniques and how they were used. What errors may have occurred during this lab? Describe them if any, and if they were from a flaw in the design or lab due to your performance with the tools & techniques.

When certain cells were examined, I felt like we should've at least **tried** to examine them under all powers, not just 100x magnification. Although, I did re-do some of the prepared slides just in case. I probably misread the instructions (which is my fault, if I got them wrong)... but in general I thought the lab was pretty straightforward.

Find a relationship of this lab to the current classroom subject matter. Look at the textbook to current, previous, or future sections to see which text topics relate to the lab topics. You should cite the chapter and page number from the textbook. After you list the book info, describe how it is related to this lab.

On page 74 of the textbook, general cell parts are specified. We used this to fill out our "Plant and Animal Cell Coloring" charts/pages in our Unit 3 organizer. I personally found this useful when writing my Analogy Presentation which was our project during this Unit. Besides, this whole unit 9... was pretty much all **about** cells and their parts!

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Summarize what you learned from this lab. This section should include definitions, explanations, and descriptions. This is the most important essay question#
INCOMPLETE

