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# Lab Activity: Your Own Cells

## Background:

## We have learned about the basics for cells in the human body. We learned that cells make up our bodies, cells do all the work in our bodies and that cells are way too small to be seen with the naked eye. With this in mind, we are going to have the opportunity to come up close and personal with our own cells!

## In this lab you are going to take a sample of your own cheek cells. These cells are going to be great examples of the types of cells that we will encounter in this course. I am going to ask you to identify and label different parts of the cells in order to remember the basic organelles and parts of a cell.

## Procedures:

1. Put a drop of methylene blue on a slide. Caution: methylene blue will stain clothes and skin.  
2. Gently scrape the inside of your cheek with the flat side of a toothpick. Scrape lightly.  
3. Stir the end of the toothpick in the stain and throw the toothpick away.  
4. Place a coverslip onto the slide  
5. Use the SCANNING (red) objective to focus. You probably will not see the cells at this power.  
6. Switch to low (yellow) power. Cells should be visible, but they will be small and look like nearly clear purplish blobs. If you are looking at something very dark purple, it is probably not a cell.  
7. Once you think you have located a cell, switch to high power (blue) and refocus. (Remember, do NOT use the coarse adjustment knob at this point)

3. Sketch the cell at low and high power. Label the nucleus, cytoplasm, and cell membrane of a single cell. Draw your cells to scale.

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| --- | --- |
| circle Low Power | circle High Power |

**Post Lab Questions:**

1. What type of cells are you looking at? What major category do they fall under in histology?
2. Why is methylene blue necessary?
3. Is the cheek cell a eukaryote or prokaryote? How do you know?
4. Why do you think the cheek cells are a good a good source of cells for this experiment?
5. List 2 organelles that were NOT visible but should have been in the cheek cell.