

Name: \_\_\_\_\_

# The Human Cheek Cell

1. List the 3 parts of the Cell Theory

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

2. Describe or define each of the following

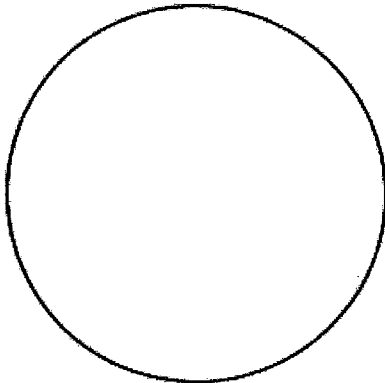
--cell membrane \_\_\_\_\_

--cytoplasm \_\_\_\_\_

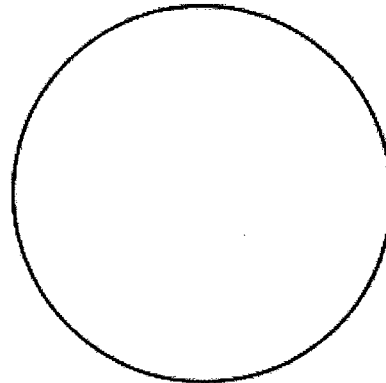
--nucleus \_\_\_\_\_

--organelle \_\_\_\_\_

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.



Low Power



High Power

5. Why is methylene blue necessary?

6. The light microscope used in the lab is not powerful enough to view other organelles in the cheek cell. What parts of the cell were visible.

6. List 2 organelles that were NOT visible but should have been in the cheek cell.

7. Is the cheek cell a eukaryote or prokaryote? How do you know?

8. Keeping in mind that the mouth is the first site of chemical digestion in a human. Your saliva starts the process of breaking down the food you eat. Keeping this in mind, what organelle do you think would be numerous inside the cells of your mouth?

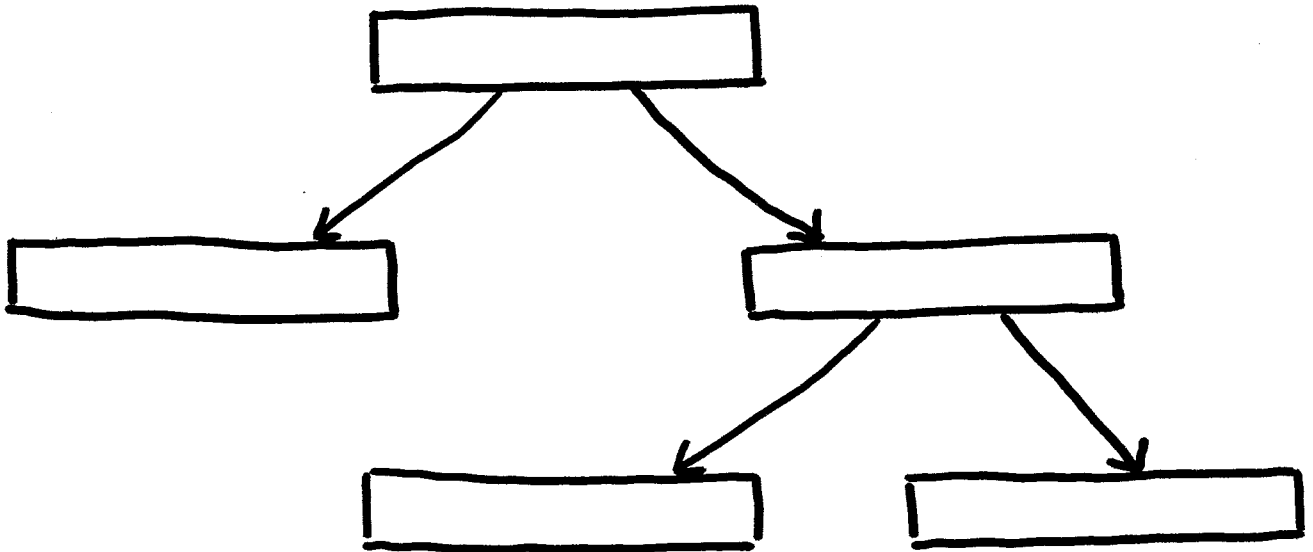
## Procedure:

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 objective to focus. You probably will not see the cells at this power.
6. Switch to low 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 and refocus. (Remember, do NOT use the coarse adjustment knob at this point)

# Types of Cells

Prokaryotic -

Eukaryotic -



VENN DIAGRAM