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| **Science 8****Buccal Cell Lab** | **Name:Date:Block:** |

**Objective:**

**Materials:**

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**Procedure:**

1. Check your lab station to ensure that you have all the needed materials.

1. Begin by having your teacher place 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.
3. Stir the end of the toothpick in the methylene blue on the slide and throw the toothpick in the garbage.
4. Place a cover slip onto the slide.
5. Place the slide on the stage and focus on low power. Cells should be visible, but they will be small and look like blue blobs. If you are looking at something very dark, it is probably not a buccal cell.
6. Once focused on low power, switch to medium power.
7. Then, switch to high power and refocus using the **fine focus knob*.*** Observe the buccal cells and draw what you see under **high power**. Make sure to include a title and total magnification. ***Label nucleus, cell membrane and cell membrane of only one cell.***

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Total Magnification: \_\_\_\_\_\_\_\_\_\_\_\_\_

1. Clean up and put away the equipment you have used.

**Analysis:**

1. Why is methylene blue necessary?
2. The light microscope used in the lab is not powerful enough to view other organelles in the buccal cell. What organelles were visible?
3. List two organelles that were **not** visible but should have been in the buccal cell.
4. 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 organelles do you think would be numerous inside buccal cells?
5. In class, you learned about 12 cell organelles. Which 2 would **not** be found in a buccal cell? Explain why.