



**Mr. Silluzio**  
**Biology Lesson Plan**  
**Date: 9/4/2018**

**Topic:** Characteristics of Life: Examination of Cells

**Summary:** This activity allows students the opportunity to gain experience using the light microscope as well as specific dyes used to make cells and components of cells more visible. Students use toothpicks to remove epithelial cells from inside the mouth and use them to prepare a wet slide. Students dye the cells using Lugol's Iodine and view them under the light microscope. The activity allows students to see their own cells under different levels of microscopy. The activity is used to 1) introduce students to the light microscope and 2) allow them to see actual cells, which provide a focus for much of the first part of the course. Students begin the activity following whole class instruction relevant to characteristics of life and biological hierarchy with special focus on cells.

**Goals/Objectives:**

- Understand the various parts of the light microscope and how to use the light microscope.
- Learn how to prepare a wet slide and understand the difference between a wet slide and a prepared slide.
- Observe an actual cell as introduction to further instruction associated with cell biology.

**Standards:**

- Students will differentiate between non-living and living things using their understanding of the characteristics of life.
- Students will learn microscope basics including parts of a compound light microscope, different types of microscopes, and how microscopes work.

**Time Required:** 1 80 minute period

**Prerequisite Knowledge:** Introductory Activity

**Accommodations:** All hard copies are backed up online. All students due to small class size are closely supervised.