

# Lesson Plan – Plant Cells

**Unit:** Cells and Microorganisms

**Topic:** Life Sciences

**Grade Level:** 5<sup>th</sup> grade

**Course:** Cells

**GPS:** S5L3b

**Summary:** In order for students to understand life science they must understand the most basic form of life, which is the cell. They must understand what it is made of and how it functions in order for there to life at all. This lesson is designed to introduce the plant cell along with all of its parts that allow it to function. They will identify the parts of the cell and describe each part's job. This lesson will also provide them with some general background information of the cell. The students will participate in many activities such as partner work, "writing on board," role play, and individually build a plant cell with food. A PowerPoint with a provided worksheet will be provided to students. The ticket out the door will be used if time permits. They will be asked to construct a graphic organizer of everything that they learned today. Students will also answer an essential question in their notebooks.

**Unit Objectives Addressed-** Students will be able to:

1. Identify each part of the plant cell and its function.

**Essential Question:** How does the plant cell function?

**Interest Approach:** The students will participate in partner discussion. I will provide them with three pictures and they will discuss it with their partner; then the whole class will share their opinions with each other. The students are then asked what a cell is and why it is important. Then, I will have them write their answers on the board to the question, "How many cells do you think are in this plant?"

**Objectives-** Students will be able to:

1. Identify the different structures of each part of the plant cell
2. Identify the cell parts that are only found in plant cells
3. Describe functions of the plant cell parts

**Materials:**

1. PowerPoint presentation
2. Bread

3. Peanut Butter
4. Banana Chips
5. Raisins
6. Grapes
7. Apples
8. Fruit Rollup
9. Plastic knives
10. Paper plates
11. Paper towels
12. Worksheet for lesson

**Procedure:**

1. Students come into class and immediately begin working on EQ provided on the board.
2. Once complete, students are reminded of announcements and due dates.
3. Interest Approach starts the PowerPoint lesson and partner work for constructing a list. Responses are also presented orally.
4. PowerPoint show moves on to basic information of the cell.
5. Then they will participate in the activity, “writing answers on board.” (Refer to show for questions)
6. Information is presented on all of the following parts and their function: Nucleus, Vacuole, Chloroplast, Mitochondria, Cell Wall, Cell Membrane, Cytoplasm.
7. Then some students will participate in the activity of role play to demonstrate the cell and its structures.
8. PowerPoint is then finished.
9. They will construct the plant cell and its parts using the food that is provided, and draw their cell on the worksheet.
10. Review questions will be presented to them.
11. The “Ticket out the Door,” will require them to construct a graphic organizer of everything they learned from the lesson.
12. Then the class will be wrapped up with a Q and A review session.

**Evaluation:**

1. The cell construction with the food done in class after PowerPoint presentation. (Objectives 1,2, and 3)
2. Students are asked to make a graphic organizer of the main points of the lesson for the, “Ticket out the Door.” (Objectives 1,2, and 3)

3. A formal written examination will be given at the end of this section that covers the cell parts, cell functions, and the differences in plant and animal cells that were covered in this unit. (Objectives 1,2, &3)

### **Modifications**

There isn't anything that I would modify about this lesson. It went really well in the classroom. The kids really enjoyed it especially when they got to eat it at the end of class.