

# Animal and Plant Cells

## Summary

Students will learn what animal and plant cells are and the differences that exist between the two. They will also learn about the organelles of a cell and what each of their function is to work together as system.

## Time Frame

1 class periods of 45 minutes each

## Group Size

Small Groups

## Life Skills

Thinking & Reasoning, Systems Thinking

## Materials

Microscope for each group Leaf sample for each microscope Science art books Textbook Art materials to create replicas of cells

## Background for Teachers

Teachers should have a clear understand of what a cell and how they function though organelles. They should know the differences of an animal cell and a plant cell.

## Student Prior Knowledge

All plants and animals, including humans, are alike in some ways and different in others. All plants and animals, including humans, have internal parts and external structures that function to keep them alive and help them grow and reproduce.

## Intended Learning Outcomes

Be able to name the parts of animals and plant cells. Be able to explain the differences of an animal cell and a plant a cell. Be able to discuss how each organelle plays a role in the function of a cell.

## Instructional Procedures

1. Guides discussion in to how all living things things are made up of cells. Both animals and plants, which are living things have cells. What are the similarities between plants and animals and what are the differences- ask the question: do you think their cells also differ? Talk about how inside these cells there are parts that work together to make cells do their jobs, like a factory. Every kind of job we do as living things, is actually really being done by cells, which is the reason we call cells, the building blocks of life. 2. We are going to compare the animal cell and the plant cell. Then we are going talk about how a cells works like a factory and do a comparison chart on the board to explain the functions of the organelles that will students understand how the cell works together. 3. We are going to have two lab activities: A. We are going to work in our assigned teams to put together a model of a cell with all the materials provided. Then each team will be assigned a couple of organelles and at the end of the project, they'll present their model as well as talking about their assigned organelle and explaining their function. B. Once we are done will the craft, present and explain project, we are going to look through our microscope to see what a leaf and its cells look like, what observations did the

students make, and illustrating those observations in their science art books. 4. Homework assignment: worksheet (website)

### Strategies for Diverse Learners

One way to ensure everyone is getting a chance to understand the information is by grouping students of different learning abilities together. Tutoring for the struggling student. And providing additional resources and challenges for the gifted student.

### Extensions

Media: Watching a high quality video that furthermore explains the functions of the cell.

### Assessment Plan

Quiz on Animal and Plant cell first thing next class period. After our class lecture, diagram discussing the functions, class activity and presentation, and homework assignment, the quiz should be completed with high accuracy.

### Bibliography

Animal Cell. (n.d.). Retrieved November 16, 2017, from <http://biology.tutorvista.com/animal-and-plant-cells/animal-cell.html>

### Authors

[Ingrid Martinez](#)