

Lesson - The Cell Structure (Grades 4-5)

By - Jason Jong

Materials:

- Cell Diagram (for reference)
- Plate (cell outline)
- Whipped cream (cytoplasm)
- licorice (cell membrane, golgi body/apparatus, endoplasmic reticulum)
- Nerds (ribosomes and lysosomes)
- M&M's (vacuole)
- Gum drop (Mitochondria)
- "Crown" brand churro snack or twizzlers (centrioles)

Procedure:

1. **Prerequisite:** students should know the organelles of a cell and their functions.
 - a. If they do not, teach the children the parts of the cell and each of its functions. Analogies to help the children fully comprehend the function are helpful.
 - i. ex) the nucleus is like the principal's office because it is the place where the nucleolus(principal) resides and instructions are sent out from there to the rest of the school to follow.
2. Have the students fill out a diagram of the cell. Once they have completed it, have them compare results with each other and go over it with them to make sure they know what to do.
3. Using the diagrams they filled out, have them begin to assemble their cell with the food items provided. (You may replace foods accordingly to your classroom and the children's needs)

Purpose:

The purpose of this activity is to teach students the function of the components of a cell and what they look like and their general placement in the cell itself. It also calls upon the student's creativity to use the snacks to try to represent each organelle. Activities like this stand out to children so they don't simply memorize what the organelle looks like or its purpose, they achieve a more vivid understanding of it.