

Cell Structure Project

Note: This project will be completed in pairs. As a partnership you will turn in one model, one paper, one illustration. After this project, you will be given a feedback form asking what you contributed, what your partner contributed, and what you did together.

Structure – a specialized part of a cell

1. The cell is the smallest unit of life. It is composed of many important structures, which are necessary to form an efficient, functioning unit.
2. Your mission is to make a **3-D model** of a plant or animal cell structure.
 - a. Take care in choosing the materials for your structure. Choose materials that you already have around the house or are easy and inexpensive to obtain.
 - b. The project must be well labeled, large enough to see clearly (*about one foot in diameter*), and transportable.
3. As well as the model, you must complete...
 - a. An **illustration** drawn of an entire cell that would have that structure to show the structure's location and size in the cell. Make the cell fill a sheet of paper. Label ALL structures (good practice!).
4. The project is due **Wednesday, SEPTEMBER 30, 2026**.
 - a. You must briefly present your structure in class in a two-minute **presentation**. You will have to explain:
 - i. What your model represents, and how to recognize your structure
 - ii. **Emphasize these questions for the students:**
 1. ***What is the function of the structure?***
 2. ***How does its shape/components complete this function?***
 - iii. Be clear and concise. Practice your delivery in front of your parents, or the mirror! Your peers and I will ask questions about your project, so be prepared.
5. Points are given for content, creativity, neatness, and accuracy of the model and paper. This is not a traditional assignment, so get your creative juices flowing!
6. Have fun!

Circle your structure:

Central vacuole
Mitochondria
Plasma membrane
Chloroplasts

Nucleus
Golgi Apparatus
Cell Wall
Ribosomes

Endoplasmic Reticulum (both)
Cytoplasm/Cytoskeleton
Lysosome
Mobility: Cilia/Flagella

Suggested Timeline:

Day One 9/21: Research and take notes on the information about your structure.

Day Two 9/22: Brainstorm how you want to make your model.

Day Three 9/23: Complete illustration and decide on what materials you'll need for your model.

Day Four - Five 9/26-9/28: Complete model.

Day Six 9/29 Practice presentation.

Day Seven 9/30: - PROJECT IS DUE

Presentations are October 1-2.

Rubric for your reference:

Cell Structure by _____

1. 3-D model
 - a. Completeness
 - b. Visibility to the whole class
 - c. Creativity _____ / 15
 2. Illustration of a cell with labels _____ / 5
 3. Presentation
 - a. Timeliness to 2 minutes
 - b. Pacing
 - c. Smoothness
 - d. Clear volume _____ / 10
- TOTAL _____ / 30