

CELL MODEL PROJECT

Objective: Construct a three-dimensional EDIBLE model of a plant OR animal cell. The purpose of this project is to familiarize yourself with the various parts of a cell while making the process more enjoyable than just studying a diagram.

All models must be made out of edible materials that will remain fresh for at least three days without refrigeration. Avoid using materials that have an unpleasant odor.

1. Decide whether you would like to construct a plant cell or an animal cell.

Each model must include all of the following organelles:

- | | | |
|--|------------------------------------|---|
| <input type="radio"/> Cell Membrane | <input type="radio"/> Cytoplasm | <input type="radio"/> Endoplasmic Reticulum |
| <input type="radio"/> Nucleus | <input type="radio"/> Ribosomes | <input type="radio"/> Cell Wall (plant cell only) |
| <input type="radio"/> Nucleolus | <input type="radio"/> Mitochondria | <input type="radio"/> Chloroplast (plant cell only) |
| <input type="radio"/> Nuclear Membrane | <input type="radio"/> Vacuoles | <input type="radio"/> Lysosomes (animal cell only) |
| <input type="radio"/> Chromosome | <input type="radio"/> Golgi Bodies | |

2. Draw a rough draft. Be sure to label each part of your model, and list what each part will be made of. Try to use food that is the shape of the organelle. (For example, ribosomes are small and grain-like, so use an item that is small and grain-like, such as sprinkles or rice.) You may use inedible props to assist in the design of your model, but they cannot represent any organelles. (For example, a toothpick may be used to hold an item in place.) Your rough draft will count as a separate lab grade.

3. Construct your model. It should be creative, unique, and attractive. Put the model together with care and quality!

»If you are having trouble getting any materials, please speak to Ms. Croce well before the due date. I will not help you the day before it is due!«

4. Complete a key based on your model that lists what each item is and what it represents. (For example, the sprinkles are the ribosomes.)

This project is worth 25% of your overall 3rd Quarter grade!

For pictures of past projects, visit croce.weebly.com and click on Cell Projects

Your final project is due on THURSDAY, MARCH 20, 2014

Student signature: _____

Parent signature: _____

CELL MODEL PROJECT GRADE SHEET

Name: _____

Plant

Animal

Is the model edible? _____ (10)

Is the cell the correct shape? (Square for plant cell, circular for animal cell) _____ (10)

Do you have the correct number of organelles? _____ (30)

ANIMAL CELL ORGANELLES

- Cell Membrane
- Nucleus
- Nucleolus
- Nuclear Membrane
- Chromosome
- Cytoplasm
- Ribosomes
- Mitochondria
- Endoplasmic Reticulum
- Golgi Bodies
- Vacuoles
- Lysosomes

PLANT CELL ORGANELLES

- Cell Wall
- Cell Membrane
- Nucleus
- Nucleolus
- Nuclear Membrane
- Chromosome
- Cytoplasm
- Ribosomes
- Mitochondria
- Endoplasmic Reticulum
- Golgi Bodies
- Vacuoles
- Chloroplast

Do the organelles look like the real cell part? _____ (20)

Are the organelles in the correct position/location? _____ (20)

Is spelling on the key correct? _____ (10)

Total Points = _____%

A B+ B C+ C D+ D F