

Name: _____

Date: _____

Build Your Own 3D Cell

Your Goal: To make a model cell to demonstrate an understanding of the basic structure and function of plant and animal cells. It must include a legend that explains the basic function of each part of the cell.

Overall Expectation:

2. Investigate and describe the role of cells within living things.

Specific Expectations:

- Describe the role of cells as a basic unit of life.
- Examine plant and animal structures; and identify contributing roles of cells.
- Work collaboratively on problems; and use appropriate language and formats to communicate ideas, procedures and results.

Your 3D Cell:

1. With a group you will choose either to make a model of a plant or animal cell. Decide on the items you will use to create model. **Due End of Class**
All models must be made out of materials that will not spoil.
2. Your project must be labeled.
3. Each model must include the following organelles.
 - a. Nucleus
 - b. Cell Membrane
 - c. Cell Wall
 - d. Chloroplasts
 - e. Cytoplasm
 - f. Mitochondria
 - g. Vacuoles
4. Your project must include a legend that includes the Cell Structure, representative material chosen, and cell function. Example:

Cell Structure	Representative Material Chosen	Cell Function
Nucleus	Balloon	The nucleus holds all the information needed to make every cell in the body.

3D Cell Assessment

Peer Feedback Checklist:

- Are the names of all group members on the front of the project?
- Are the cell type identified? Tell if it is a plant or animal cell.
- Is the model a 3D representation of a plant or animal cell?
- Are all the organelles included? (10 for plants cells, 9 for animal cells)
- Are the relationships between the parts shown correctly? Plant cell - are the chloroplasts around the vacuole?
- Are the materials acceptable and creative? The materials cannot be food products. **/2 marks if all included**

Group Work Mark determined by Group Members:

	3	2	1
Group Work	Was prepared for class and contributed to group work and discussion.	Was not prepared for class but contributed to group work and discussion	Was not prepared for class and did not contribute to group work in class.

3D Cell Rubric

	4	3	2	1	Insufficient/Blank
Model Cell Elements	Includes all required elements in the model cell.	Is missing one required element in the model cell.	Is missing two required elements in the model cell.	Is missing several elements in the model cell.	No Model Cell was created.
Legend Elements	Includes all required elements in the Legend.	Is missing one required element in the model cell.	Is missing two required elements in the model cell.	Is missing several elements in the model cell.	No Legend was created.
Model Cell Labels	All labels are correctly placed.	One label is not correctly placed.	Two Labels are not correctly placed.	Several labels are not correctly placed.	No labels on Cell Model.
Legend	All Cell functions are included, correct and detailed.	One cell function is incorrect and more details could have been given.	Two cell functions are incorrect and more details could have been given.	Several cell functions are incorrect.	Legend does not include cell function.

