

NAME: \_\_\_\_\_

GROUP: \_\_\_\_\_

**3-D Cell Model Project**  
**(10 points)**

Project Assigned: \_\_\_\_\_

Project Due: \_\_\_\_\_

Objective: By making a 3-D model of the cell, the student will become aware of the various organelles and structures which make up a plant or animal cell.

Guidelines:

- You may choose to make either a plant or animal cell.
- Your cell **must be 3-dimensional**, as was shown in class. This means it needs to have a front, back, and sides. It can not be a piece of paper with things glued on it. Your plant cell must be rectangular and/or your animal cell must be circular.
- It can be edible or non-edible.
- All parts of your cell **must be labeled** clearly in order to receive credit; I suggest using toothpicks and pieces of paper to make little flags, as was shown in class.
- Your representations of the **organelles must be similar to the ones seen in class:** for example, your nucleus can not be square. Review pages 174-181 in book, and also diagrams for plant and animals cells that we have gone over in class.
- **Be unique and creative**, use food, yarn, clay, Styrofoam, and anything else appropriate that you can think of, in any combination.

**You will use the attached rubric to see which organelles need to be present, accurate, and labeled. You will turn your copy of the rubric when you turn in your 3-D model.**

Name: \_\_\_\_\_

Group: \_\_\_\_\_

### 3-D Plant Cell Model Project Rubric

#### Grading:

You will initially start with a 10 for your project grade. You will lose points for the following items:

- Missing an organelle
- Missing a label on an organelle
- Organelle is mislabeled
- No name on project
- Plant cell is not square
- Project is sloppy
- **Project is late**
- Project is not three-dimensional

**Remember:** Your project grade is worth 10 points total. It is intended to help you better understand the cell and **improve your grade**. Please take this seriously and turn it in on time.

<u>Organelle</u>	<u>Present</u>	<u>Label</u>	<u>Total</u>
Cell Wall			
Cell Membrane			
Cytoplasm			
Nucleus			
Nucleolus			
Smooth ER			
Rough ER			
Ribosomes			
Golgi Complex			
Vacuoles			
Mitochondria			
Chloroplasts			

<u>General Project Guidelines</u>	<u>Total</u>
No name on project	
Plant cell is not square	
Sloppiness	
Not 3-dimensional	
Late: Date turned in: _____ # of days late: _____	

Final Grade: \_\_\_\_\_ /10

Comments:

Name: \_\_\_\_\_

Group: \_\_\_\_\_

### 3-D Animal Cell Model Project Rubric

#### Grading:

You will initially start with a 10 for your project grade. You will lose points for the following items:

- Missing an organelle
- Missing a label on an organelle
- Organelle is mislabeled
- No name on project
- Animal cell is not circular
- Project is sloppy
- **Project is late**
- Project is not three-dimensional

**Remember:** Your project grade is worth 10 points total. It is intended to help you better understand the cell and improve your grade. Please take this seriously and turn it in on time.

<u>Organelle</u>	<u>Present</u>	<u>Label</u>	<u>Total</u>
Cell Membrane			
Cytoplasm			
Nucleus			
Nucleolus			
Smooth ER			
Rough ER			
Ribosomes			
Golgi complex			
Vacuoles			
Mitochondria			
Lysosomes			

<u>General Project Guidelines</u>	<u>Total</u>
No name on project	
Animal cell is not circular	
Sloppiness	
Not 3-dimensional	
Late: Date turned in: _____ # of days late: _____	

Final Grade: \_\_\_\_\_ /10

Comments: