

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

### 3-D Plant/Animal Cell Model Project Rubric

#### Grading:

You will initially start with a 100 for your project grade. You will lose points for the following items:

- Missing an organelle (deduct 4 points for each organelle)
- Missing a label on an organelle (deduct 4 points for each label)
- Organelle is mislabeled (deduct 4 points for each mistake)
- No key (deduct 10 points)
- Incorrect descriptions for each labeled organelle (deduct 4 points each)
- No name on project (deduct 4 points)
- Plant cell is not square (deduct 20 points)
- Project is sloppy (deduct up to 20 points)
- **Project is late (deducted: 10 points per day: after 3 days project grade is a 0)**
- Project is not three-dimensional (deduct 30 points)

**Remember:** Your project grade is worth 100 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.

#### An example of the Cellular Structure Key:

<u>Organelle Label</u>	<u>Material in Model</u>	<u>Definition/Function</u>	
Cell Wall			
Cell Membrane			
Cytoplasm			
Nucleus			
Lysosomes			
Smooth ER			
Rough ER			
Ribosomes			
Golgi Complex			
Vacuole(s)			
Mitochondria			
Chloroplasts			

### 3-D Cell Model Project (100 points)



Project Assigned:

Project Due:

**Objective:** By making a 3-D model of the cell, you will become aware of the various organelles and structures which make up a plant or animal cell, together with their physiology.

**Guidelines:**

- You may choose to make either a plant or animal cell.
  - Your cell **must be 3-dimensional**. This means it needs to have a front, back, and sides. It cannot be a piece of paper with things glued on it. **Your plant cell must be rectangular or your animal cell must be circular.**
  - It can be edible or non-edible. If you choose to make an edible cell, DO NOT use anything that will spill or spoil. The use of anything PEANUT related is strictly prohibited.
  - All parts of your cell must be labeled clearly in order to receive credit. You may use toothpicks and pieces of paper to make little flags, for instance. Do not use anything sharp.
  - **A separate key must be provided for all labels of the organelles. A concise statement for each cellular structure, the material that you used in the model, and its function.**
  - Your representations of the organelles must be similar to the ones seen in class, for example, your nucleus cannot be square. Review your textbook, and also diagrams for plant and animals cells that we have or will go over in class. Of course, you can also Google plant and animal cell images to see variations of the cell types! Use Pinterest.
- Be unique and creative**, use food, yarn, candy, clay, Styrofoam, pasta, and anything else appropriate that you can think of, in any combination. You do not need to spend money to make the cell model.