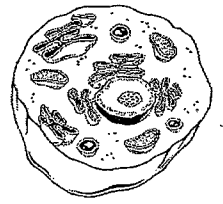


3-D Cell Model Project



Project Guidelines:

Due Date: _____

- 1) You may work individually OR with 1 partner
- 2) You must create a 3-dimensional model of eukaryotic cell (plant or animal). Be creative! Ideas may include but are not limited to making/using:

- diorama
- styrofoam
- pillow
- play-doh / moldable foam
- mobile
- pop up book
- costume
- any other materials you find around your house (you do NOT have to spend money to build an effective model)
- NO food components please!

Note:
Posters are NOT 3-dimensional!

- 3) Your cell must include at least 10 cell organelles. If you choose a plant cell, your model must include a large central vacuole, chloroplasts, and a cell wall. If you choose an animal cell, your model must include centrioles.
- 4) Each organelle must be distinguished from one another via use of labeling tags, a color code, legend key, etc.
- 5) Your model will be displayed in class for your peers to view and evaluate and will be graded by your teacher on the following components:

- 10 organelles properly represented (2 pts/organelle)----- 20 points
structurally and/or functionally with written justification (see chart on back)
- 3-D quality -----3 points
- Effort/Creativity-----2 points
- Written Reflection-----5 points

Total = 30 points

Name(s) _____

Type of Model (be as specific as possible) _____

3-Dimensional Cell Model – Assessment Rubric

| | <u>SELF</u> | <u>TEACHER</u> |
|---|--|--|
| Modeling of organelles (from chart on back) = (20 points) | _____ | _____ |
| 3 - Dimensional quality (0-3 points) = | _____ | _____ |
| Effort / creativity (0-2 points) = | _____ | _____ |
| Written Reflection (0-5 points) = | _____ | _____ |
| TOTAL (out of 30) = | <div style="border: 1px solid black; width: 60px; height: 25px; display: inline-block;"></div> | <div style="border: 1px solid black; width: 60px; height: 25px; display: inline-block;"></div> |

Name: _____

Period: _____

3-D Cell Model: Organelle Explanations

Directions: Explain the type of modeling used for all 10 organelles. Explain how your model accurately represents the structure and/or function of organelles in a living cell. Be specific and use your own words. Complete the chart below. This will determine how many organelle points your project receives.

| Organelle Name | Represented by: (be specific) | Structural, functional model or both? | Explanation | Points (out of 2) |
|----------------|----------------------------------|--|-------------|-------------------------|
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Organelle Points Total ____ /20

