

Creative Cell Projects



Use pages 16-24 in your textbook as a reference.

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| Project Timeline: |
| _____ Project Introduced |
| _____ Project Type Chosen |
| _____ Project Due Date |



Option #1: (Individual or Team)

Devise an original cell simile, such as, “The Cell is Like a City”. Select and explain supporting details of the simile to represent each of the organelles of a plant or animal cell. Each detail in your simile symbolizes an organelle in its structure and function (example - “Just as the principal’s office in a school contains the principal, who directs the activities of the school, so does the nucleus of a cell contains DNA, which...”) Along with your poster, create a large visual key of the organelles, describing what they represent. Some ideas are: A car, a house, a school, a garden. (Do not use “city”).

Option #2: (Team)

Show how dynamic the life of a plant or animal cell is by writing and acting out a role-play about materials as they enter and are used by the cell to make proteins. In your team appoint a director, a writer, and actors. The required organelles must be written into the role-play in a way that demonstrates their function. Creative props and costumes can be used.

Option #3: (Individual)

Write a story entitled, “Honey, I Shrunk Myself, so I could fit Inside a Cell.” In the story, describe your exploration of a plant or animal cell from the inside. Make sure you mention your interaction with each of the organelles in a way that demonstrates their functions. The use of a creative or humorous story line with pictures of your experiences is required. Write about:

1. How and where you entered the cell
2. What you experienced as you moved through the cell
3. Where and in what form you left the cell.

Option #4: (Individual)

Design and build an edible model of a plant or animal cell using edible food material to act as the cytoplasm and edible food objects to represent the organelles. Select each food object carefully to represent the structure and function of each organelle. Along with your model cell, create a key of the organelles, labeling the food objects you chose and the structure and function of each.

The Required Organelles:

Plant Cell: (10) cell membrane, cell wall, nucleus, ribosome, endoplasmic reticulum, Golgi body, vacuole, chloroplast, mitochondrion, and cytoplasm.

Animal Cell: (9) cell membrane, nucleus, ribosome, endoplasmic reticulum, Golgi body, vacuole, lysosome, cytoplasm, and mitochondrion.

Creative Cell Project Assessment

Point Value: 10/9=Excellent 8=Good 7=Basic 6=Poor

- _____ Project is **neat/well organized**; written work is typed without errors in mechanics.
- _____ Project has a **creative** component such as imaginative use of props/costumes, a humorous story line, original illustrations, or clever use of materials.
- _____ All the required organelles are included in the project.
- _____ All the required organelles are included in the written piece or key.
- _____ Project and written work illustrates accurate understanding of organelle **structures**.
- _____ Project and written work illustrates accurate understanding of organelle **functions**.

_____ Total Points Earned and Grade

Comments: