Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Class Period \_\_\_\_\_\_\_\_\_ **Due Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Cells Choice Board**

**Directions** Choose one of the 6 options to complete.

|  |  |  |
| --- | --- | --- |
| Make a children’s book about the organelles of plant or animal cells, with a different organelle on each page. For each organelle, include the name of the organelle, its function and a picture.  Also, compare the organelle to anything that has a similar job and include an explanation of the comparison, as well as a picture of the item you are comparing the organelle to. | Create an organelle amusement park map for a park which has attractions, shows, dining and shopping and compare these to the parts of the cell. For example, you might want visitors to ride the Ribosomes Rampage so they could watch proteins synthesize before their very eyes! Pick either a plant or animal cell and include each organelle and its function in a ride, show, restaurant or shopping area. Name your amusement park! | Create a fictional city where each part of the city represents an organelle in the cell. You may choose either a plant cell or an animal cell for your city. Label all the city parts, the organelles represented and WHY you chose it to represent that part of the city. For example, the city garbage department would be the lysosomes because they take care of the trash. Name your city! |
| Compare an animal or plant cell to a school. Choose parts of the school that have similar jobs as the organelles in your chosen cell. Draw a picture of the school and label each area. Also, explain the comparison of the cell part to the school part on the picture. | Find a magazine or newspaper picture of an everyday object which has a similar function as each cell structure. Write an analogy to show the similarity between the cell part and the everyday object. Be sure to explain the reasoning behind your analogies. **(The nucleus is like a brain because it controls and coordinates the activities of the whole cell in the same way the brain controls and coordinates activities of the body.)** | Make a list of body parts that serve the same function as each of the organelles in the animal cell. Your list should be in the format of a chart. The first column shows the organelle. The second column shows the corresponding body part. The third column explains how the two are similar.  Also, include a drawing of the body. Label each part of the body with the organelle you compared to that part.  For example: Cell Membrane - Skin - Keeps things in and out |

The following organelles should be included in each project:

**BASIC 11**

Cell Membrane

Nucleus

Nucleolus

Mitochondria

Lysosome

Vacuole

Endoplasmic Reticulum

Chromatin/Chromosomes (inside the nucleus, but not visible)

Cytoplasm

Ribosome

Golgi Apparatus

**OTHERS**

Cell Wall (PLANT CELL)

Chloroplast (PLANT CELL)

Centriole (ANIMAL CELL)

Flagella (ANIMAL CELL)

**Organelles of the Cell**

**Use this chart to help you with your project.**

|  |  |  |  |
| --- | --- | --- | --- |
| **Cell Part** | **Function** | **Picture** | **Way to Remember (comparison)** |
| **Plasma Membrane**  **(Cell Membrane)** |  |  |  |
| **Cytoplasm** |  |  |  |
| **Ribosomes** |  |  |  |
| **Endoplasmic Reticulum** |  |  |  |
| **Golgi Apparatus** |  |  |  |
| **Mitochondria** |  |  |  |
| **Lysosomes** |  |  |  |
| **Vacuole** |  |  |  |
| **Chromatin/**  **Chromosomes** |  |  |  |
| **Nucleus** |  |  |  |
| **Nucleolus** |  |  |  |
| **Centrioles**  **(animal cell only)** |  |  |  |
| **Flagella/Cilia**  **(animal cell only)** |  |  |  |
| **Cell Wall**  **(plant cell only)** |  |  |  |
| **Chloroplasts**  **(plant cell only)** |  |  |  |

**CELLS Choice Board Rubric**

|  |  |  |  |
| --- | --- | --- | --- |
| **Area** | **Points Possible** | **Student Grade** | **Teacher Grade** |
| **All required organelles (13 total)** | **10** |  |  |
| **The comparison/analogy is clear and makes sense** | **13** |  |  |
| **All required parts of the project are included** | **15** |  |  |
| **Project is neat, creative & best work** | **12** |  |  |
| **TOTAL** | **50** |  |  |