Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ **Due Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Organelle Project**

**Directions** Choose **one** of the 5 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. | 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 **WHY** you made that comparison of the cell part to the school part on the picture. | 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! |
| Find a magazine or newspaper picture of an everyday object (or print one) 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. **(Example: The mitochondria is like a battery because it provides energy for the cell in the same way a battery provides energy for an electronic device.)** | **You come up with your own comparison!** For example you can compare the parts of a cell to the different rides on an amusement park or the parts of a body.  Make sure to label the parts and the organelle they are being compared to and explain **WHY** you made that comparison. | **Organelle Project Rubric**   |  |  | | --- | --- | | **Area** | **Points Possible** | | **All required organelles (13 total) & All required parts of the chosen project are included** | **10** | | **The comparison/analogy is clear and makes sense** | **13** | | **Project is neat, creative & best work** | **7** | | **TOTAL** | **30** | |

The following organelles should be included in each project (13 total organelles):

**BASIC 11**

Cell Membrane

Nucleus

Nucleolus

Mitochondria

Lysosome

Vacuole

Ribosomes

Golgi Apparatus

Smooth Endoplasmic Reticulum

Rough Endoplasmic Reticulum

Cytoplasm

**OTHERS (choose either plant or animal)**

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)** |  |  |  |