Cell Structure and Function Project

\*In place of a normal **unit test** you will be completing the following project to demonstrate your knowledge of the function of a cell, cell structures (organelles), and their functions in the cell.

\*The ONLY supplies we will provide are copy paper, scissors, colored pencils/markers, and glue.

\* Please come prepared with supplies for your work days: Tuesday, March 21st & Wednesday, March 22nd.

\*Projects are due when you enter class on Thursday, March 23rd. Each group/individual will be presenting their project to the class.

This project can be completed individually or with a small group (no more than 3 people).

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| **Cell Analogy Project** | | | |
| * **You will be creating an analogy for the cell & its organelles. You can choose to do this for a Plant Cell or an Animal Cell.** * **You should be creating an analogy for the cell that compares the organelles of the cell & their functions, to the parts of your analogy.** * **You will be turning this analogy into a visual display in the form of a colored drawing on a poster board or display board.** * **Analogy ideas are listed below or you can come up with your own idea.**   **-Sport or Sports Team**  **-House or Family**  **-Car**  **-Shopping Mall**  **-Specific Movie, Book, or Play**  **-Specific City: Gotham City, Louisville, Stars Hollow, etc. (We have used a generic city as an example in Miss Mac’s class, so this is not allowed.)**   * **Displays must contain a realistic drawing of a Plant or Animal Cell in the center, with the analogies for each organelle displayed around the cell.** * **Each analogy should be written in complete sentences and include a picture or drawing of the object the organelle is being compared with.** * **It is acceptable to make portions of your project 3D.** | | | |
| Cell Organelles you must include: | | | |
| Animal Cells: | | Plant Cells: | |
| * Cell Membrane * Cytoplasm * Nucleus * Mitochondria * Endoplasmic Reticulum | * Golgi Bodies/Apparatus * Ribosomes * Vacuoles * Lysosomes | * Cell Membrane * Cytoplasm * Nucleus * Mitochondria * Endoplasmic Reticulum | * Golgi Bodies/Apparatus * Ribosomes * Vacuoles * Cell Wall and Chloroplasts |

Name(s): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

You must submit this paper with your project!

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|  | **Labeled on Cell Drawing (2 pts.)** | **Not Included** | **Analogy Description included with Picture of comparison object (6 pts.)** | | **Not Included** |  | **Points** |
| Cell Membrane |  |  |  | |  |  |
| Cytoplasm |  |  |  | |  |  |
| Nucleus |  |  |  | |  |  |
| Mitochondria |  |  |  | |  |  |
| Endoplasmic Reticulum |  |  |  | |  |  |
| Golgi Apparatus |  |  |  | |  |  |
| Ribosomes |  |  |  | |  |  |
| Vacuoles |  |  |  | |  |  |
| Lysosomes (Animal Cell Only) |  |  |  | |  |  |
| Cell Wall and Chloroplasts (Plant Cell Only) |  |  |  | |  |  |
|  | **GREAT (10 pts.)** | **Acceptable (7 pts.)** | **Insufficient (≤ 6 pts.)** | |  |  |
| Project was Neat & Attractive  AND/OR  Presentation was appropriate & engaging. |  |  |  | |  |  |  |
| **Project Turned in on Time 3 pts.** | | | | | | | |
| **YES** | | | | **NO** | | | |
|  | | | |  | | | |
|  | | | Total Points= \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_/85 pts. | | | | |
| Additional Comments: | | | | | | | |