Cell Analogy Project

Introduction:

Cells need to carry on the same basic functions as we do to sustain life; the difference is cells do this with much smaller parts. These smaller structures that allow the cell to function are called organelles – “tiny organs.” Also plant and animal cells have some similar parts and some parts that are not similar.

It’s only common sense that if you are able to relate things you learned in class to everyday things, you’ll remember it better. It’s not every day that you and your friends sit around at Starbucks discussing the rough endoplasmic reticulum. However, you probably do discuss things like cars, your homes, and places to visit, etc… Therefore, your task in this assignment is to relate the different cell organelles to an everyday situation or thing using an analogy.

Your Task:

You will come up with an analogy for the plant cell and its organelles. Your analogy will be represented in the form of a poster that represents a cell and its organelles. You should compare roles of all the organelles on the attached chart to a part of a city.

Example:

* The **Nucleus** of a cell is the main control center of the cell. It holds all of the information needed for the cell to function properly. Therefore, it’s like **city hall** because this is where the information, policy and governing is done to run the city.

The Poster:

Step 1: Fill out the attached chart.

Step 2: You will need to draw out a city that contains all of the city part analogies listed in your chart (building, parks, roads, etc.) Each city part must be labeled with wither a picture of the organelle or the name if the organelle with the logo (the Nuclear City Hall). You will then need to create a key that has the following information; name of organelle, drawing of organelle and drawing of analogous city part.

Cell City Rubric

Name and Period on front of poster \_\_\_\_\_/2pts

Title \_\_\_\_\_/5pts

Color \_\_\_\_\_/5pts

Neatness/Effort \_\_\_\_\_/10pts

Key (name, picture of organelle and picture of city part)

Cell Membrane \_\_\_\_\_/3pts

Nucleus \_\_\_\_\_/3pts

Nucleolus \_\_\_\_\_/3pts

Lysosome \_\_\_\_\_/3pts

Ribosome \_\_\_\_\_/3pts

Endoplasmic Reticulum

Rough and smooth \_\_\_\_\_/3pts

Golgi Apparatus \_\_\_\_\_/3pts

Mitochondria \_\_\_\_\_/3pts

Chloroplast \_\_\_\_\_/3pts

Vacuole \_\_\_\_\_/3pts

Cell Wall \_\_\_\_\_/3pts

Cytoskeleton \_\_\_\_\_/3pts

All city parts are drawn in cell \_\_\_\_\_/12pts

Total \_\_\_\_\_/70pts