

Cell Analogy Model Instructions

Due Date: _____

Create an analogy for a cell.

Illustrate the systems of a working cell in terms of the systems of the real world.

Produce a product that is neat, clear and creative. Creativity and Neatness count in this project.

Guidelines:

- Choose a real world working system and decide how each organelle of the eukaryotic cell can be compared to the components and functions of the real world system.
- Some ideas are: hospital, city, mall, country, restaurant, zoo, garden, castle, etc.
- Create a large poster that is a visual representation of your analogy illustrating all of the parts representing the cell organelles/structures.
- Make sure your analogous parts are logical, accurate representations of the organelles.
- Label each part of your system with its name and the cell structure name.
[Example: principal-nucleus] Print your labels NEATLY in black. **Check your spelling.**
- Create a typed table as a key to go with your poster with the following four columns: Organelle Name, Organelle Function, Analogous Structure, Analogy Explanation.
- Attach the table to the front of the poster. Do not cover anything. Make sure it is secure.
- Label/name your poster and table with the type of cell and the analogous system.
- Make sure your name is on the back of the poster and on the table.

The analogy poster you choose to create must include the following organelles:

PLANT CELL

- _____ Cell Membrane
- _____ Cell Wall
- _____ Chloroplast
- _____ Cytoplasm
- _____ Mitochondria
- _____ Chromatin
- _____ Nucleus
- _____ Nucleolus
- _____ Golgi Complex (body)
- _____ Smooth Endoplasmic Reticulum
- _____ Rough Endoplasmic Reticulum
- _____ Vacuoles
- _____ Nuclear Membrane
- _____ Ribosomes

ANIMAL CELL

- _____ Cell Membrane
- _____ Cytoplasm
- _____ Mitochondria
- _____ Nucleus
- _____ Nucleolus
- _____ Chromatin
- _____ Golgi Complex (body)
- _____ Smooth Endoplasmic Reticulum
- _____ Rough Endoplasmic Reticulum
- _____ Vacuoles
- _____ Nuclear Membrane
- _____ Ribosomes
- _____ Lysosomes

Example of Table for Cell as a School:

Organelle Name	Organelle Function	Analogous Structure	Analogy Explanation
nucleus	Controls all of the cell's functions; contains the cell's genetic material,	Principal	I chose the principal because he is in charge of all of the school's activities. He also passes out the information important to the running of the school.

