

Name: _____

Period: _____

Date Due: _____

CELL ANALOGIES PROJECT

"It takes 3 million cells to cover the head of a pin, but only one cell project to cover a large part of your Biology grade!"

1. **DRAW** and **COLOR** a plant **OR** animal cell in pencil or pen on ½ sheet of an 8.5x11 plain piece of unlined white paper. Include the following structures (where applicable):

| <i>BASIC ONES</i> | | <i>Additional possible parts</i> |
|------------------------|-----------------------|---|
| plasma membrane | nucleus | cilia |
| cell wall (if present) | nucleolus | flagellum |
| centriole | mitochondrion | lysosome |
| vacuole | Golgi apparatus | Check with me about other structures |
| chloroplast | ribosome | Cytoskeletal elements (microtubules, microfilaments, etc..) |
| cytoskeleton | endoplasmic reticulum | |
| cytoplasm | nuclear envelope | |
| chromatin | | |

2. Correctly identify your cell as a plant cell or an animal cell.

3. Paste/create your cell drawing on the cover page complete with an appropriate title for your project. Your first and last name, date and period should be on front cover also.

4. Find out the function (or main job) each structure above has in the cell. (Read your book, check the glossary, the internet and/or class notes.)

5. Think of an analogy that describes the similarity between a particular cell part and an everyday object. Find a magazine, newspaper picture, photo off of the computer/internet or draw a picture of an everyday object which has a similar function (or use) as each cell structure. In writing your analogies, be sure to explain the reasoning behind your analogies. (e.g. 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.)

6. Paste/create the pictures of analogous objects on the subsequent pages along with your neatly written analogies.

7. Make identifiers on the front cover's cell drawing to be able to find each structure in the book or create a table of contents page that makes it easy to find each structure's page.

GRADING POLICY: (40 points possible)

A(36-40pts) - Neat, complete, 15 accurate analogies

B (32-35 pts) - Neat, complete, 12-15 total analogies

C (28-31pts) - Complete, labeled but <12 analogies or incongruous analogies

D (24-27pts) - Messy, incomplete, or incorrect structures for a certain cell type.

F - Too messy for words, wrong, incomplete.

0 - No collage turned in will result in 0 points.

The assignment is due on _____ We will have very little time in class to work on these, so plan accordingly.