

## Cell Analogy Project

Name: \_\_\_\_\_

Now that you have learned about the organelles in a cell, you need to think of an analogy, comparing the cell and its organelles to something of your choice, as I did below, comparing a cell to a factory. This project should be on paper LARGER than notebook paper, and should be in full color. The following criteria will be graded:

/10pts Make sure you include a **labeled** picture of what you are **comparing your cell to**

/10pts Make sure you list and compare each of the 10 organelles to something in your picture

/20pts Make sure you include a typed/word processes chart with the **function of each part** of your analogy, **and why it is like the organelle.**

Please choose **ONE** type of cell (plant or animal), and check off each organelle as you add it in your chart:

### Plant Cell

- Nucleus
- Cell wall
- Chloroplast
- Golgi body
- vacuole
- Mitochondrion
- cell membrane
- ribosomes
- Endoplasmic reticulum
- lysosome

### Animal Cell

- Nucleus
- flagella
- lysosome
- Golgi body
- Contractile vacuole
- Mitochondrion
- cell membrane
- ribosomes
- Endoplasmic reticulum
- cytoskeleton

Please attach this checklist to your analogy

Due \_\_\_\_\_

I have included a chart as an example

## The Animal Cell as a Factory

| Factory Part         | Function   | Organelle             |
|----------------------|--|-----------------------|
| Central Office       | Manages activities, initiates production, controls activities of factory | Nucleus               |
| Assembly Line        | Assembles raw materials to manufacture items                             | Ribosome              |
| Packaging & Shipping | Packs products for distribution  | Golgi Bodies          |
| Conveyer Belt        | Moves product within the factory   | Endoplasmic reticulum |
| Generator            | Produces energy for the factory  | Mitochondrion         |
| Storage area         | Stores materials for later use   | Vacuole               |
| Collection center    | Breaks down and recycles used parts                                      | Lysosome              |
| Door                 | Allows for things to enter and leave the factory                         | Cell membrane         |
| Bricks and Steel     | Construction materials that keep the factory from collapsing             | cytoskeleton          |
|                      |  |                       |