

- The goal of this project is to come up with analogous concepts for all of the organelles of a cell. You will **draw** a cell (plant or animal) with all of the organelles present in cross section, similar to the drawing below. Then, using images cut out neatly from magazines, you will label and **write a single sentence explaining how the organelle is like the image you selected**. For example;

**Vacuole –**

***A vacuole is like this garbage can because it stores things the cell can not have floating around in the cytoplasm because it would make the cell sick.***

The idea behind making the analogies is to force you to think about the function of the organelle in everyday terms, and the drawing makes you think about its form. The relation between form and function is one of the key concepts we need to establish in your study of biology. Make sense? Good.

- Make sure you include all of the organelles for cell (plant or animal) that are listed here: cell membrane, cytoplasm, nucleus, nuclear membrane, endoplasmic reticulum (both smooth and rough), golgi apparatus, mitochondria, vacuole, ribosomes. For plant cells include chloroplast, cell wall and plastid. Refer to pages 30 – 35 in Nelson Biology.
- Posters must be bigger than 11"x17" (big construction paper) but no larger than 24"x36" poster board.
- The cell should be hand drawn and the images should be cut out neatly from magazines or created in some other creative fashion. 3-D objects are acceptable as long as they are firmly attached to the poster and will not decay.
- This project will be worth 30 marks. A maximum of 20 marks will be awarded for content and a maximum of 10 marks will be awarded for presentaion.
- Do the poster. Do it well. It's due on \_\_\_\_\_. If for any reason your poster is late please let your teacher know. Don't try and hide it... if you are fair, I will be fair.



Vacuole –  
The vacuole is like this water bottle because it stores water and nutrients the cell might need

