

Lab Activity: Cell Structure and Function

Research the organelles found in a cell.

Your group has been assigned the organelle _____

Day 1

1. Your group will research the organelle. Be sure to include the following information:

- If it is found in a prokaryotic cell, eukaryotic cell or both.
 - If it is found in a plant cell, animal cell or both.
 - Explain where the organelle is found in the cell (nucleus or cytoplasm)
 - Explain the function of the organelle (what it does).
- Find 2-3 cell types where organelle is different. (ex: muscle cell: multinucleated)

Teacher note: The function of the organelles is a major focus of this activity. Relating the functions to different types of cells is also critical. The assessment of this activity should not be a diagram of the cell to label the specific parts but rather a comparison of why some organelles are in some cells but not others. The assessment should also include the relationship of the cell organelles to the life processes (protein synthesis, respiration, photosynthesis, etc.).

2. Construct a model of your organelle. Your group will need 4 copies of the organelle. Make sure it is colorful and labeled. Tomorrow you will add your model to a class model of the cell. Make sure it is large enough to be seen. Make your organelle as realistic looking as possible and be prepared to explain its function in the cell to the class tomorrow.
3. Each member in the group must write a paragraph describing the organelle researched. Include all information discussed in step number 1. It must be in your own words and will help you prepare for your oral presentation.

Day 2

4. Your group will add your model to the classroom cell and teach the class about your organelle. Be sure to include all information found in #1.
5. As each group presents their information, complete the organelle chart below.

Cell Organelles

Name: _____

Organelle	Prokaryotic Or Eukaryotic or Both	Plant Or Animal or Both	Location in cell (nucleus or cytoplasm)	Describe the Function
Nucleus				
Cell Membrane				
Cytoplasm				
Ribosomes				
Endoplasmic Reticulum				
Golgi Apparatus				
Lysosomes				
Mitochondria				
Chloroplasts				
Cell Wall				
Plasmid				
Chromosome				