

## Grade 8 Science: Plant and Animal Cells Research Assignment

Plant and animal cells have been extensively researched in the past decade and exciting research continues to this day. In particular, scientists have looked deep inside of these cells and have discovered several distinct “organelles” or very important structures or bodies – each of which performs very important but specific tasks. Learning about each of these organelles has helped scientists understand exactly how cells work and remain healthy.

Individually, research the following organelles: These organelles are briefly described in the text book on pages 28 and 29.

1. Cell Membrane
2. Cell Wall
3. Nuclear membrane
4. Nucleus
5. Cytoplasm
6. Vacuoles
7. Mitochondria
8. Endoplasmic Reticulum
9. Golgi Body (or Golgi apparatus)
10. Chloroplasts
11. Lysosomes
12. Chromosomes
13. Chromatin
14. Centrioles
15. Ribosomes

Create a chart as follows:

| <b>Organelle Name</b><br>(spelled correctly) | <b>Structure</b>   | <b>Function</b>                                  | <b>“P” or “A”</b>                   |
|--|--|--|-------------------------------------|
|  | Describe the structure<br>“Made of... looks like”<br>“Located where in the cell?”<br>“What does it contain?” | Describe what job it does<br>“How does it work?” | found in a Plant<br>or Animal cell. |

You can create your chart on paper or using one of the computer applications. You may also include a picture in your chart if you desire.

This assignment precludes several other assignments (Namely: The Edible cell design lab – Cell Analogies Assignment – Cell organelle test or quiz) – each of which is directly related to your knowledge and understanding of the above organelles.