Purpose: The main goal of a cell is to produce proteins which are used as building blocks in a variety of ways (hair, muscle, other tissues, repair, growth, enzymes, etc.). There are five steps, and hence five products, you must complete in this project.

1) In this project, you will learn about the structures that comprise a cell by creating a **Cell Function Table**. This table must be hand-written for credit. Every *individual* must complete this project. **On this part of the project, you may work by yourself or... by yourself.** Due within TWO DAYS of receiving this project handout. **DUE:**

You must run a campaign to get your assigned cell organelle elected as The Most Important Organelle. You will have to argue that, without your organelle, the cell and the organism and consequently the world as we know it will collapse. I expect you to understand the details of your organelles. Here's what you have to do:

2) You must create **one poster** championing the greatness of your organelle. This must be posted in the classroom/science hallway. Include a picture of your organelle, and identify the organelle function in some way. Other campaign paraphernalia will be accepted for posting in the room with pre-approved permission of the classroom instructor. This should be very visual, think of the iconic Obama Hope poster. **Due within FIVE DAYS of receiving this project handout.** **DUE:**

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**Breaking News**

"The rumors, accusations, and chest pounding resounded throughout the community of Cellville. Organelles, though normally an organized group working together well, were a fragmented group. It seems that certain organelles had the notion they were more important or performed a more important function than other fellow organelles.

"If it wasn't for us, you couldn't exist", shouted the mitochondria.

"Well, I beg to differ", exclaimed the chloroplast.

Cellville was divided.

"Please, please", pleaded ribosome, "A Cell divided cannot stand."

"I say I perform the most important function in Cellville and I know that, if asked, the majority of the other organelles would agree", boasted the cell membrane.

"Yes, I think Mr. Do Nothing Accurately, has a point", added the nucleus. "Let's take some time to organize a campaign to inform the other organelles of our important functions and then put it to a vote."

"I feel more secure if everything is in its place", muttered the cytoskeleton, so we need to establish the procedures, rules, and requirements."
3) In addition to your poster, you must create a campaign pamphlet (8x11 trifold) and contribute to the Organelle Campaign Headquarters Google site. Each will describe how totally awesome your organelle is.

a) Pamphlet: Turn it in the pamphlet for the teacher to make copies and then pass them around to classmates, teachers, or administrators. Have extra copies in case a “reporter” shows up.

b) Google Site: There will be a main site for the class that you will be given a page to access. Edit it to include all of the same information as on the pamphlet. Most people don’t read paper anymore, technology is key!

For both, include a catchy graphics and details as to the structure and function of the organelle. Be sure to relate the structure of the organelle to its function. It is crucial for you to make the connection for your voter about why your organelle is the most important. Tell your voter why your organelle is important for survival of the organism. Be very detailed about the jobs it performs. Link the organelle to survival of the organism. Can you link the organelle to survival of an ecosystem? The whole entire world? Okay, maybe I’m being dramatic, but that is how campaigns can be! Get into this.

- Quotes of doctors or other experts (real ones, not made up)? Great idea. Pictures? Perfect.
- Your pamphlet & Google page must include references (APA or MLA formatting only).
- DUE: _________________________

c) Mudslinging. The fun stuff. It seems every politician does it. You need to run a smear campaign against at least 3 other organelles. Look up what diseases are associated with mutations or malfunctions of their organelles and create some kind of product against it (poster, pamphlet, fact sheet, T shirt, radio ad, etc.). You must include mudslinging in your campaign speech. You must have a smear campaign against THREE other organelles and one must appear on your Google Site. Then, post it and spread around the dirt liberally before Election Day.

a. DUE: _________________________

d) Election Day: Campaign speeches - You need to prepare a campaign speech. You may either video this before Election Day. You will be presenting your speech to the class. In your speech, you need to convince the voters based on structure and function that your organelle is the most important. You have to try to deflect the smear campaigns that have hit you during the week of mudslinging madness that precedes speeches. Limit the speeches to 5 minutes. I will get the giant hook and remove you from the stage otherwise (aka take off points). You must provide me with a transcript of the speech on the same day, complete with references in APA formatting. After the speeches, the students and select faculty members will complete a ballot.

a. DUE: _________________________

You will be allowed two votes on Election Day; one for your organelle and one for another organelle. (No secret ballots in this election).

Beyond what I have required, you can be as creative as is ethically correct to win this campaign. That said, no threatening or bribing other students, please. But extra posters, t-shirts, buttons, ribbons, stickers, pencils, . . . you get the idea. . . . go crazy.

Good Luck! And may the voters be ever in your favor!