Cell Organelle Research Guide

After completing the case study "Little Girl Lost", you will be assigned a disorder that involves one of the many cell organelles.

Your Task:

1. Research (using educational/medical websites) your given disorder and organelle and relate the symptoms to the function of the cell organelle it is caused by.
2. Create a mini poster detailing information about the disease, organelle, and the relationship between the two.

My/Our organelle is_____ and the disease is_____.

Part 1: The Organelle

1. What is an organelle?

2. What is/are the function(s) of the organelle that I am researching?

3. Sketch your organelle in the box to the right.

Organelle_____

Part 2: The Disease

1. What are the symptoms of the disease?

2. How does your organelle relate to the disease?

3. How does the function of the organelle relate to the symptoms of the disease? (Because the organelle can't ... it causes the cell to ... which causes this symptom...)

4. Are there any treatments or cures for the disease? If so, how does the treatment/cure work?

Organelle Research Mini-Poster Rubric

Criteria

Cell Organelle Research Guide completed and turned in	/ 2
Correct poster format (see example below)	/ 2
Neatness and Legibility of Poster	/ 2
Colored picture of organelle	/ 2
Function(s) of organelle	/ 2
Disease symptoms	/ 3
Disease treatments	/ 2
Conclusion includes explanation of how functions of the organelle relate to disease symptoms in complete sentences	/ 5
TOTAL	/20

Example of Correct Poster Format

Name of Organelle	Name of Disease
• Color picture • Function	• Symptoms • Treatment
Conclusion • How does the function of the organelle relate to the disease?	

4th pd

1. Alzheimer's disease and the golgi apparatus
2. Meckel- Gruber syndrome and centrioles
3. Hailey Hailey disease and golgi
4. Diamond-blackfan Anemia and ribosomes
5. Shwachman-Diamond Syndrome and ribosomes
6. Cystic fibrosis and the ER/ cell membrane
7. ER stress
8. Hyaline membrane disease and the cell membrane
9. Fabry Disease, Tay Sachs, Gauchers , Pompe and lysosomes
10. Barth Disease and the mitochondria
11. Luft disease and the mitochondria
12. Sickle cell anemia and the cytoskeleton
13. Duchenne MD and cytoskeleton
14. Nuclear envelope- Emery-Dryfuss, MD, Progeria
15. Nucleolus- Treacher Collins syndrome, Survival Motor neuron spinal muscular atrophy

3rd pd

16. Alzheimer's disease and the golgi apparatus
17. Meckel- Gruber syndrome and centrioles
18. Hailey Hailey disease and golgi
19. Diamond-blackfan Anemia and ribosomes
20. Shwachman-Diamond Syndrome and ribosomes
21. Cystic fibrosis and the ER/ cell membrane
22. ER stress
23. Hyaline membrane disease and the cell membrane
24. Fabry Disease, Tay Sachs, Gouchers , Pompe and lysosomes
25. Barth Disease and the mitochondria
26. Luft disease and the mitochondria
27. Sickle cell anemia and the cytoskeleton
28. Duchenne MD and cytoskeleton
29. Nuclear envelope- Emery-Dryfuss, Progeria
30. Nucleolus- Treacher Collins syndrome, Survival Motor neuron spinal muscular atrophy