No Structural Assistance:

Student Example #1 (20/20):

In my cell, the ribosomes are not functioning. This will not be good for the cell because the cell would not have protein and there would be no use for the RNA.DNA has the information of what kinds of specific proteins the cell needs, but the DNA does not leave the nucleus, to transport the data to the ribosomes. So, there is a copy of the DNA called RNA the RNA can leave the nucleus and goes to ribosomes to make protein for the cell. Without ribosomes the RNA has no where to go to make the protein and there is no proteins for the cell.To conclude, if the cell has ribosomes that are not functioning, then there would not be protein for the cell and there would be no use for the RNA. This would cause the cell to not have protein and end up dying.

Student Example #2 (18/20):

I have a cell and I have just recently noticed that my cell has a golgi body but the golgi body is not working and that is not good because the golgi body has the job to repackage and send proteins outside the cell and the golgi body also has the task to produce lysosomes.

Since the golgi body has the job of re packaging and sending the proteins outside the cell, without it the proteins couldn't be sent anywhere because the golgi body is not doing its job inside the cell.That also means there would be no lysosomes to help the cell because the golgi body produces the lysosomes and without the golgi body that takes away another thing to help the cell survive viruses and other problems.

To conclude. My cell is not in good shape and will face some problems without the work golgi body functioning in the cell because the golgi body needs to repackage proteins and send them outside the cell but since the golgi body isn't working that can't happen, and the golgi body produces lysosomes to help the cell and since the golgi body isn't working then the lysosomes can't be produced to help the cell survive.

Paragraph Frames:

Student Example #1 (20/20):
Student writing is bolded.

In my cell, the **mitochondrion** is not functioning. This will not be good for the cell because **the cell needs energy to survive and to do important tasks, such as mitosis.**

The cell wouldn't be able to do anything, because mitochondria produce ATP, which is energy, and without energy the cell can't do anything. When the cell only has a small amount of ATP for a period of time, it will die.

Since the cell can't move, it can't go find food, so it wouldn't be able to make it's own food or go engulf food or bacteria because it doesn't have the energy. Without being able to do that, the cell will starve. Also, if it was a white blood cell, it wouldn't be able to engulf bacteria, which kills the bacteria. This means that the white blood cells and other types of cells would get attacked by bacteria more often and could die from a bacteria attack.

To conclude, if the cell has a **mitochondrion** that is not functioning, **then the cell will not be able to move or eat**. This would cause t**he cell to be disabled or die.**

Student Example #2 (13/20):
Student writing is bolded.

Introduction:
In my cell, the **mitochondria** is not functioning. This will not be good for the cell because **the cell will run out of heat and energy.**

Explanation sentences 1: Since the mitochondria isn't producing atps, The cell will eventually not be able to use anything: chloroplasts, nucleus, endoplasmic reticulum, etc.

Explanation sentences 2: Since respiration produces heat, the cell would become too cold in frigid weather and die.

Conclusion:
To conclude, if the cell has **mitochondria** that is not functioning, then it **can't produce heat and energy.** This would cause **the cell to die from cold or not being able to do work; whichever happens first.**

Sentence Starters:

Student Example #1 (20/20):
Student writing is bolded.

In my cell, the **nucleus** is not functioning. This will not be good for the cell because (*list two ideas*): **There would be no DNA and the cell would not be able to protect itself or function properly**

The first problem the cell might have is: **no DNA.** This problem would happen because (explain the first problem in at least 2 sentences) **If there is no nucleus, there would be no DNA as DNA is stored inside the nucleus. DNA is the code of the cell, and without DNA the ribosome can not send out the proteins and codes the DNA has. Also, with no DNA, mitosis, the process of nucleus division and duplicating the cell, would not be performed. Mitosis needs chromosomes, tightly wound DNA. But if there was no DNA in the nucleus, there would be no mitosis and nothing would grow if cells couldn't split.**

The second problem the cell might have is: **The cell would not be able to protect itself and function right.** This problem would happen because (explain the second problem in at least 2 sentences) **The nucleus is the control center of the brain. It tells the other organelles what should be made. It tells the cell membrane to make pseudopods to move, it tells the Endoplasmic Reticulum to make protein, etc. The nucleus, builds defensins and slicer enzymes, things the cell uses to protect itself. Without these things the nucleus makes and the orders the nucleus gives, the cell would not be able to function and the cell would be vulnerable to virus attacks.**

To conclude, if the cell has **a nucleus** that is not functioning, then **there would be no DNA and the cell would not be able to protect itself or function properly**. This would cause the cell to **lose protein, grow weaker, and die.**

Student Example #2(15/20):
Student writing is bolded.

In my plant cell, the **cell membrane** is not functioning. This will not be good for the cell because. **Now anything can enter the cell and anything could leave the cell. Which means harmful things can enter the cell. But also good things can leave the cell.**

The first problem the cell might have is: **harmful things can now enter the cell.** This problem would happen because. **Since the cell doesn't have a cell membrane now harmful things can enter the cell. like viruses which could damage the cell**.

The second problem the cell might have is . **Good things might leave the cell.** This problem would happen because. **Since there is no membrane. The membrane is suppose to control what goes in and out of the cell but without it anything can enter and leave the cell. So something beneficial might leave the cell**

To conclude, if the cell has a membrane that is not functioning, **then bad things can enter the cell and beneficial things can leave the cell.** This would cause **damage to the cell.**