Name: Date:

Station 2- The Nucleus

Function of the nucleus:

 . Structures the nucleus depends on:

*
*

Station 4- Cells to Tissues

How do organelles make up cells?

 . How do cells make tissues?

 . Provide examples of tissues: 

*
*
*
*

Are all tissues the same?

 .

|  |  |
| --- | --- |
| **PROKARYOTE** | **EUKARYOTE** |
|  |  |

 ce l l s

Station 1- Prokaryote or Eukaryote?

Explain how you can tell by looking at an illustration if a cell is prokaryotic or eukaryotic?

 .

|  |
| --- |
| Station 3- Prokaryotes or Eukaryotes?**Among your eukaryotic organisms, circle the ones with animal cells and put a rectangle around the ones with plant cells. Leave all others blank.** |
| Station 5- RibosomesFunction:  . |
| * C:\Users\heatherm.stuart\AppData\Local\Microsoft\Windows\INetCache\Content.MSO\21AD49E8.tmpStation 6- **What is the function of the chloroplast?**
*
*
 |

Station 13- Cell Membrane

The function of the cell membrane is

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_. 2-3 reasons why it’s important:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Eukaryote

Prokaryote

Station 12- Prokaryotic vs. Eukaryotic Cells. **Use the Venn Diagram to Complete the task.**

Station 15- MYSTERY CELL

What type of cell do you think you are viewing under the microscope? Explain your reasoning:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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**Station 16 Cell Analogy- Compare a cell to a factory**

Determine which organelles are best represented by each type of factory component

Station 14 What is the cytoplasm?

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\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  |  |  |
| --- | --- | --- |
| **Factory Component** | **Description/Job** | **Organelle most closely associated:** |
| Main office | Controls and manages the activities at the factory, initiates production and provides the blueprints for the products. |  |
| Packaging and Shipping | Packs products and sends them out for distribution. |  |
| Generator | Produces the electricity required to run the factory. |  |
| Doors to the outside with buzzer to only let approved personnel and products into the factory. | Determines what can leave the factory and what can enter the factory. |  |
| Recycle center | Breaks down old or damaged products to use the parts. |  |

Station 8- BRAINSTORM **What do you think would happen if the nucleus was removed from your cells? List some ideas:**

*
*
*
*

 

Station 11- Plant Cells vs. Animal Cells Using your answers for Station #10 above, explain why animal cells do NOT need or why they are different in organelles that are found in plant cells

Animal cells do not need

 because

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Animal cells do not need

 because

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 .

Animal cells do not need

 because \_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Station 10 - Plant Cells vs. Animal Cells 3 organelles found in PLANT cells, but absent or different in plant cells

*
*
*

Station 9- Tay-Sachs Disease

What malfunctioned organelle do you think causes Tay-Sachs Disease? List 2-3 reasons why:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
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Station 7- Leigh Disease

What malfunctioned organelle do you think causes Leigh Disease? List 2-3 reasons why:

*
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_