**Goal 2: Cells Introduction** Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Pd\_\_\_\_

**Learning Target(s)—I can... How are cells classified?**

* Describe the Cell Theory.
* Differentiate between prokaryotes and eukaryotes.

**Cell Introduction Notes**

1. Intro to The Cell

* \_\_\_\_\_\_\_\_\_: The \_\_\_\_\_\_\_\_\_\_\_\_ unit of \_\_\_\_\_\_\_\_\_ and the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ unit of \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ that can carry out all of the processes of \_\_\_\_\_\_\_\_\_\_\_\_.

1. **Discovery of the Cell**

Match each scientist to his discovery from the video

\_\_\_\_\_ Robert Hooke a. Discovered that animals were made up of cells

\_\_\_\_\_Anton Van Leeuwen Hoek b. Discovered that plants were made up of cells

\_\_\_\_\_Matthias Schleiden c. Discovered the cellular composition of cork and introduced

the word cell to science.

\_\_\_\_\_Theodor Schwann d. Stated that all living things come from other living things.

\_\_\_\_\_Rudolph Virchow e. “Animacules” were discovered; discovered bacteria from a

sample of saliva from his mouth

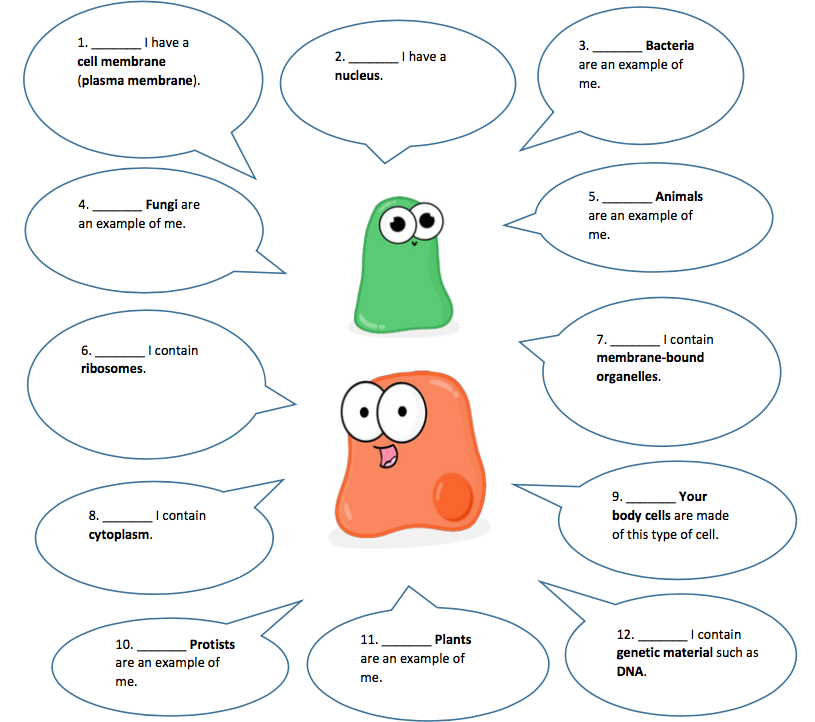
* Made possible by the development of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

1. **Cell Theory**: The contributions of these scientists created what we call the cell theory:
2. **Prokaryotes vs. Eukaryotes**

|  |  |  |
| --- | --- | --- |
| **Characteristics** | **Prokaryotes** | **Eukaryotes** |
| Unicellular or multicellular? |  |  |
| Nucleus? |  |  |
| Membrane-bound organelles? |  |  |
| Complexity |  |  |
| Specialized functions? |  |  |
| Genetic Material |  |  |
| Types of Cells |  |  |

1. **Cell Types**: Complete the comparison chart for the different types of cells.

|  |  |  |
| --- | --- | --- |
| **Cell Type** | **Description** | **Picture** |
| **Bacterial Cells**  [ Prokaryote / Eukaryote ] | See above |  |
| **Animal Cells**  [ Prokaryote / Eukaryote ] |  |  |
| **Plant Cells**  [ Prokaryote / Eukaryote ] |  |  |

**Amoeba Sisters: Cells Intro** <https://youtu.be/8IlzKri08kk>

oeba Sisters: Prokaryotic vs. Eukaryotic Cells WS page 1 goes here!

**Prokaryotes-Eukaryote Comparison**: Compare and contrast Prokaryotes and Eukaryotes in the space below. It must take up the full space and include color. Include the following terms:

|  |  |  |  |
| --- | --- | --- | --- |
| Animal cells | Archaea | Bacteria | Cell membrane |
| Cell wall | Cytoplasm | DNA | Eukaryote/eukaryotic |
| Fungus cells | Genetic material | Membrane-bound organelles | Multicellular |
| Nucleus | Plant ells | Prokaryote/prokaryotic | Protist cells |
| Ribosomes | Unicellular |  |  |

**Check Your Understanding:** Use your notes to answer the following questions in complete sentences.

1. What are the three parts of the cell theory?
2. Choose 3 scientists. How did each one contribute to the cell theory?
3. Compare and contrast prokaryotes and eukaryotes.
4. Compare and contrast plant and animal cells.