**Cells of Plants and Animals**

**(Microslides 102)**

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*In this lab, you will view a variety of plant and animal cells. For each slide, you will draw and picture and answer the questions related to each cell. Some of the answers will be found in the reading booklet, while other questions will be answered by viewing the cells.*

**Introduction**

*Read the introduction in the booklet.*

1. Scientists refer to cells as …
2. What is the estimated number of cells in a human body?
3. Why are all cells NOT the same exact size and shape?
4. What is the significant difference between plant animal cells?

**Slide 1: Cheek-Lining Cells**

*View slide 1 and read “Cheek-Lining Cells” in the booklet.*

1. Draw, color, and label the parts of the cell.

Label the cytoplasm and cell membrane.

1. What part of your body would you expect to find these cells?
2. When viewing the slide, describe the appearance of the nucleus.
3. What is the function of the nucleus?
4. What is the function of cytoplasm?

**Slide 2: Onion-Skin Cells**

*View slide 2 and read “Onion-Skin Cells” in the booklet.*

1. Draw, color, and label the parts of the cell.

Label the nucleus, cytoplasm, cell membrane, and cell wall.

1. Which of these organelles is only found in plant cells?
2. What is the function of the cell wall?
3. What is the significant difference between the cheek cell (slide 1) and the onion cell?

**Slide 3: Spirogyra Cell**

*View slide 3 and read “Spirogyra Cell” in the booklet.*

1. Draw, color, and label the parts of the cell.

Label the cell wall.

1. What makes this cell unique?
2. What “group” does this cell belong to?

**Slide 4: Amoeba**

*View slide 4 and read “Amoeba” in the booklet.*

1. Draw, color, and label the parts of the cell.

Label the nucleus.

1. What type of organism is an Amoeba?
2. What is its habitat?
3. How does the Amoeba obtain its food?

**Slide 5: Green Leaf Cells**

*View slide 5 and read “Green Leaf Cells” in the booklet.*

1. Draw, color, and label the parts of the cell.

Label the stomates, veins, and chlorophyll.

1. Describe the appearance of the green leaf cell.
2. What is the job of the stomates?
3. What is the job of veins in a plant cell?

**Slide 6: Wood Cells**

*View slide 6 and read “Wood Cells” in the booklet.*

1. Draw, color, and label the parts of the cell.

*Label the cell walls.*

1. Why do these cells have no nucleus or cytoplasm?

**Slide 7: Bone Cells**

*View slide 7 and read “Bone Cells” in the booklet.*

1. Draw, color, and label the parts of the cell.

Label the blood vessels.

1. If bone is made of cells, is bone alive? Explain.

**Slide 8: Brain Cells**

*View slide 8 and read “Brain Cells” in the booklet.*

1. Draw, color, and label the parts of the cell.
2. What are the fibers in the brain cell used for?
3. How does the brain cell compare to the cheek cell (slide 1)?

**Conclusion: After viewing the 8 slides and your drawings, describe the similarities and differences between plant and animal cells.**