

Name \_\_\_\_\_  
Class Period \_\_\_\_\_  
Date \_\_\_\_\_  
Lab Partner \_\_\_\_\_

## Cell Type Lab

**Objective:** To determine the differences in cell types.

**Materials:** Microscope, slides, lab report, Petri dishes, colored pencils

**Procedure:** Pick one slide from each of the following categories.

### Group A

Pancreas  
Artery  
Kidney  
Pig Liver  
Rabbit Ovary  
Thyroid Gland  
Spinal Cord  
Mammal Lung  
Human Cerebrum

### Group B

Squamous Epithelium Smear  
Epithelium Composite  
Ciliated Epithelium Trachea

### Group C

Bone Ground

### Group D

Adipose Tissue

### Group E

Frog Blood Smear  
Human Blood Smear

### Group F

Smooth Muscle  
Striated Muscle  
Muscle Composite

Follow the following rules and draw something from each of the slides you observe.

- Title the page.
- Trace a Petri dish on the paper. (The circle now represents the field of view.)
- Draw in the circle exactly (This includes color) what you see through the microscope. Objects should be the same size and location as they are in the field of view.
- Under the circle, write the power (in number form) the object was seen under.

**Data: YOU WILL HAVE SIX DRAWINGS**

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**Questions:**

1. Match the cell to the correct type:

plant/animal

bacterial

prokaryote

eukaryote

2. Explain the differences between the two types of cells.

3. Why would there be chloroplasts in a leaf cell, but not in a root cell?

4. What is this process called?

5. What organelle creates the energy necessary for a cell to work?

6. Why would a heart cell contain more mitochondria than a cell found in the skin?

7. What is the major difference between mitochondria and the other animal cell organelles?

8. What do mitochondria and chloroplasts have in common?

9. Why was the invention of the microscope important to science?