

**Chapter 4- Lab (Regular)
Tissue Identification**

Purpose: To identify, compare and contrast the different types of human body tissues.

Materials: compound light microscope, prepared epithelial tissue slides, prepared connective tissue slides, prepared muscle tissue slides, prepared nervous tissue slides

Technology Needed: Camera (smart phone or other electronic device), Google Drive App, CamScanner App, or other Comparable Apps, Computer with internet access

Procedure: **Before you begin the lab:**

1. Your group needs to share their student gmail addresses.
2. Go to your google drive and click on "Shared With Me" on the left of the screen.
3. Open "Copy of Lab- Tissue Identification Template."
4. One of you needs to copy the presentation that I shared with all students.
DO NOT TYPE ON MY TEMPLATE!
5. Rename your copy by PERIOD and TABLE #. Example: **Lab- Tissue Identification 42**
6. Share this presentation with your group members and me_rmanalastas@hartdistrict.org so everyone can edit and work on the lab report collaboratively at the same time.
7. Make sure every member in your group, can edit the "Shared" presentation.

During the Lab

1. You will be given a set of tissue slides. The teacher will show you the tissues that you must identify on the flex cam. Examples have also been provided for you in the chapter, lab section of the class website
2. Find the tissues beginning in low power and then find the image in high power.
3. On your electronic device, open the application CamScanner.
4. Take a picture of the tissue, under high power, and upload it as a JPEG to your G-Drive.
 - You will have to adjust the picture size and save it as original before uploading it to your G-Drive.
 - You can upload your pictures all at once or as individuals.

Instructions for Uploading a Picture from CamScanner to the G-Drive App.

- a. In the picture menu tap EDIT and check all of the pictures that you want to upload by tapping the picture.
 - b. When finished, on the bottom right hand corner of the screen, tap the arrow. A menu of choices, including UPLOAD, will appear.
 - c. Tap on UPLOAD and a menu of locations will appear. Choose Google Drive.
 - d. Tap JPG to upload the picture as a JPEG file.
From here you may need to specify a folder you would like to upload it to.
 - e. When you have selected a destination to upload your pictures, tap on UPLOAD HERE in the upper right hand corner. Uploading may take a few minutes depending on your internet connection.
 - f. Go to your G-Drive and see if your pictures have uploaded. The pictures may be in a ZIP folder. If this is the case, then open the folder and click DOWNLOAD in the bottom right hand corner. This will download the folder for you. Make sure you save it to your desktop for ease of locating.
5. When your pictures are uploaded, go to your "Shared" Tissue Identification Lab Presentation.
 6. Begin inserting the pictures onto the correct slide.
 7. Label the pictures using the label list provided on the slide. You will need to use the "Text Box," "Shapes," and/or "Lines" icons in the presentation task bar. An example of labeling has been provided.
 8. Repeat steps 2-4.
 9. Answer the conclusion questions on your presentation.

****If you have any questions, see me during tutorial.**

****Students are not limited to the method above for uploading and inserting pictures. Students are encouraged to search for an simpler solution and to share it with me and the other students.**

List of slides you will be using.

Epithelial Tissue

<u>Name of Tissue</u>	<u>Slide Letter</u>	<u>Hint Where to Locate</u>
Simple Squamous	O	Look at the walls of the alveoli
Simple Cuboidal	A	Look for ring formed of cube shaped cells
Simple Columnar	S	Look at the lining of the inner passageway
Stratified Squamous Non-Keratinized	P	Look at the upper surface of the tissue
Stratified Squamous Keratinized	N	Look at the upper surface of the tissue
Pseudostratified Columnar	R	Look at the inner lining of stomach
Transitional	C	Look at the inner edge of the bladder

Connective Tissue

<u>Name of Tissue</u>	<u>Slide Letter</u>	<u>Hint Where to Locate</u>
Adipose	Y or D	Look at the outer edge of the specimen
Dense Irregular	N	Look for where hair is embedded
Hyaline Cartilage	D	Look for the "eyes"
Compact Bone	F	
Blood	G	All cells are very tiny under high power

Muscle Tissue

<u>Name of Tissue</u>	<u>Slide Letter</u>	<u>Hint Where to Locate</u>
Skeletal	H	Look at the outer edge of the vessel
Smooth	S	Place your slide so that you are viewing the specimen on the right of the slide
Cardiac	I	

Nervous Tissue

<u>Name of Tissue</u>	<u>Slide Letter</u>	<u>Hint Where to Locate</u>
Neuron	K	Look for a dark purple, star-shaped cell