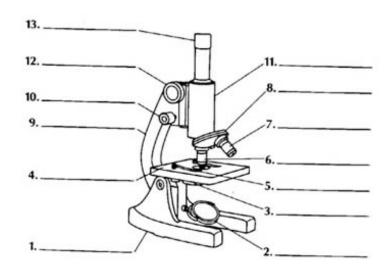
Nedwidek Revised LABORATORY REPORT EXERCISE #5: B2 10/17/13, M6; A1 10/22/13, M5 INTRODUCTION TO THE COMPOUND LIGHT MICROSCOPE AND CELLS: DUE WEDS. 10/23/13

INTRODUCTION TO THE COMM CORD FIGHT IMPROCESS E AND CELEG. DOE WEDG. 10/20/10				
Name_	Section_SLS43QM:Teacher_Dr. Nedwidek_Date			
PRE-LAB	UESTIONS			
1. Explair	e difference between magnification and resolution.			
2. Explair	e function(s) of each of the following parts of the compound light microscope: Ocular lens			
	Nosepiece			
	Wide angle objective lens			
	Low power objective lens			
	High power objective lens			
	Diaphragm			
	Coarse adjustment knob			
	Fine adjustment knob.			
	the structure and function of 2 organelles in plant but not animal cells and 2 organelles but not plant cells.	typically		
4. How is a	et mount prepared?			
ruler piece drawn nea cellular org will review MAGNIFIC 1) DRAW A 2) DRAW A 3) DRAW A	ES - use the prepared drawing form sent to you. Use the checklist. DRAW the letter in circles which represent the FOV as described in your procedure. The letter "e" shexactly as you view it under low power. Draw the cells indicated in your procedure. In elles to label: cell wall, cytoplasm, nucleus, cell membrane, nucleolus (hi mag). Your in recommended method of drawing and labeling for your drawings. Always INDICATE A ION represented under each drawing. LABEL DRAWING & STRUCTURES. USE PENCED LABEL the letter "e" under high power (400X). D LABEL your e with the edge of the ruler over it under low power (100X). ABELED diagram of an onion cell under HIGH power, 400x. ABELED diagram of 2 cheek cells under HIGH power, 400x.	ould be aportant astructor ACTUAL		
II. SUMMA	QUESTIONS: Scope and "e":			

1. Describe the appearance, texture and orientation of the lower case letter "e" under low power. For example, was the letter right-side up or up-side down? What differences did you observe under high power? (Some microscopes have optics that only reverse in one direction. Your teacher will explain why.)

- 2. If you want to move the upper right hand corner of your field of vision closer to the center, which way do you move your slide? Why?
- 3. Do you expect that the diameter of your FOV will increase or decrease with an increase in magnification? WHY? What kind of a relationship is this?
- 4. Approximate, based on the crude actual measurement of "e" taken by the ruler at 100x, the Actual size of the letter "e" (in micrometers- μ m) = _____ μ m
 - 5. Label the diagram of the microscope by choosing the following names:

Arm
Base
Body tube
Coarse focus knob
Diaphragm
Fine focus knob
High power objective lens
Light source
Low power objective lens
Nosepiece
Ocular (eyepiece)
Stage
Stage clips



III. SUMMARY QUESTIONS: ONION (epidermal) CELLS:

1. Describe in detail the appearance of one onion cell under HIGH power, 400x.

2. Why are the chloroplasts NOT visible in these particular plant epidermal cells?

	MARY QUESTIONS: CHEEK (epithelial) CEL 1. Describe the shape of your cheek cells. When the shape of your cheek cells.	
2	Which part(s) of the cell stain darker in the parts?	presence of Lugol's tincture of iodine than the other
1	MARY QUESTIONS: GENERAL: 1. A student was looking at some cells under to animal or plant cells. How would she tell the dif	he microscope, and didn't know if she was looking at ference?
	2. Wet mounts are sometimes made with wate your wet mount instead of water? Why use stai	er. What is the advantage of using Lugol's solution in ns for visualization?
3	3. Explain how you can demonstrate cellular de	pth using your microscope.
V S	AND (TONGUE IN) CHEeeeeeeeeeEK. If I re was purely to understand the material, and I did sources (my peers or otherwise) in the process	
Gludelil	Signature:	Date:

Teacher Signature

Lab Completed Satisfactorily_____