

Name _____

Date _____

Period _____

Microscope Webquest

I. Parts, History and function of the Microscope

1. Go to <http://www.biologycorner.com/microquiz/index.html#>
 - a) Label the parts of the microscope

2. Go to <http://www.cas.muohio.edu/mbi-ws/microscopes/index.html> click on History of the microscope.
 - List the 4 scientists responsible for the discovery or invention of the microscope.
 1. _____
 - a. Father that helped create the first compound microscope.
 2. _____
 - a. Son that took over the production of the first compound microscope.
 3. _____
 - a. Viewed cork under the microscope and coined the word cell in 1665.
 4. _____
 - a. Created the first simple microscope. First to describe bacteria & Protozoan's.

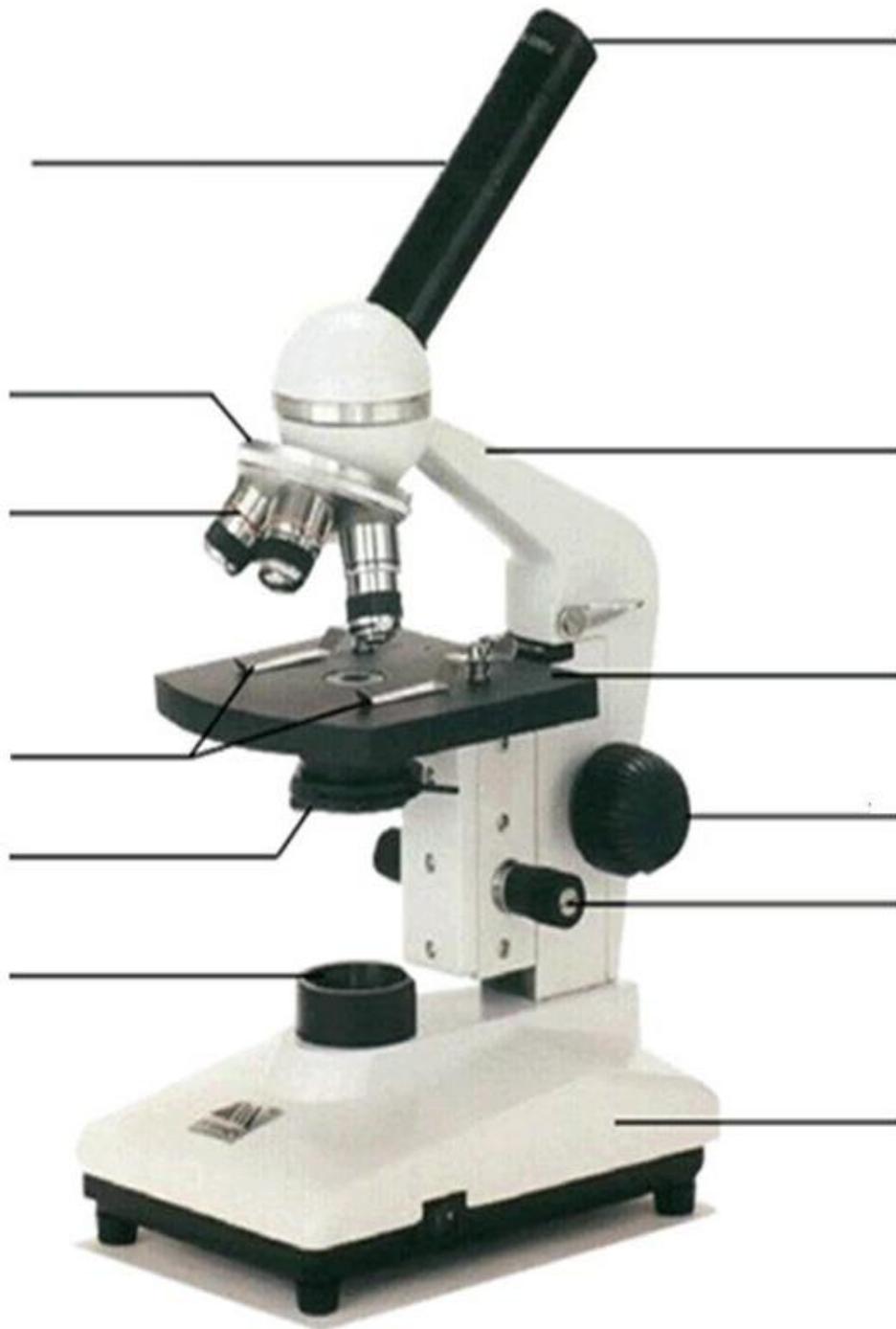
3. Click on the "Types of Microscopes" button and complete the table below.

	Compound	Dissection	Scanning Electron	Transmission Electron
Description				
Cost				
Radiation source				
Magnification adjustments				

4. Click the back button. Click on compound microscope. Then click on "Magnification"
 - a) How do you calculate the total magnification?

5. Click the back button. Click on Resolution. Define the following:
 - a) Magnification
 - b) Resolution

6. Scroll to the bottom of the page and Click on "Using the microscope" and answer the questions.
 - A. When you carry a microscope you have one hand under the _____ and the other hand on the _____.
 - B. Which part of the microscope do you turn to raise the body tube? _____.
 - C. Which part of the microscope do you turn to place the low power objective in place? _____.
 - D. What is the name of the part of the microscope where you set the slide? _____.
 - E. What is the name of the part of the microscope that you use to hold the slide in place? _____.
 - F. When turning the revolving nosepiece to move the high power objective in place, why must you be very careful? _____.
 - G. Which part of the microscope do you turn to bring the object into focus? _____.
 - Click on Compound Light Microscope. Then click "Parts"
 - Review the parts of the microscope by clicking on each name.
 - Click on Diagram/Self Quiz. List the parts...



- Click on activities.
- Click on "e" lab. You will complete this lab in class tomorrow, please read through this lab carefully. Answer the following questions.

1. What happened to the letter e when it was observed under a microscope? It turned

_____ and _____.

2. What happened when the letter e was moved to the left? _____.

3. What would you do to determine the position of each colored thread?

Microscope fill in the blank exercise-

<http://nhscience.lonestar.edu/biol/dropdrag/using.htm>

40X center coarse coarse coarse condenser fine lens tissue low power low
power mechanical stage objective ocular other parfocal slide movement slightly
specimen specimen specimen spring clip switch up viewing field

Clean the entire lens with special grit free _____ only. Plug in the cord and _____ on the light. Obtain a prepared slide and place it on the _____ anchoring it with the _____. Move the slide with the mechanical stage knobs until the _____ appears to be directly on top of the _____ in the center of the stage. Always start focusing with the scanning _____ in place. Use the _____ adjustment knob to move the stage all the way _____. Now look through the _____. Using the _____ adjustment knob, lower the stage down slowly until the _____ comes into view. Center the _____ in the field of view by turning the _____ knobs. To go to a higher magnification rotate the _____ objective in place. Again use the _____ adjustment knob to focus. You need to turn the knob only slightly to focus because the microscope is _____. This means that when objects are in focus at one magnification, they will remain in focus at _____ magnifications. Once again _____ the part of the image that you want to see in detail in the center of the _____. Finally to go to high power you rotate the nosepiece to the _____ objective. You now will focus the image by turning the _____ adjustment knob very _____ to focus. If you centered the part of the image you wanted to see in _____ you should now see the detail somewhere in the view.