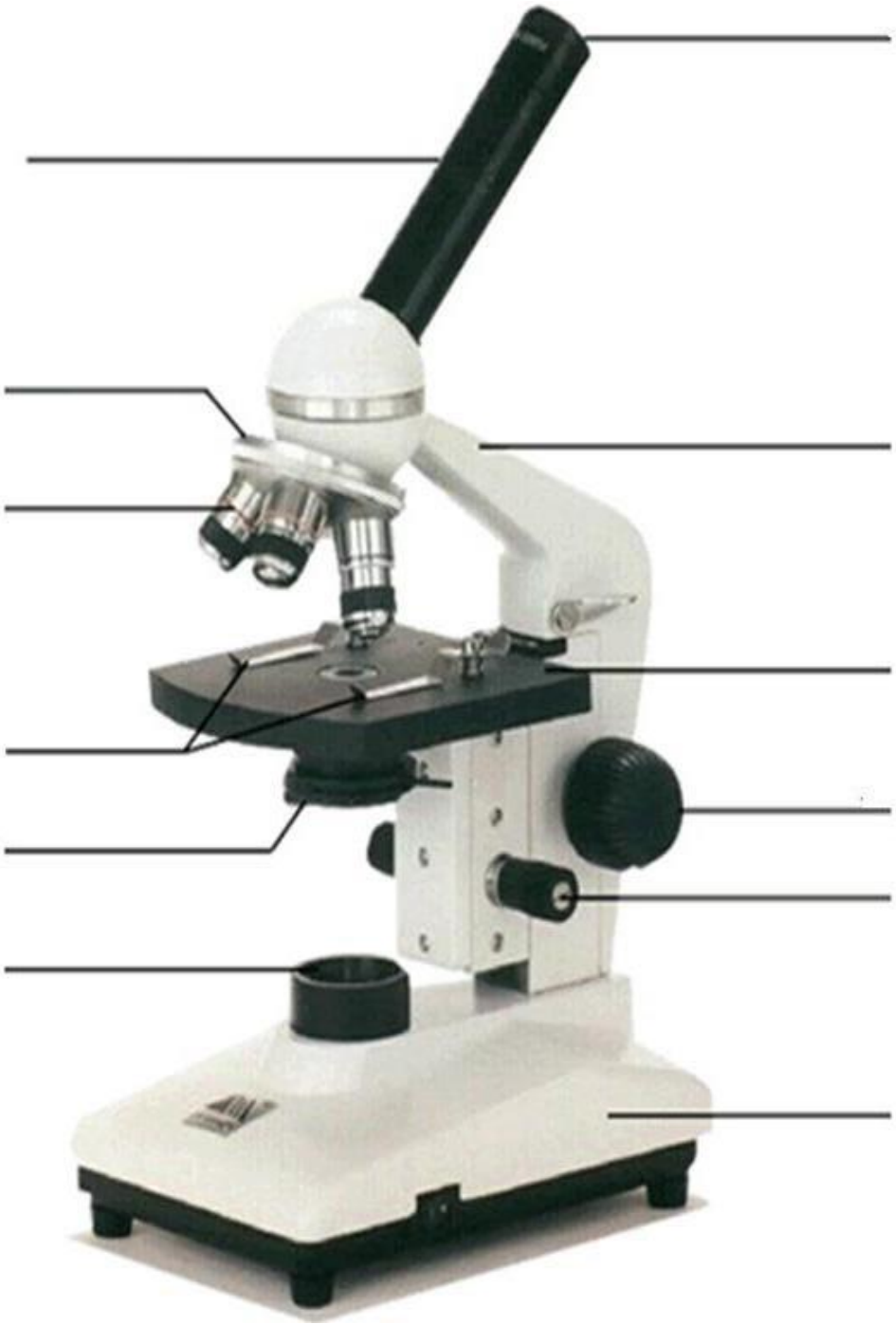
Name _____ Date _____ Period _____

Microscope Webquest

I. Parts, History and function of the Microscope

Go to http://www.biologycorner.com/microquiz/index.html#

1. **Label the parts of the microscope on the second page using this website.**



Go to http://www.cas.muohio.edu/mbi-ws/microscopes/index.html click on History of the microscope.

2. List the 4 scientists responsible for the discovery or invention of the microscope.

_____: Father that helped create the first compound microscope.

_____ : Son that took over the production of the first compound microscope.

_____: Viewed cork under the microscope and coined the word cell in 1665.

_____: 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? _____.**

Scanning Electron Microscopy:
https://www.olympus-lifescience.com/en/microscope-resource/primer/java/electronmicroscopy/magnify1/

7. **From the "Choose a Sample" drop down menu, choose Ragweed Pollen.**
   How many spores are in the field of view at 1100X?

   How many spores are in the field of view at 2000X?

8. **Choose the Honey Bee.**
   What shape are the scales on the bee's skin?

9. **Choose the jellyfish.**

   Describe the appearance of the jellyfish at 10,000X:

5. **Choose the sand star.**

   Compare the porosity of the star at 40X to the porosity of the star at 4,000X: