WebQuest: Microscopes

Part I: You will need to go to the Cells & Microscopes page of the Kid zone at http://www.az-microscope.on.ca/history.htm to complete the first part of this assignment.

1. Who was the first man to make and use a microscope? ________________________________

2. What was his microscope called? ________________________________

3. How many microscopes did he create in his lifetime? _____________

4. How can you change the power of a single-lens microscope? ________________________________

5. How was the first compound microscope different from Leeuwenhoek’s microscope? _____________

6. Where are the two lenses located in a compound microscope used in most classrooms today? ________

7. What did each of the following scientists discover by using a compound microscope?
   a. Robert Hooke – ________________________________
   b. Louis Pasteur – ________________________________
   c. Robert Koch – ________________________________
Part II: You will need to go to the “History of the Microscope” section of Microbus at http://www.microscope-microscope.org/basic/microscope-history.htm to complete this part of this assignment.

8. What did the Romans discover as they experimented with different shapes of clear glass lenses? ______
____________________________________________________________________________________
____________________________________________________________________________________

9. What were early lenses called besides magnifiers? _________________ Why? _________________
____________________________________________________________________________________
____________________________________________________________________________________

10. Describe the compound microscope developed by Zaccharias and Hans Janssen. ________________
____________________________________________________________________________________
____________________________________________________________________________________

11. What did Galileo contribute to the field of microscopy? ______________________________________
____________________________________________________________________________________
____________________________________________________________________________________

12. Who is known as the “Father of Microscopy”? ____________________________________________
Part III: You will need to use your collective knowledge from our class notes and both websites used during this WebQuest.

**Across:**
1. Known as the “Father of Microscopy”
8. Refers to the power of a microscope; calculated by multiplying the power on the objective by the power on the eyepiece
13. Part of the microscope that contains the ocular lens
15. Type of lens found in the eyepiece
17. When viewing objects under __-power, you are able to see a larger field of view, but not as much detail.
19. Small disk found under the stage that regulates the amount of light that reaches the specimen
20. Large knob on the side of a microscope that should be used first when viewing a slide
22. Small glass or plastic piece that is used to cover a water drop on a slide.
23. Refers to the type of microscope Leeuwenhoek created with one lens

**Down:**
1. Provides light to allow you to view materials on a glass slide
2. Developed one of the first compound microscopes by placing several lenses in a tube
3. When viewing objects under ___-power, the field of view is smaller, but you are able to see more details.
4. Type of light source that reflects light rays
5. Bottom portion of the microscope
6. Used a compound microscope to discover that living things are composed of cells
7. Found on the nosepiece; range from low to high power
9. Refers to the amount of a specimen we are able to see; decreases as the power of magnification increases
10. Used to hold a slide in place on the stage
11. Small knob on the side of a microscope that helps you focus the microscope
12. Part of the microscope that holds the objective lenses and is able to rotate to change magnification
14. Type of microscope made up of two or more lenses
16. Rectangular glass plate used to view samples of water or other materials
18. Part of the microscope that should be used when it is carried
21. Part of the microscope that supports the slide being viewed.