

Study Guide : Using the Microscope

The information in this study guide is based on the video "Using the Microscope".

Read over this study guide before seeing the video. This way, you will know the general type of information to be looking and listening for as the video progresses.

1. If you ever have to carry a microscope, hold it in these two places as you do.

2. To determine the magnification of a microscope, what two things do you need to know about the microscope ? _____

3. What is then done with this information to determine the magnification ? _____

4. Write down the sample problem information in the spaces below:

_____ power is _____

_____ power is _____

Total Magnification = _____

5. The _____ is what the three objective lenses are attached to.

6. What are the magnifications for each of the three objectives ?

low power magnification = _____

medium power magnification = _____

high power magnification = _____

7. You turn this to change objective lenses. _____

8. The first focusing of the microscope is done by turning the _____

9. To produce a sharply focused image, you then turn the _____

10. To vary the amount of light that passes through the slide you turn a _____ which is located just below the _____ .

11. The viewable area that you see through the microscope is called the _____

12. One millimeter is equal to how many micrometers ? _____
13. The number of millimeters across for this microscope's _____ of _____ is _____.
14. This is equal to _____ micrometers.
15. What happens to the size of the viewing area when you switch to high power ?

16. What happens to the brightness of the viewing area when you switch to high power ?

17. What is the size of the viewing area under high power ? _____
18. To bring an image into sharp focus under high power you only turn the _____

19. To determine the size of an individual cell, divide the _____ by an estimate of the number of _____ across the field of view.
20. The estimated size of the cells in this problem is _____ micrometers/cell for the low power objective.
21. Under high power, it takes about _____ cells to go across the field of view. The field of view under high power is approximately _____ micrometers.
22. The estimated size of the cells in this problem is _____ micrometers/cell for the low power objective.
23. When you are finished with the microscope, you need to remove the _____ and turn the _____ so the _____ doesn't bump into the stage.