# How Do Tools that Magnify Help Us Study Cells?

In this lab, you will view materials under a microscope to learn how microscopes help us study small objects.



## Objective

* Compare the appearance of samples at different microscope magnifications.

## Materials

* Prepare slides (2)
* microscope

## PROCEDURE

1. From your teacher, obtain two different samples that you would like to see using a microscope.
2. What does the sample on each slide look like without magnification?
3. What do you think each of the samples will look like with magnification?
4. Use the microscope diagram to investigate the different parts of the microscope.
5. Use the microscope to observe each slide.
6. In the space below, draw what you see on each slide at each magnification. Write the magnification in the upper right corner of the box. Drawing should fill the box!

| Specimen Name | | Specimen Name | |
| --- | --- | --- | --- |
|  |  |  |  |

Use complete and detailed sentences to answer the following. You may use lined paper or type answers in Compass (the document is there)

1. How do your drawings of the magnified samples compare to what you expected to see in Step 5?
2. Compare your drawings of the same sample at different levels of magnification. How are your drawings alike and different?
3. At which level of magnification can you see the samples most clearly? Explain your answer.
4. How does increasing magnification change what you can see?
5. Adjust the amount of light on your slides using the diaphragm. How does this change the image you see?
6. What was most challenging when using the microscope?