

Station 1

Mystery Pictures



What is it?

Study the mystery photos and
try to identify each one!

Hint: They are all common objects that might
be found in your home or a classroom.

Write your guesses for the mystery items in the Station 1
section of your notebook

Key Question: What happens to the view of an object when it
is magnified?

Extra time? Study the parts of the microscope for the quiz

Station 2

Make it Simple



Write all your answers in the Station 2 section of your notebook.

Directions:

1) You will need one slide, and a water dropper to create a simple lens. You will also need a standard ruler and a marble lens.

2) **Place one drop of water in the middle of the slide and hold it over the letter e** (find the letter e on one of the worksheets on the table)

- move the slide up and down until you get the letter in focus
- measure the distance between the slide and the table

3) **Place another drop of water in the middle of the slide and hold it over the letter e again.**

- move the slide up and down until you get the letter in focus
- measure the distance between the slide and the table

4) **Place another drop of water in the middle of the slide and hold over the letter e again**

- move the slide up and down until you get the words in focus.
- Measure the distance between the slide and table.
- How does the view of the e change as you add more drops of water?

5) **Use the marble lens to view the letter e**

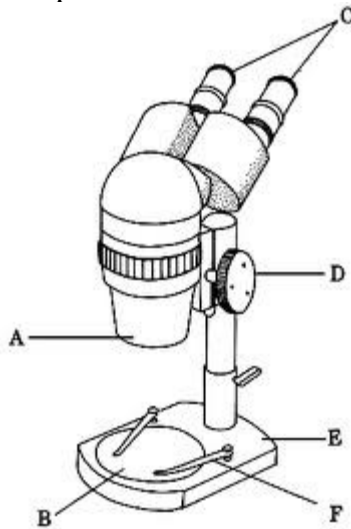
- Move the hand lens up and down until you get the words in focus
- measure the distance between the slide and the table.
- How does the view of the e with the hand lens compare to the water lens?

Key Question: Why does the water drop magnify the letter e?

Extra time? Add more drops and see what happens

Station 3

Up close and Personal



Make sure there is light shining on the stage of the dissecting scope

Find your creature, and place it **safely** onto the stage of the dissecting scope.

The creature should be in it's container for safety.

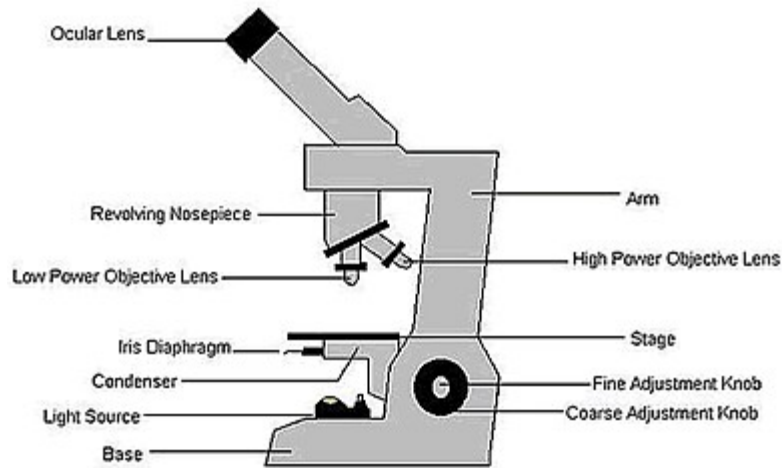
Observe, write any new observations you may have (on p 37 of your journal) and draw a detailed picture of what you see under the dissecting scope.

It's time to say goodbye. Place the creature into the "living community" and throw away the old container.

Wash your hands before moving on to the next station!

Station 4

Understanding the Steps



Copy the steps for using a microscope in your the section for station 4 in your notebook

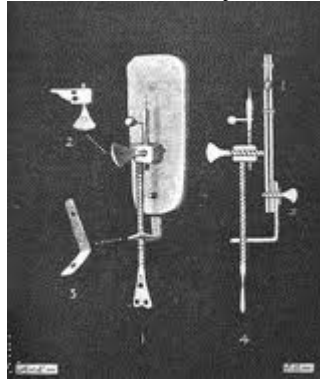
Steps to using a microscope:

1. **carry the microscope with two hands, holding the arm and base**
2. **put the microscope on the lab table so the arm is facing you**
3. **plug the microscope in and turn on the light**
4. **turn the nose piece until the low power objective is into place**
5. **turn the coarse adjustment knob to move the body tube to its highest position**
6. **place your slide onto the stage and under the stage clips so the specimen is in the light**
7. **while looking from the side, lower the body tube all the way down using the coarse adjustment knob**
8. **while looking into the ocular, turn the coarse adjustment knob to focus**
9. **while looking into the ocular, use the fine adjustment knob to focus more sharply**
10. **make sure the specimen is in sharp focus on low power:** *you have to make sure the specimen is in sharp focus on low power before you switch to high power (if needed)*
11. **slowly turn the nose piece until the high power objective clicks into place to switch from low power objective to high power objective**
12. **use the fine adjustment knob to focus the high power objective**

Extra time? Study the steps for your microscope quiz

Station 5

It's History



Reading the passage about the history of microscopes.

What did you learn about the history of microscopes that you did not know before?

Include the names of scientists and their discoveries or inventions.

Key Questions:

What did the discovery of a microscope allow people to see that they could not see before?

How did this knowledge help shape the world we live in today?

Extra Time? Read the other passage!