## Dear assistant,

This Science is going to be in the lab. This is our second lesson using the microscope. We can spend 20-25 minutes reviewing some words related with this topic, but the students are going to use their microscopes during most of the hour.

First, you can tell them the PARTS OF THE MICROSCOPE. Tell the names while having a microscope in your hands and ask the students to pronounce the words.

- 1. Ocular or <u>eyepiece lens</u> that one looks into. It is the lens at the top that you look through.
- 2. The **objective lens** is the lens closest to the object.
- 3. **Revolving nosepiece** or objective changer: This is the part that holds two or more objective lenses and can be rotated to easily change power.
- 4. <u>Stage</u>: the flat platform where you place your slides. If your microscope has a mechanical stage, you will be able to move the slide around by turning two knobs. One moves it left and right, the other moves it up and down.
- 5. <u>Focus knob</u>: some microscopes have two focus knobs: coarse focus and fine focus.
- 6. **Arm**: Supports the lenses and connects them to the base. While moving your microscope you have to take it by the arm.
- 7. **Base or foot**: The bottom of the microscope, used for support
- 8. <u>Internal lamp or mirror</u>. Some microscopes have their own light source but some don't. In this case, the microscope has a mirror: it is used to reflect light from an external lamp.



MICROSCOPE SLIDE PREPARATION. I gave them some preparations last week, but in this occasion they are making their own preparations following these instructions:

- 1. Take a <u>slide</u> (portaobjetos en español) that is a small thin square of glass about 1 X 3 inches. The glass is used to "mount" specimens so that they can be handled and seen under a microscope.
- 2. Then place a <u>drop of the sample</u> in the middle of the slide. The water is coming from a pond. You need a dropper.
- 3. Then apply the <u>coverslip</u> (en español, cubreobjetos). When holding the coverslip, be sure to hold it by the sides, so that it does not get fingerprints. Lower the cover slip gently over the drop at an angle, with one edge touching the slide first. Be careful because the cover slip is easily broken.
- 4. Take off excess water using a clean paper-towel
- 5. Put the slide on the stage.

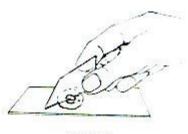


Figure 1

## SOME FINAL PIECES OF ADVICE (better with your own words):

- Start with the lowest power objective lens (the shortest). When you get a sharp image you can turn into the medium lens. Don't worry if you can see nothing with the largest lens.
- Be careful while focusing: don't crash the slide with the objective lens
- Keep the lenses clean and dry: don't put your finger on the lenses.
- Move yourself very soft in the lab and don't play. Microscopes are very expensive items.

Thank you