Name: Date: Class Period:

How to Correctly use a Microscope

How to use a microscope

Video Link: https://youtu.be/BJvVxvya3Z4

Student Notes:

When using a microscope you get to see things that are _____ to the unaided human eye. However, if you don't know what you are doing, the microscope can be frustrating. You may wind up just seeing a _____ or nothing at all.

Write the meaning of each of the parts of the name:

Micro means -

Scope means -

The microscope is a tool for seeing really small stuff!

In the space below draw arrows and correctly label the following parts of the microscope

ocular/eyepiece, body tube, nosepiece, objective lenses, stage, stage clips, lamp/light, diaphragm, coarse adjustment knob, fine adjustment knob, base, arm



https://microscopecentral.com/products/national-c1028-monocular-microscope?variant=825234829&cmp_id=19235316366&adg_id=&kwd=&device=c&gclid=Cj0KCQjw5f2lBhCkARIsAHeTvliRwnmR6tIDDstatX32vS6lyycdQ66ezPljALu4SgbKbozgEgalQkoaAgW8EALw_wcB#gallery

Flip over →

Student notes continued:

In order to see human cheek cells you will need a _____ - this is the rectangular piece of glass. You will also need a _____ slip - this is the small square piece of glass. Be careful because they are fragile and can _____.

Methylene blue dye will make the transparent cheek cells easier to _____. Apply the drop of methylene blue to the middle of the slide. Next get your sample of mouth cells by gently rubbing the end of the toothpick against the inside of your _____. Transfer the cheek cells to the methylene blue dye by _____ the end of the toothpick in the dye.

When placing the cover slip on the slide try to avoid getting _____ bubbles in the specimen. The best approach is to take the cover slip and _____ it and then slowly lower it down.

When placing your slide on the stage make sure the _____ objective lens is over the hole in the stage. Press the back of the stage clips and situate your slide so the specimen is _____ the hole in the stage.

The next step requires _____. Slowly turn the _____ adjustment knob until something comes into focus. Turn the knob _____ and watch carefully. It is helpful to know what you are _____ for. You can gently move the slide on the stage to place the best sample right at the tip of the _____. If your specimen is not right at the tip of the pointer, it may be out of your field of view when you zoom _____ with the next objective lens. Next turn the nosepiece to the next level of magnification. Don't use the _____ adjustment knob any more! Doing so can actually _____ the glass by forcing the longer objective lenses into the glass. Using only the _____ adjustment knob, bring your image into focus. Now go to the highest level of magnification and again use only the fine adjustment knob to bring your specimen into focus.

Sum it up!

What does the word microscope mean?

If you were teaching someone how to use a microscope, what would some of the most important steps be?

What things should one be careful NOT to do with a microscope?