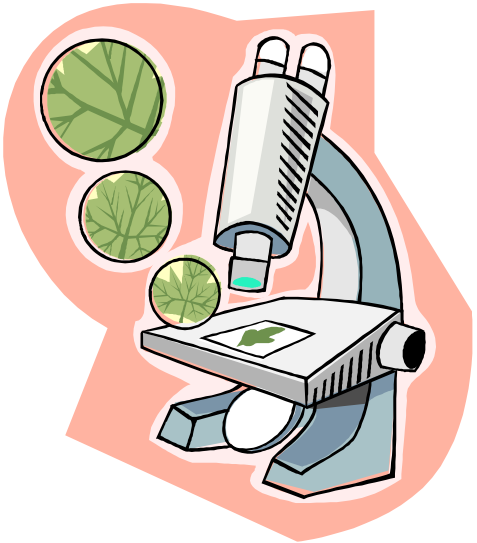
Activity #8B

Introduction to Microscope



Parts of a Microscope Notes

Eyepiece or Ocular:

Where you where you look into the microscope to see the image. Magnifies image 10x.

Body Tube:

Long, skinny tube that holds the eyepiece up above the microscope. It allows the light to travel through the microscope.

Nosepiece:

The nosepiece holds the _two or three__ objective lenses. It _____rotates_____.

Objective Lenses (High, Medium,& Low):

Lenses that magnify the image. The _shortest lens_ (4x) is the least powerful and _longest lens_ is the most powerful.

Arm:

The arm _**holds the upper portion** _ of the microscope above the stage. One hand should be here when moving microscope

Course Adjustment Knob:

Located on the arm. Allows you to move the upper portion of the microscope up and down.

Fine Adjustment Knob:

Located on the arm. _**Small knob**_ that allows you to fine tune the image.

Slide & Coverslip:

Thin piece of glass that you place directly over the opening in the stage. Place the material that you want to view on the slide, place a drop of water onto the material & put the coverslip over it.

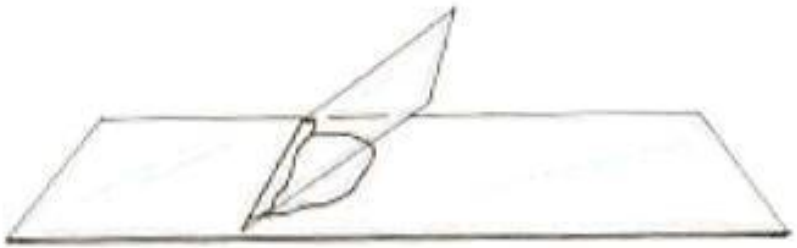


Figure 2: Placing the Coverslip

Stage:

Place the _stuff___ that you want to look at here. It has a hole in the middle to let the light through.

Diaphragm (die-a-fram):

Round disk under the stage that has several _different size holes in it__. It allows you to change the amount of light that comes up through the aperture.

Aperture (app-ur-chure):

The hole in the middle of the stage. Allows light to _come up from the lamp__.

Lamp:

This is located on the base, in the middle. _**Reflects light**_____ onto the slide so you can see the image.

Base:

This holds the whole microscope up. One hand _**goes underneath here**_ when holding and moving the microscope.

Legs:

Part of the base. _**Sometimes split into two portions**_.

Magnification

__Ocular__ or eyepiece is 10x (makes things 10 times bigger).

Objective Lenses include:

- Low 4x (makes things 4 times bigger)
- _Medium_ 10x (makes things 10 times bigger)
- High 40x (makes things 40 times bigger)

The _total magnification_ is found by multiplying the eyepiece and the objective lens power.

When focusing a microscope, always go from _Low_ to _Medium_ to _High_ magnification.

Parts of a Microscope Notes

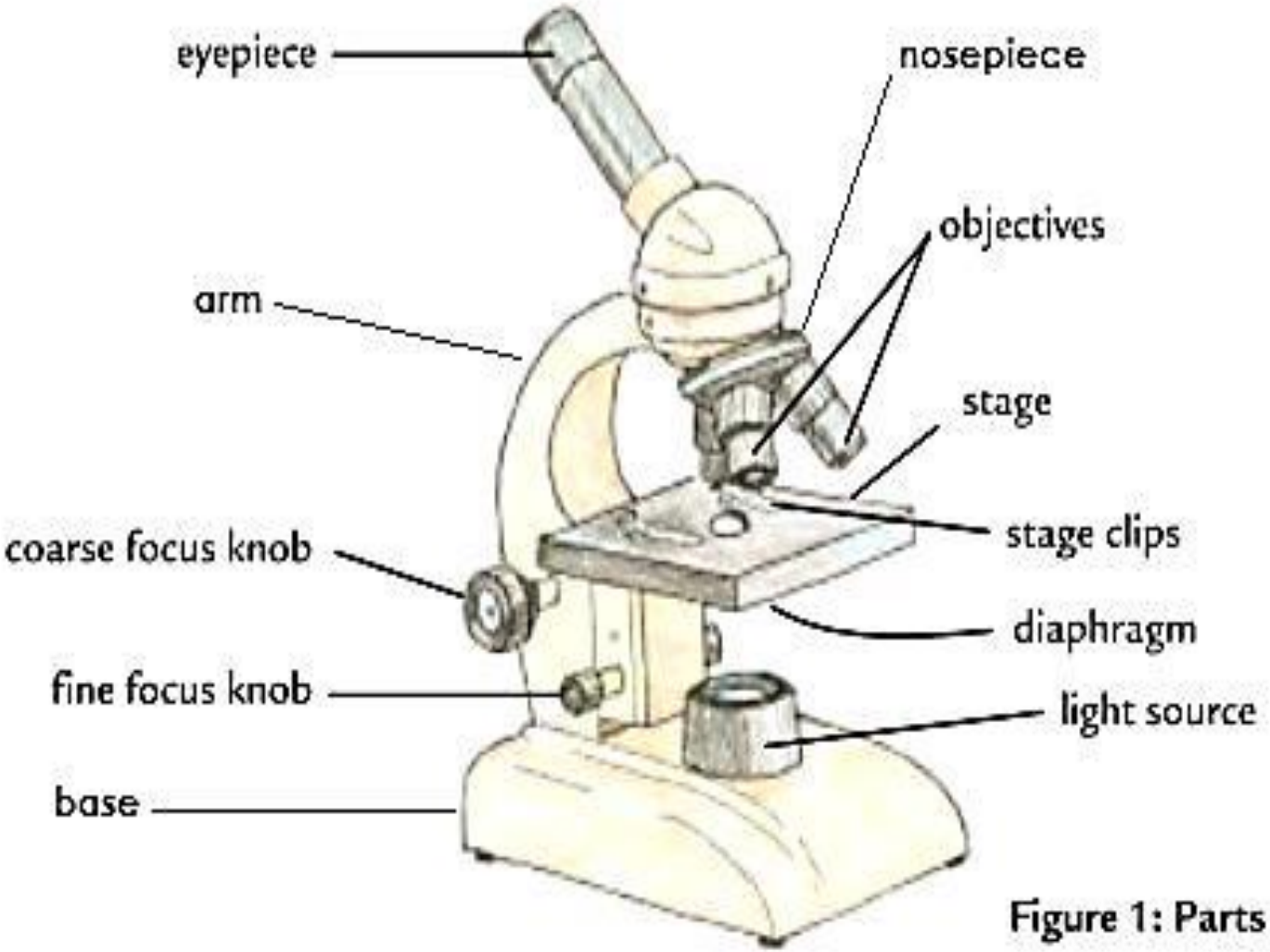


Figure 1: Parts of a Microscope