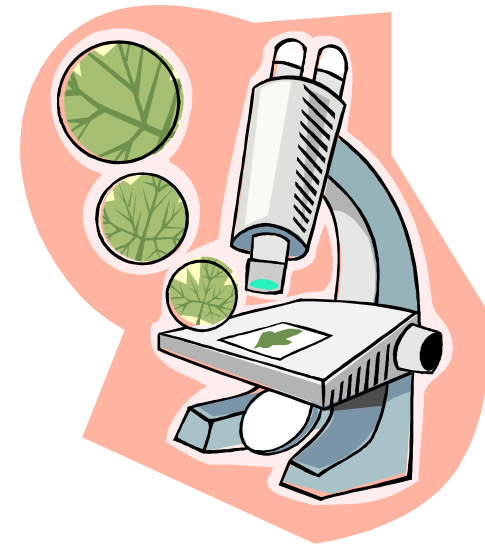


# Activity #11B

## 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.

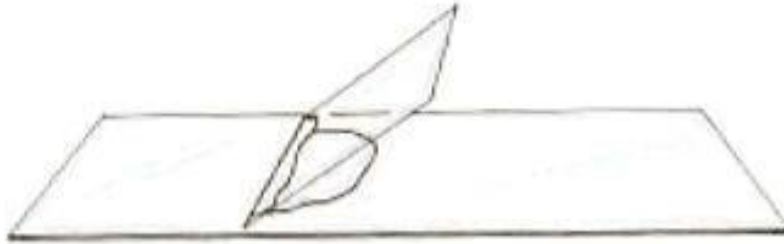


Figure 2: Placing the Coverslip

## 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

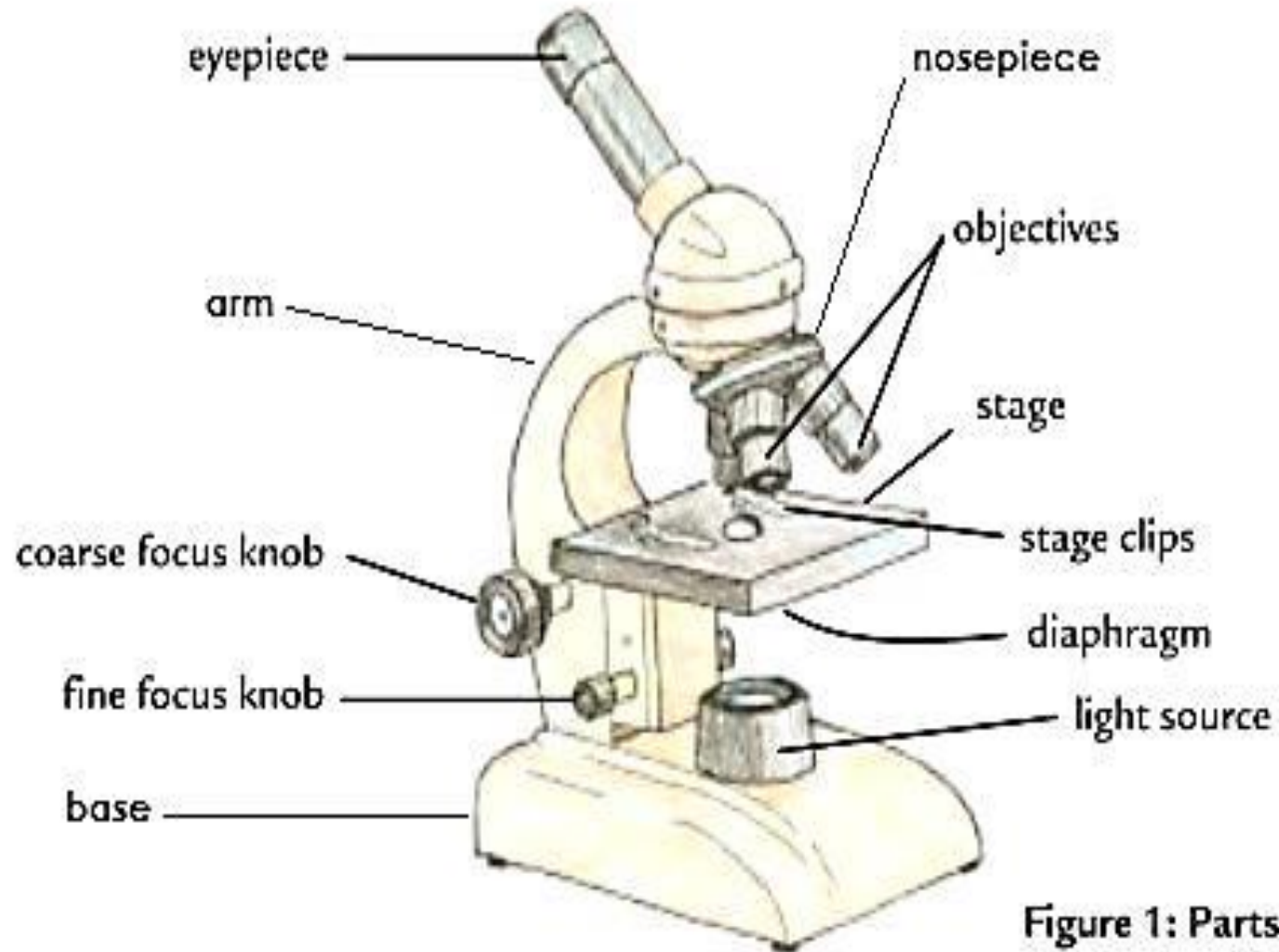


Figure 1: Parts of a Microscope