Microscope Vocabulary

Base

Bottom of microscope which supports the whole microscope

*keep one hand under it when carrying!

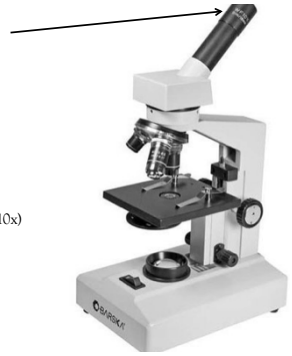
Arm

Where you hold microscope

Ocular

Eye Piece

Lens closest to your eye (10x)



Magnification

- Refers to the power of the lens (the ability to make image appear larger than its size)
- 10x means 10 times larger than its size

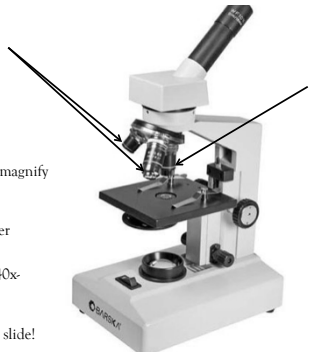
Objective

2nd set of lenses that help magnify the object

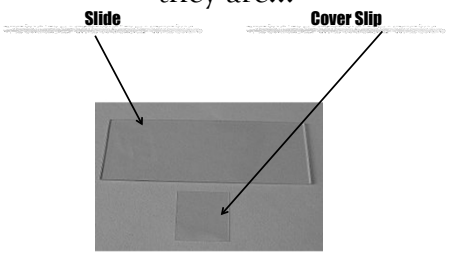
They vary in size and power

Low power (4x-shortest) (40x-longest)

***do not let them hit the slide!

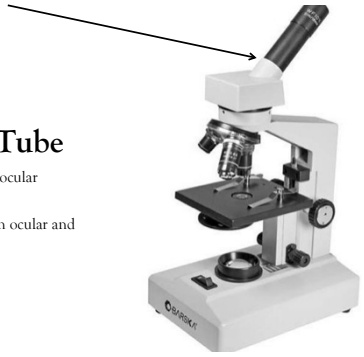


In case you don't know what they are…



Total Magnification

- Ocular magnification times the objective magnification
- 10x X 10x =
  - 100x
- 10x X 40x =
  - 400x



Body Tube

Supports the ocular

Space between ocular and objectives

Revolving Nosepiece

Part that you can turn to change the objectives

It revolves from objective to objective

The objective will "click" into place

Stage

It's where you place your slide to view it

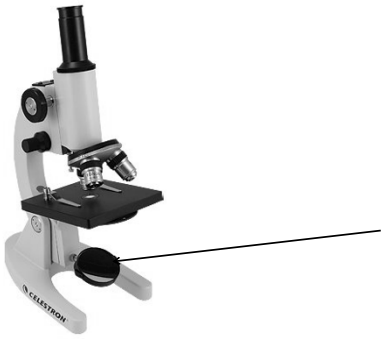
Stage Clips

Clips that hold your slide in place against the stage

Substage Light/ Mirror

Light source

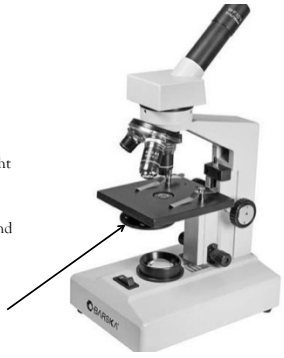
Mirror can be turned towards a light source so that the rays go up towards the body of the tube



Diaphragm

Regulates the amount of light that enters the microscope

There are two kinds – iris and disc



Iris Diaphragm

This has a lever controlling size of opening where the light passes through

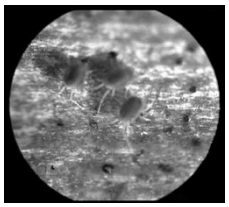
Disc Diaphragm

Has a disc that rotates

It has many different size openings

Field of View

- The area you can see when you look into the ocular



Coarse Adjustment Knob

Large knob

Moves stage up and down quickly

Use this first on low power when beginning to focus

**be careful not to hit the slide with the objective when doing this

Fine Adjustment Knob

Small knob

Moves stage slowly

Used for final focusing with high power

Working Distance

Amount of space between the objective and slide

*less working distance on high power

Figure 1

Compound Microscope

Microscope with two lenses

Simple Microscope

Microscope with one lense

Quiz Time!