



## Lect.1: biology

Subject name: Microscope parts

Subject year:First stage

Lecturer name:

Assist.Lecturer. Hanen omar

Academic Email:

Hanenomar@tu.edu.iq



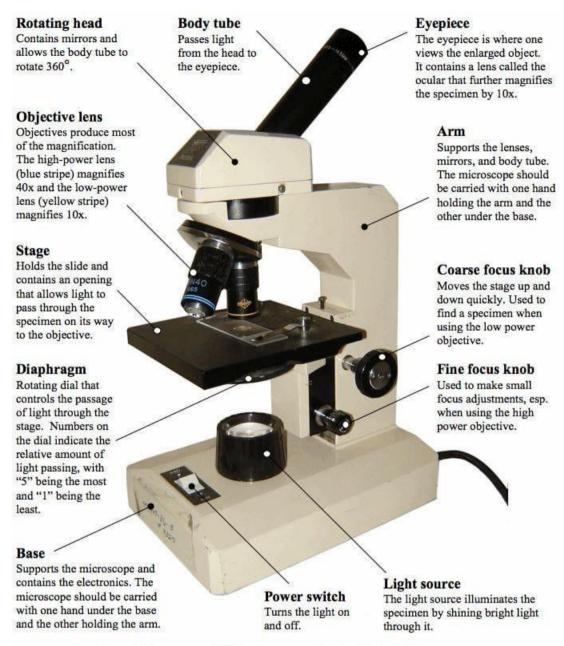


Figure 5 The compound light microscope with descriptions of its parts

## **Microscopes**

A microscope is an instrument that can be used to observe small objects, even cells. The image of an object is magnified through at least one lens

## **Types of Microscopes**

- • The Compound Light Microscope.
- • The florescent Microscope.
- • The Electron Microscope.
- • The Scanning Probe Microscope (SPM)
- THE dark field microscope
- Bright field microscope

There are three structural parts of the microscope i.e. head, base, and arm.

- 1. Head This is also known as the body, it carries the optical parts in the upper part of the microscope.
- 2. Base It acts as microscopes support. It also carriers the microscopic illuminators.
- **3.** Arms This is the part connecting the base and to the head and the eyepiece tube to the base of the microscope.

Optical parts of a microscope and their functions The optical parts of the microscope are used to view, magnify, and produce an image from a specimen placed on a slide. These parts include:

- 1. Eyepiece also known as the ocular.
- 2. Eyepiece tube its the eyepiece holder.
- 3. Objective lenses These are the major lenses used for specimen visualization.
- 4. Nose piece also known as the revolving turret.
- 5. The Adjustment knobs These are knobs that are used to focus the microscope.
- 6. Stage This is the section on which the specimen is placed for viewing.
- 7. Aperture This is a hole on the microscope stage,
- 8. Microscopic illuminator This is the microscopes light source
- 9. Condenser These are lenses that are used to collect and focus light from the illuminator into the specimen.
- 10. Diaphragm its also known as the iris