



Physiology

Stage 2

Lab 3

Microscope



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Microscope

A Microscope is a laboratory instrument used to examine objects that are too small to be seen by the naked eye. Microscopy is the science of investigating small objects and structures using a microscope. Microscopic means being invisible to the eye unless aided by a microscope.

Types of Microscopes

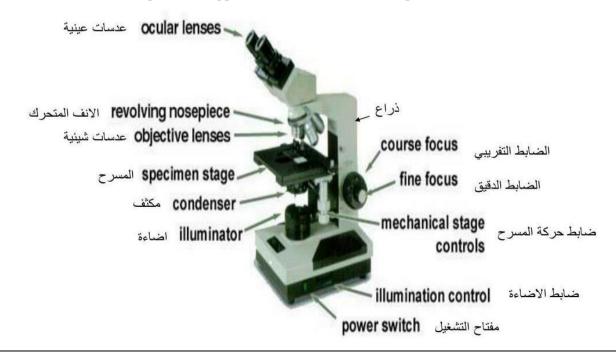
- a simple microscope has only 1 lens
- compound microscope has 2 sets of lenses. It can magnify things 100 200
- times larger than they really are
- **electron microscope** can magnify objects up to 300,000 times. They do not use lenses, but use electrons to enlarge the image.

Microscope Care

- 1. Always carry with 2 hands
- 2. Never touch the lenses with your fingers
- 3. Only use lens paper for cleaning
- 4. Keep objects clear of desk and cords

The Parts of a Microscope

- 1. ocular (lens) eyepiece: the lens of the microscope that you look through
- 2. course adjustment :the large knob on the microscope that you turn to bring the object into focus
- 3. fine adjustment: the small knob on the microscope that brings the image into focus
- 4. arm: the part of the microscope supporting the body tube
- 5. .body tube: the part that holds the eyepiece and the objective lenses
- 6. nosepiece: the part at the bottom of the body tube that holds the objective lenses and allows them to be turned
- 7. objective lens: One of the most important parts of a compound microscope, as they are the lenses closest to the specimen. A standard microscope has three, four, or five objective lenses .that range in power from 4X to 100X
- 8. stage :the flat part below the objectives lens where the slide is placed
- 9. clip :the part that holds the slide in place so it doesn't move
- 10. .diaphragm :the part that controls the amount of light entering the field of view
- 11. light source :the lamp (or mirror) under the stage that sends light through the object being viewed
- 12. base : the bottom part that supports the rest of the microscope



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