



Microscope

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Microscope

- ❖ One of the most important tools used to study living things
- ❖ “Micro” means very small “Scope” means to look at The microscope is an essential tool in the study of life science.
- ❖ It allows you to see things that are too small to be seen with the unaided eye



Types of Microscopes

Types of Microscopes

- 1- The light microscope (compound microscope).
- 2- The fluorescent microscope.
- 3- The Electron microscope.
- 4- The dissecting microscope.

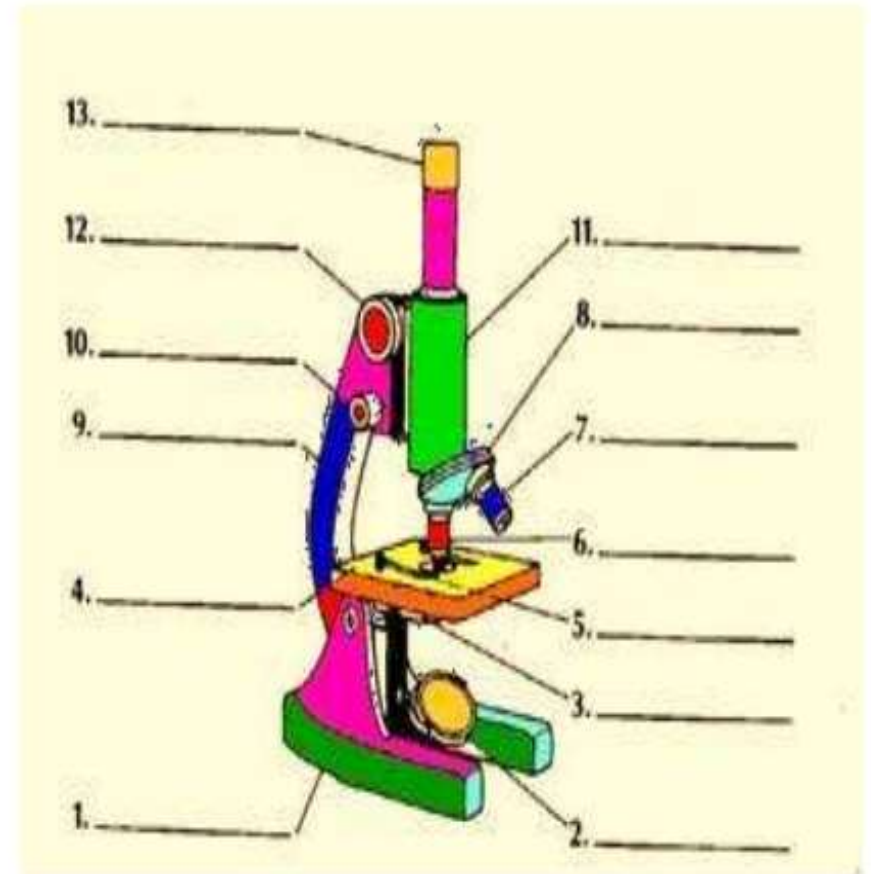


Light microscope

➤ **The light microscope** : the common light microscope use in the laboratory for diagnosis and study structures the microscopic organisms, the light microscope is called a compound microscope because it contains two types of lenses that function to magnify an object. The lens closest to the eye is called the ocular, while the lens closest to the object is called the objective.

Basic Microscope Parts

1. Base
2. Light source
3. Diaphragm
4. Stage
5. Stage clips
6. Low power
7. High power
8. Nosepiece
9. Arm
10. Fine Focus
11. Body Tube
12. Course Focus
13. Eyepiece



Light microscope

- ✓ Base : Bottom part of the microscope often shaped like a horseshoe.
- ✓ Light Source : Located beneath the Stage and Diaphragm. Sends light towards the hole in the stage.
- ✓ Diaphragm : Changes the amount of light reaching the objective lenses, Located under the Stage.
- ✓ Stage : Place where the object you are looking at is placed (Specimen).
- ✓ Stage Clips : Holds down the slide on the stage.



Light microscope

- ✓ **Arm** :Supports the body tube. Used to carry the microscope.
- ✓ **Eyepiece** :The lens you look through that magnifies the specimen.
- ✓ **Body Tube** : The hollow tube through which light passes. It holds the lenses apart.
- ✓ **Course Focus** :Raises or lowers the Body Tube to focus
- ✓ **Fine Focus** :Raises and lowers the Body Tube and used to bring objects into focus.
- ✓ **the nosepiece is**: the round part that holds the objective lenses apart.
- ✓ **Low Power Objective** :Magnifies the specimen at a lower power
- ✓ **High Power Objective** : magnifies the specimen at a higher power the nosepiece hold the objective lenses apart.

The microscope has several objective lenses. each lens has a different magnification power.