



Department of biology

((Plant groups))

Lab2

Stage 2

**Instructions for the use of
scientific equipment**

By

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Instructions for the use of scientific equipment

- ❑ Laboratory equipment can be hazardous if they are not used and maintained properly. Laboratory personnel must be trained on the proper use of laboratory equipment prior to using the equipment. These general guidelines should be followed:

Instructions for the use of scientific equipment

- ✓ Review and follow instructions provided in the manufacturer's manuals and standard operating procedures.
- ✓ The manuals and procedures should be located with the equipment or in a location that is easily accessible to all laboratory personnel.
- ✓ Maintenance or repairs to any laboratory equipment should only be performed by a qualified individual.
- ✓ Safety devices on laboratory equipment must never be disabled or altered.

Microscopes



Microscopes

- A microscope is an instrument that is used to magnify small objects. Some microscopes can even be used to observe an object at the cellular level, allowing scientists to see the shape of a cell, its nucleus, mitochondria, and other organelles. While the modern microscope has many parts, the most important pieces are its lenses. It is through the microscope's lenses that the image of an object can be magnified and observed in detail. A simple light microscope manipulates how light enters the eye using a convex lens, where both sides of the lens are curved outwards. When light reflects off of an object being viewed under the microscope and passes through the lens, it bends towards the eye. This makes the object look bigger than it actually is.

Hood



Hood

- Fume hoods are a form of regulation in environments that are exposed to harmful vapors and fumes. In order to protect people from the harmful effects of these fumes, fume hoods are used to get rid of the harmful aspects and allow the individuals to work safely. Labs use fume hoods when working with substances that let off a harmful fume or odor. Laboratory workers can work with substances directly under the fume hood, or simply place the substance in the fume hood after the work is done.

Petri dish



Petri dish

- Petri dish is a shallow, circular, glass or plastic dish with a loose-fitting cover over the top and sides, used for culturing bacteria and other microorganisms.



Thank
you!