

COMMON LAB EQUIPMENT IN SCIENCE LAB

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Beaker



- simple container for stirring, mixing and heating liquids
- generally cylindrical in shape, with a flat bottom and a lip for pouring
- available in a wide range of sizes, from one millilitre up to several litres.

Erlenmeyer Flask



- flat, conical body, and a cylindrical neck
- allows contents to be swirled or stirred during an experiment - narrow neck keeps the contents from spilling out
- reduces evaporative losses compared to a beaker

Test Tube



- common piece of glassware consisting of a finger-like length of glass or clear plastic tubing, open at the top, usually with a rounded U-shaped bottom
- available in a multitude of lengths and widths, typically from 10 to 20 mm wide and 50 to 200 mm long

Volumetric Flask



- flat bottomed bulb with a long neck, usually fitted with a stopper
- the neck has a single ring graduation mark and a label
- used for making solutions to a known volume



Evaporating Dish



a porcelain or ceramic dish used to used to evaporate excess water (or other solvents) to ensure that a concentrated solution or the dissolved substance is left behind

Petri Dish



a shallow glass or plastic cylindrical lidded dish that biologists use to culture cells

Graduated Cylinder



- used to accurately measure the volume of an object
- more accurate and precise for this purpose than flasks and beakers

Watch Glass



a circular, slightly curved piece of glass used in chemistry as a surface to evaporate a liquid, to hold solids while being weighed, or as a cover for a beaker



Funnel



used to channel liquid or fine-grained substances into containers with a small opening



Mortar & Pestle



- a tool used to crush, grind, and mix solid substances
- the pestle is a heavy bat-shaped object, the end of which is used for crushing and grinding
- the mortar is a bowl, typically made of hard wood, ceramic or stone

Crucible



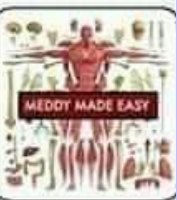
originally used for metal, glass, and pigment production, a crucible is a container that can withstand temperatures high enough to melt or otherwise alter its contents



Filter Paper



- a semi-permeable paper barrier placed perpendicular to a liquid or air flow
- used to separate fine solids from liquids or air





Retort Stand



a piece of scientific equipment, to which clamps can be attached to hold test tubes and other equipment (such as burettes)

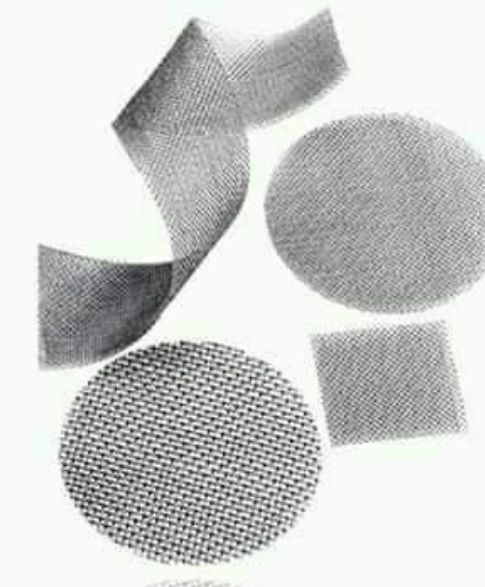
C-Clamp



a device (shaped like a "C") used to hold or secure objects to a retort stand.



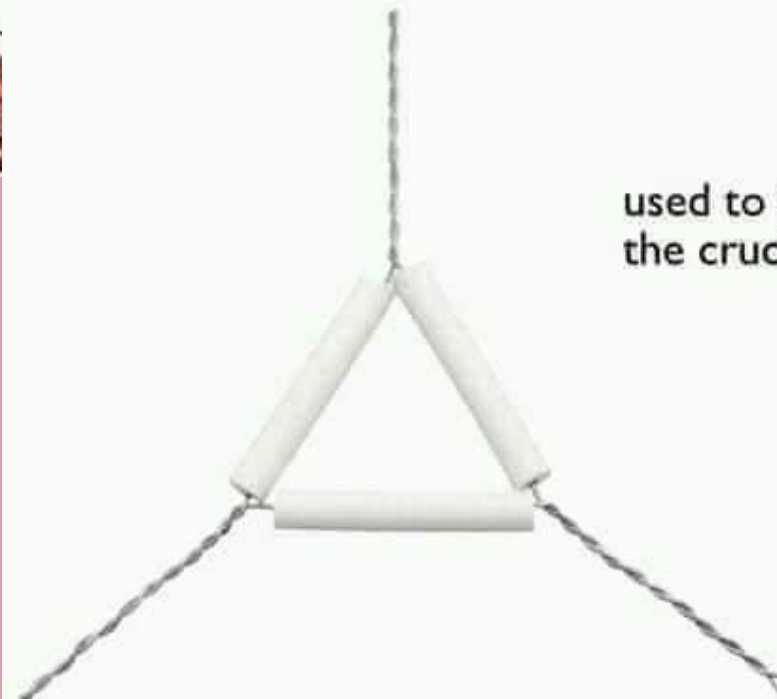
Wire Mesh



a semi-permeable barrier made of connected strands of metal, fiber, or other flexible/ductile material



Clay Triangle



used to hold a crucible while the crucible is heated





Bunsen Burner



piece of laboratory equipment that produces a single open gas flame, which is used for heating, sterilization, and combustion



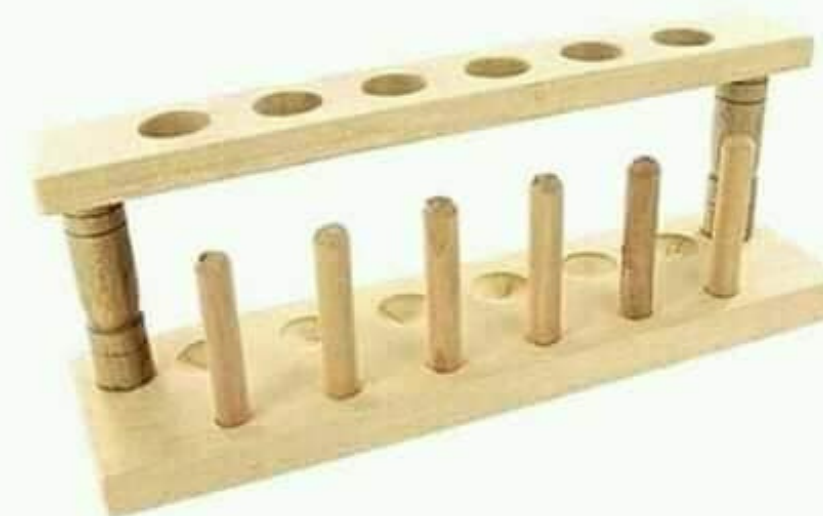
Burette

- a vertical cylindrical piece of laboratory glassware with a volumetric graduation on its full length and a precision tap, or stopcock, on the bottom
- used to dispense known amounts of a liquid in experiments for which precision is necessary, (e.g. a titration experiment)



Test Tube Rack

used to hold/support test tubes containing chemicals waiting for further operations





Forceps

- a handheld, hinged instrument used for grasping and holding objects
- used when fingers are too large to grasp small objects or when many objects need to be held at one time while hands are used to perform a task



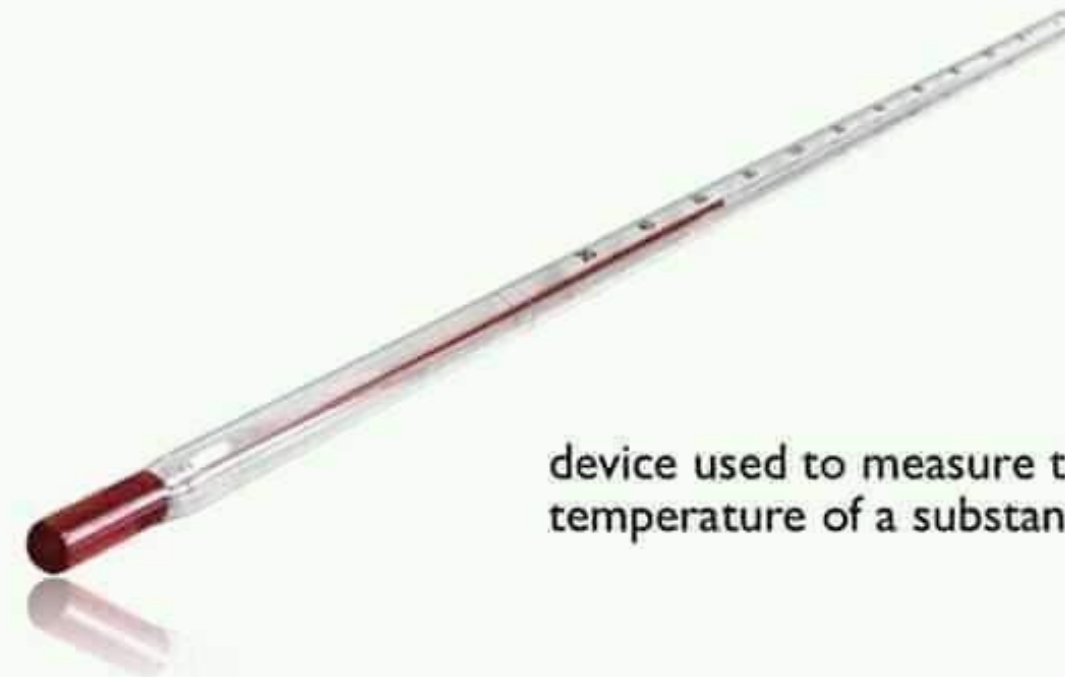
Glass Stirring Rod



- a piece of lab equipment used to mix chemicals and liquids for laboratory purposes
- usually made of solid glass, about the thickness of a drinking straw



Thermometer



device used to measure the temperature of a substance



Medicine Dropper



- usually glass tubes tapered to a narrow point, and fitted with a rubber bulb at the top
- used to transfer small quantities of liquids

Scoopula



a utensil used to transfer solids
(usually in powdered form)

Test Tube Brush



a device used to clean the
inside of a test tube (or other
long-necked glassware)



Test Tube Holder



a gripping device used to carry a test tube after it has been subjected to heat and/or cold temperatures



Beaker Tongs



tongs used to carry a beaker after it has been subjected to heat and/or cold temperatures



Crucible Tongs



tongs used to carry a crucible after it has been subjected to heat and/or cold temperatures

