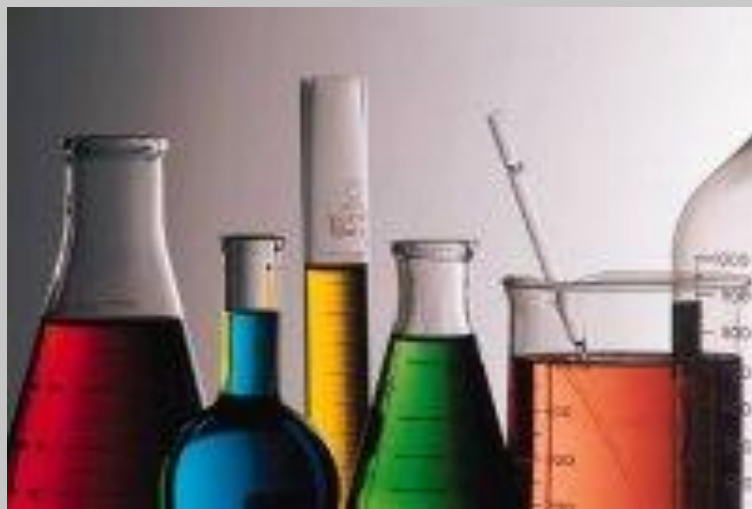


Lab Equipment

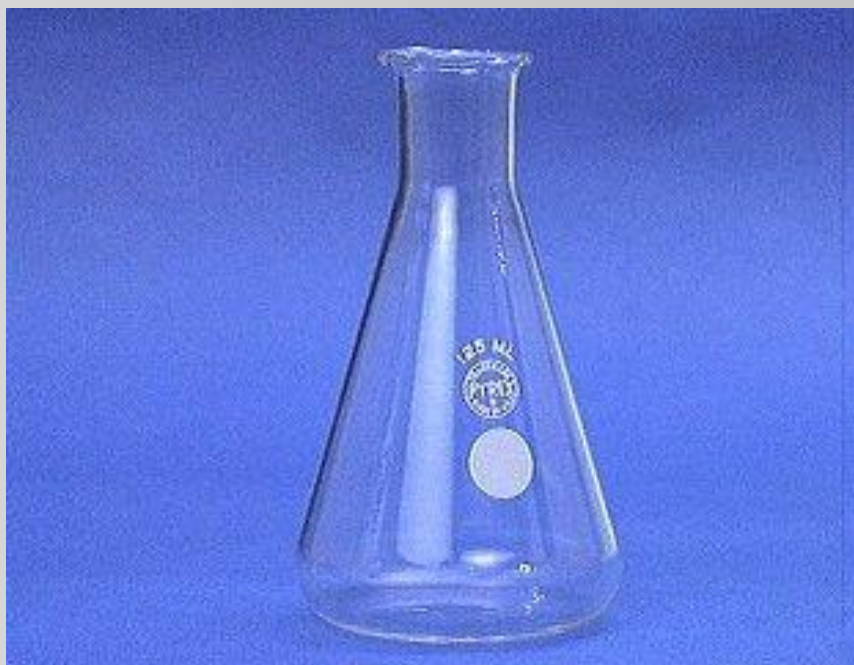


Beaker

Beakers hold solids or liquids that will not release gases when reacted or are unlikely to splatter if stirred or heated.



Erlenmeyer Flask



Erlenmeyer flasks hold solids or liquids that may release gases during a reaction or that are likely to splatter if stirred or heated.

Florence Flask

Rarely used in first year chemistry, it is used for the mixing of chemicals. Narrow neck prevents splash exposure.



Graduated Cylinder

A graduated cylinder is used to measure volumes of liquids.



Gas Collecting Bottle

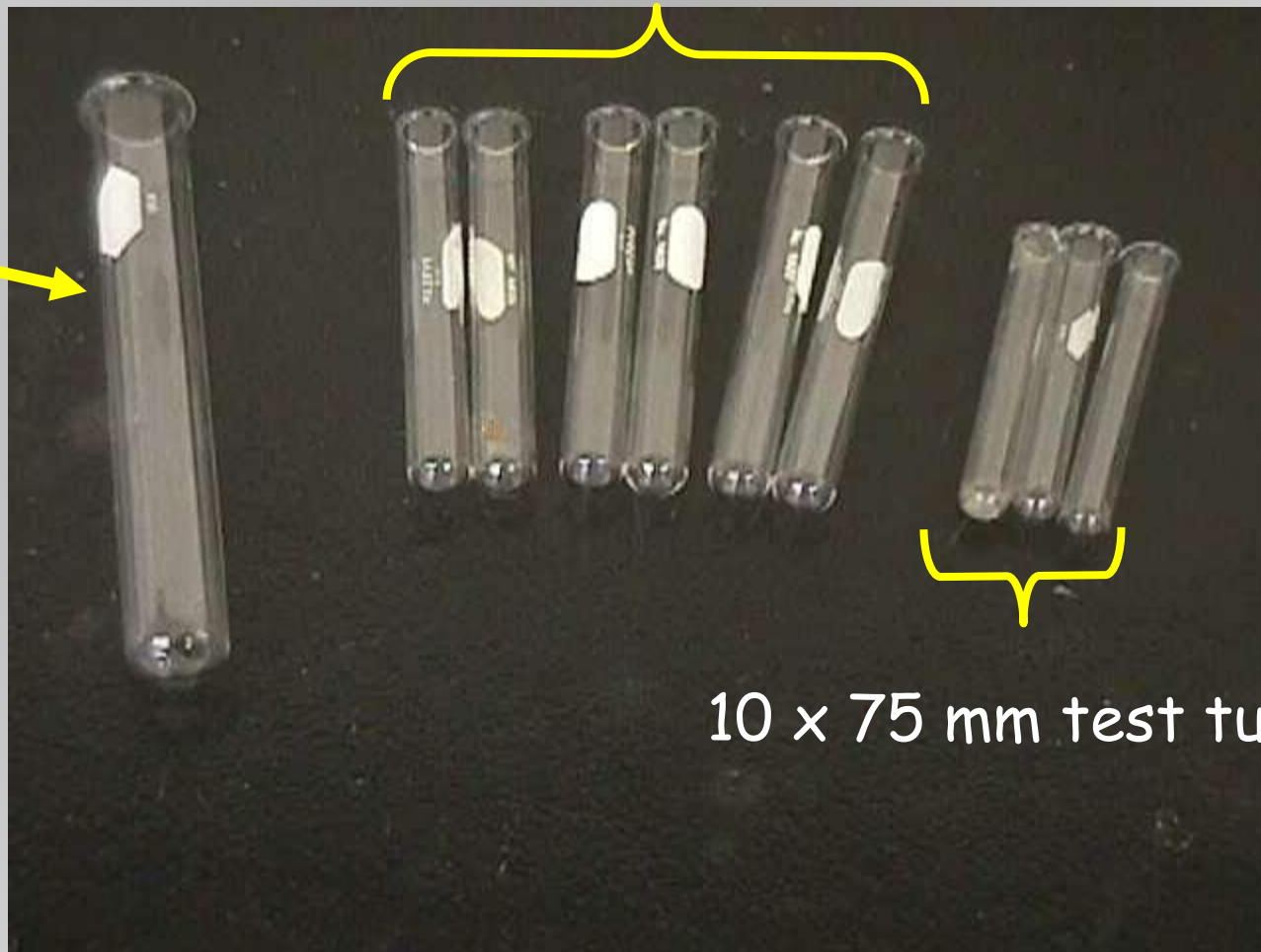


We use gas collecting bottles when large volumes of gases are produced, and must be collected by the displacement of water.

Test Tubes

13 x 100 mm test tubes

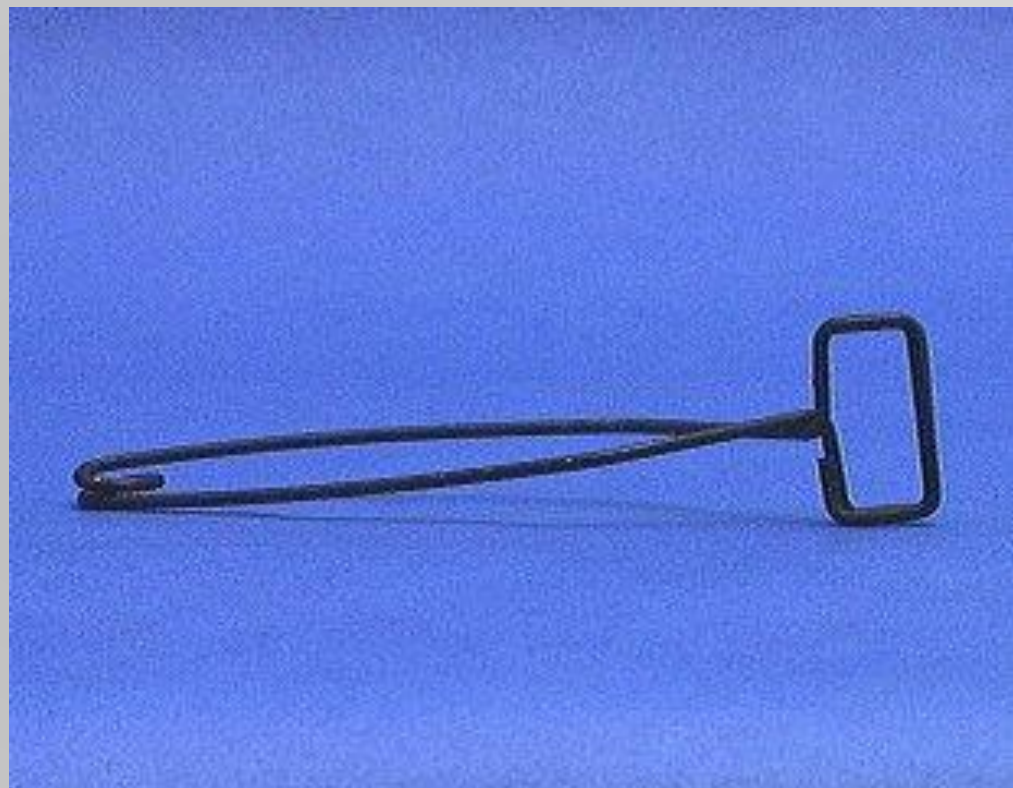
Ignition
tube



10 x 75 mm test tubes

Test Tube Holder

A test tube holder is useful for holding a test tube which is too hot to handle.



Test Tube Brushes

Test tube brushes are used to clean test tubes and graduated cylinders.

Forcing a large brush into a small test tube will often break the tube.



Test Tube Racks



Test tube racks are for holding and organizing test tubes on the laboratory counter. Plastic racks may melt in contact with very hot test tubes.

Rubber Stoppers



Rubber stoppers are used to close containers to avoid spillage or contamination.

Containers should never be heated when there is a stopper in place.

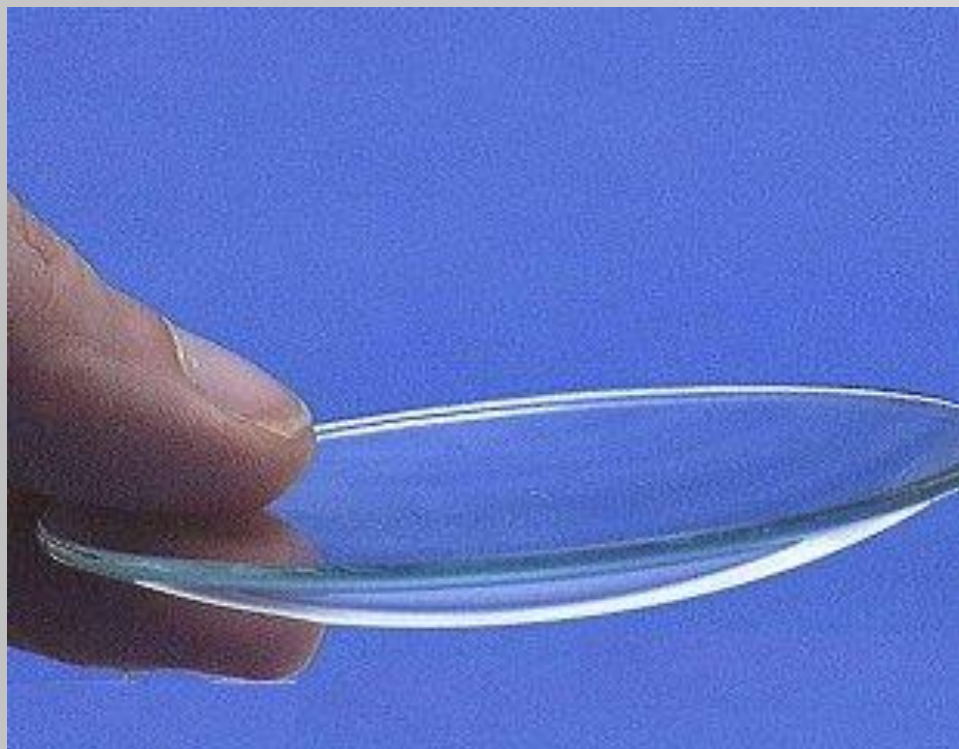
Spot Plates

Spot plates are used when we want to perform many small scale reactions at one time. We will use these many times during the year.

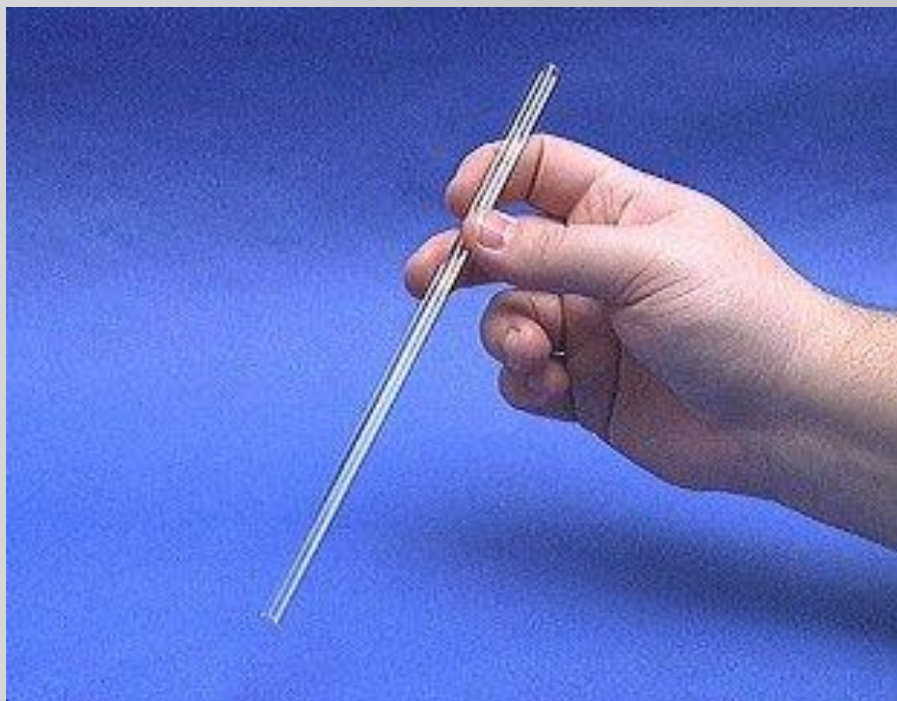


Watch Glass

A watch glass is used to hold a small amount of solid, such as the product of a reaction.

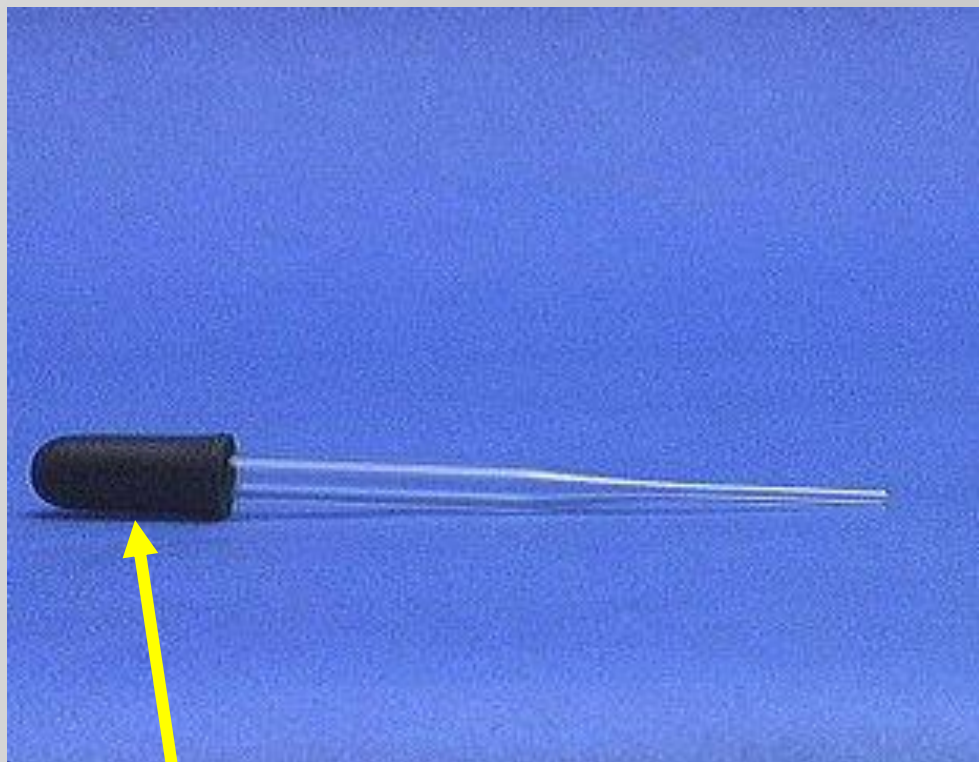


Glass Stir Rod



A glass rod is used to manually stir solutions. It can also be used to transfer a single drop of a solution.

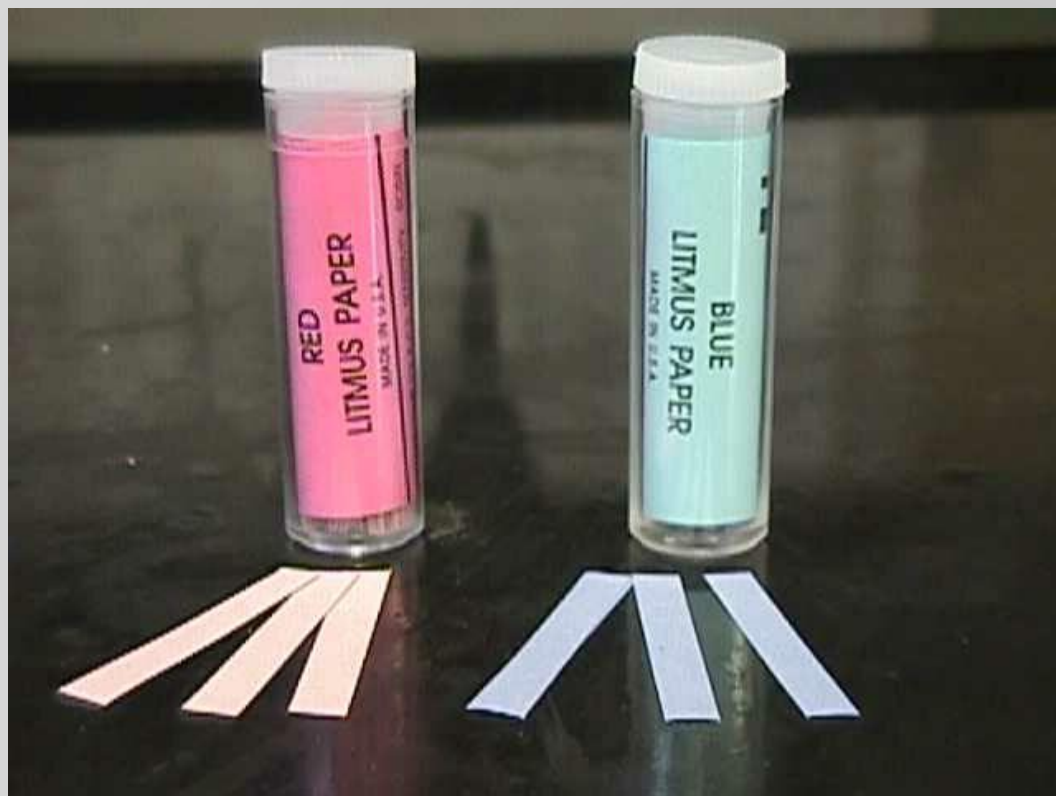
Medicine Dropper



A medicine dropper is used to transfer a small volume of liquid (less than one mL).

On top of each medicine dropper is a "rubber bulb"

Litmus Paper



Red litmus paper is used to identify bases.

Blue litmus paper is used to identify acids.

Forceps



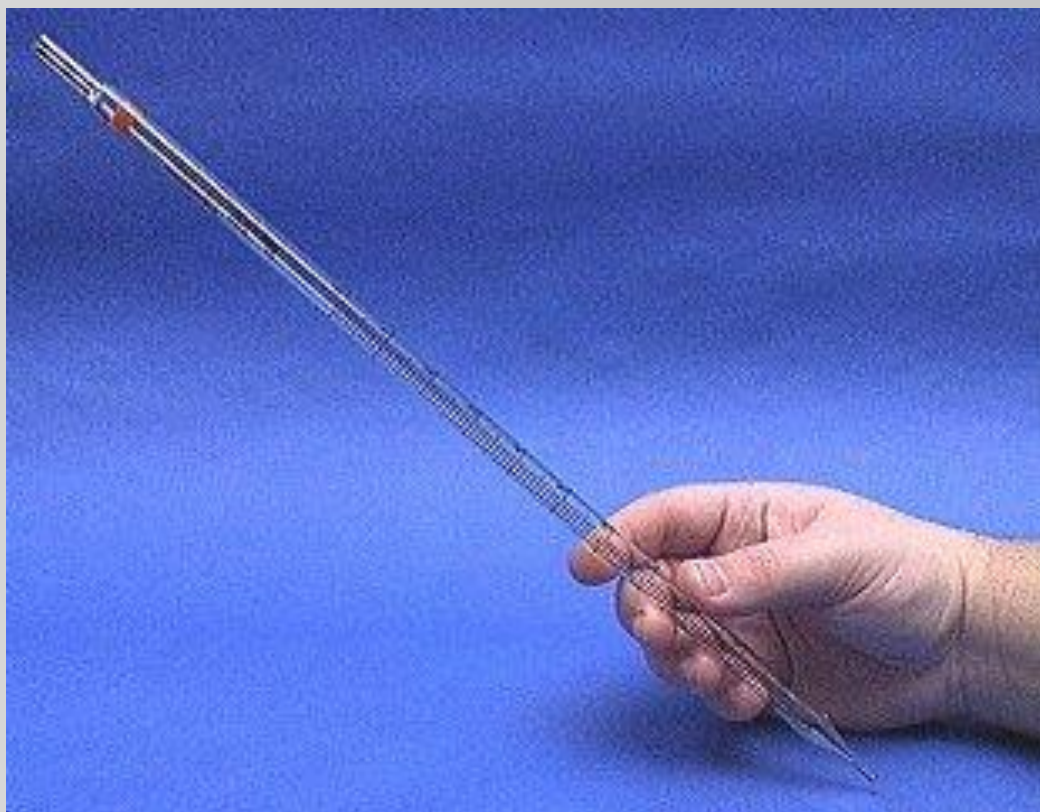
Forceps (or tweezers) are used to pick up small objects.

Funnel

A funnel is used to aid in the transfer of liquid from one vessel to another.



Mohr Pipet



A Mohr pipet measures and delivers exact volumes of liquids.

Wash Bottle



A wash bottle has a spout that delivers a wash solution to a specific area. Distilled water is the only liquid that should be used in a wash bottle.

Weighing Boat

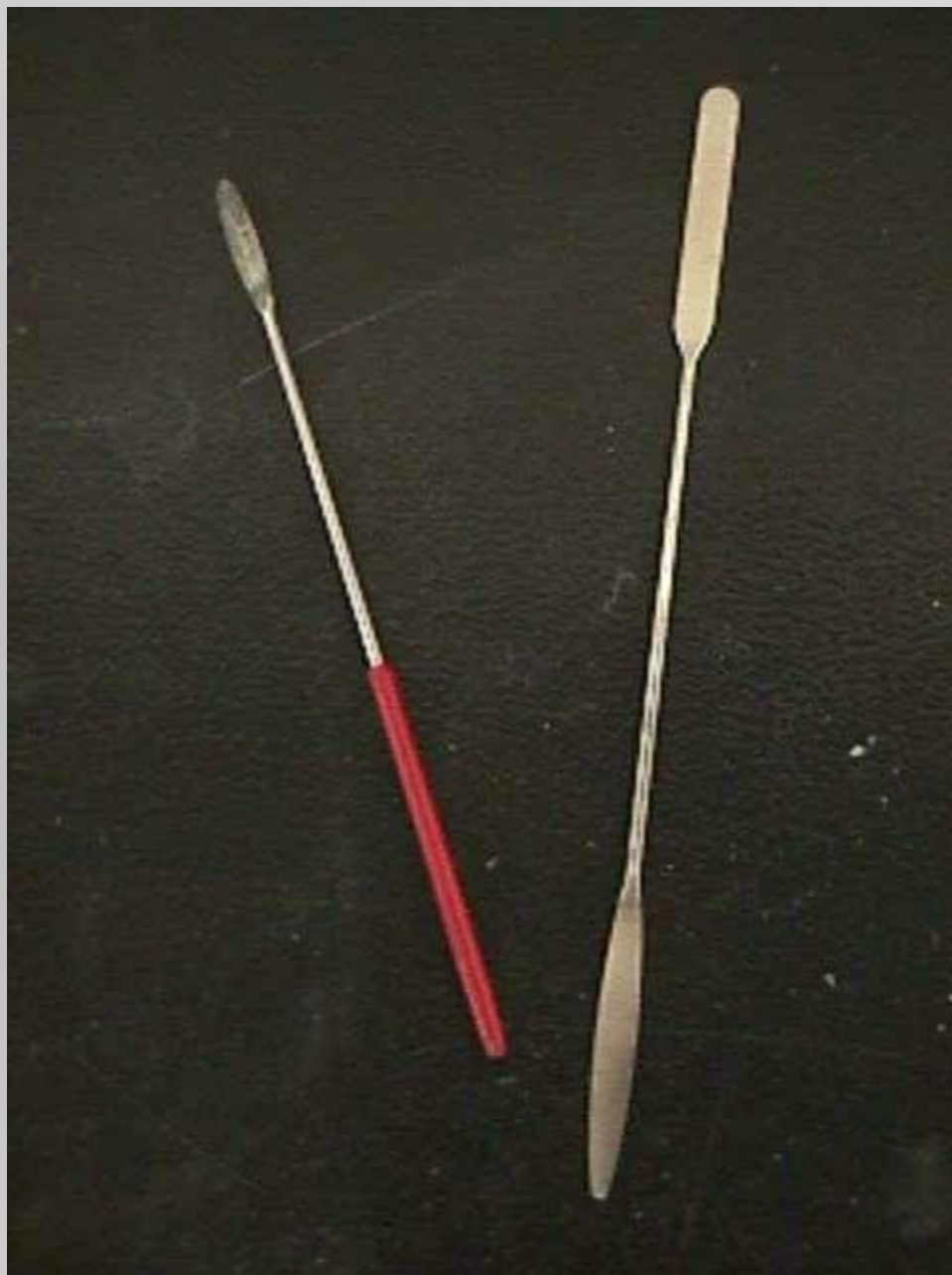
Weighing boats are used to weigh solids that will be transferred to another vessel.



Spatulas

Spatulas are used to dispense solid chemicals from their containers.

Chemicals should never be transferred with your bare hands.



Beaker Tongs



Beaker tongs are used to move beakers containing hot liquids

Bunsen Burner



Bunsen burners are used for the heating of nonvolatile liquids and solids.

Evaporating Dish



The evaporating dish is used for the heating of stable solid compounds and elements.

Crucible



Crucibles are used for heating certain solids, particularly metals, to very high temperatures.

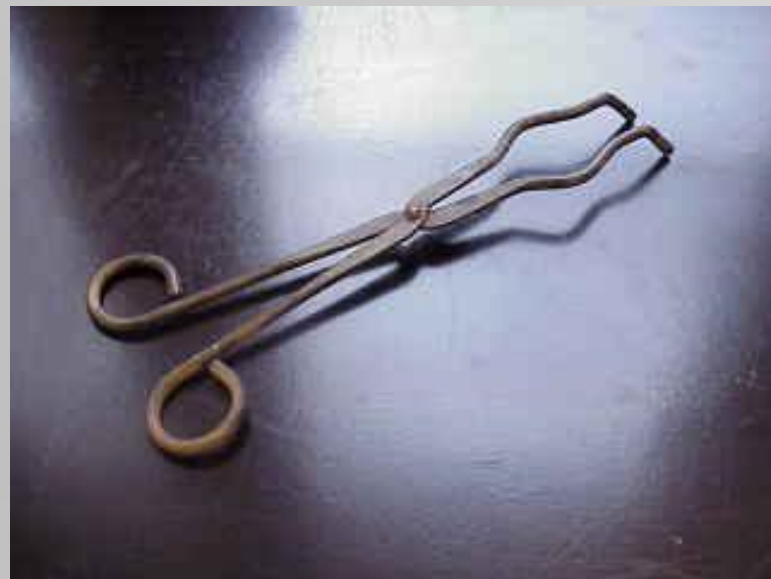
Clay Triangle

The clay triangle is used as a support for porcelain crucibles when being heated over a Bunsen burner.



Crucible Tongs

For handling hot crucibles;
also used to pick up other
hot objects. **NOT** to be
used for picking up beakers!



Glass Plates

Glass plates provide a surface for semi-micro scale experiments, such as drop reactions and testing of acids and bases.



Triangular File



Triangular files are used primarily to cut glass rod, a skill that your instructor will share with you when it becomes useful.

Ringstands and their Components

Ringstands are a safe and convenient way to perform reactions that require heating using a Bunsen burner.



Ringstands and their Components

Iron Rings

Iron rings connect to a ringstand and provide a stable, elevated platform for the reaction.



Ringstands and their Components

Utility Clamps

Utility clamps are used to secure test tubes, distillation columns, and burets to the ringstand.



Ringstands and their Components

Double Buret Clamps

Double Buret clamps are used to burets - long graduated tubes used in titration.

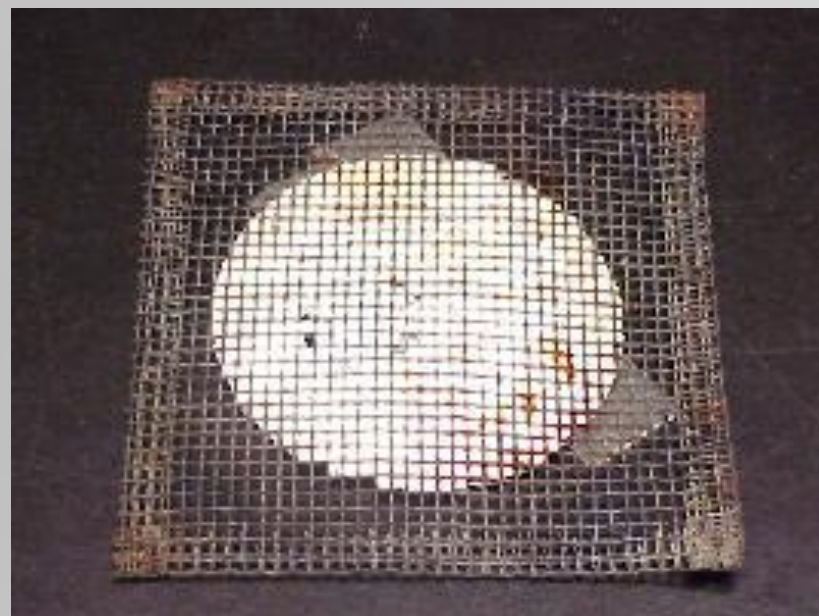


Ringstands and their Components

Wire Gauze

Wire gauze sits on the iron ring to provide a place to stand a beaker.

On older wire gauze, the white material is asbestos!



Pressed Fiber Pad

A 4" x 4" square of ceramic fiber, it provides a surface for hot beakers so that the beaker does not come in contact with a cold countertop and shatter.



Strikers

Strikers are used to light Bunsen burners.

The flints on strikers are expensive. Do not operate the striker repeatedly just to see the sparks!

