

Lockers:

13, 14, 17, 23, 24, 32,  
33, 34, 43, 44, 53, 54,  
59, 62, 63, 71

# Chemistry 51 Lab Equipment

Tonight

Make sure you have all of the equipment on the list  
Make sure your glassware is clean

## Bunsen Burner



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

## Beaker

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



## Buret

Burets are used for titration and are long graduated pieces of glass



## Beaker Tongs



Beaker tongs are used to move beakers containing hot liquids

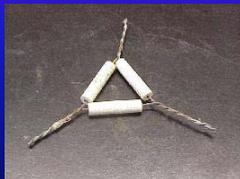
## Buret Clamp

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



## Clay Triangle

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



## 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.



## Crucible

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



## Evaporating Dish

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



## Crucible Tongs

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



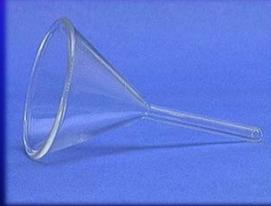
## Forceps

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.



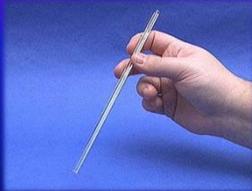
## Hot Hand

Hot hands are used to move beakers containing hot liquids



## 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.



## Pipette

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



On top of some pipettes are a "rubber bulb"



## Graduated Cylinder

A graduated cylinder is used to measure volumes of liquids.



## Rubber Policeman

Rubber policemen are used on glass stirring rods to assist in the movement of materials



## Spatulas

Spatulas are used to dispense solid chemicals from their containers.

Chemicals should never be transferred with your bare hands.



## 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.



## Strikers

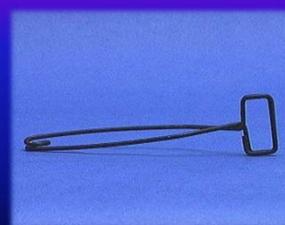
Strikers are used to light Bunsen burners.

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

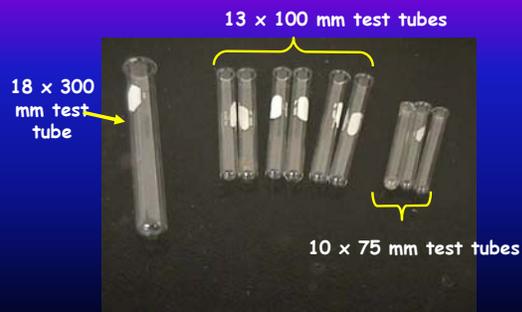


## Test Tube Holder

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



## Test Tubes



## 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.

## Ring Stands

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



## 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.



## Iron Rings

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



## 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.



## Utility Clamps

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



## Water Bottle

A water 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.



## Watch Glass

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



## 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!



## Due Next Class Meeting

- Buy Safety Goggles **and bring them to lab!**
- Buy Scientific Calculator
- Read Experiment #1
  - What Chemists Do: Identification and Analysis
  - Watch video at <http://elearning.lamission.edu/?cat=9>
- Composition Book **laboratory notebook**
  - Buy
  - Follow the rules on the syllabus\*
  - Write up as much as possible for Experiment #1
- Turn in Safety Test\*
- Turn in Safety Contract\*

\* See Professor Paz's website

