**Laboratory equipment and uses**

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| **NAME** | **Description and/or use** | **Picture** |
| Beaker  | * Beakers are used for holding various chemicals.
* Not for measuring precisely.
* Sizes vary.
 |  |
| Conical flask | * Used to approximately measure the volume various liquids.
* Useful for mixing by swirling
* Sizes vary.
 | Pyrex Erlenmeyer Flask Starter Pack |
| Florence flask | * Used to boil liquids.
* Also used to collect gases, if applicable.
* Sizes vary.
 | Pyrex® Florence Boiling Flask |
| Condenser  | Condenser is used for condensing of vapors that pass trough the center tube. It is cooled with water that passes in the outer tube. | Liebig condenser @ Chemistry Dictionary & Glossary |
| Graduated cylinder  | * Used to measure the volume of liquids.
* Plastic ring always on top if applicable.
* Sizes vary.
 | Glass Graduated Cylinders, Single Metric Scalehttp://tbn0.google.com/images?q=tbn:CiBjOewsvg86OM:http://www.tea.state.tx.us/student.assessment/resources/online/2006/grade8/science/images/20graphicaa.gif |
| Volumetric flask | * Used to prepare precise standard solutions.
* They are only good for 1 specific volume.
* Comes in many sizes
 | Pyrex® Volumetric Flask |
| Reagent bottle | * Used to store, transport, or view reagents such as acids or bases.
 | Dropping Bottle, Glass, Squat Form, 100 mL |
| Test tube and racks  | * Used to hold chemicals/tubes while experimenting.
* Not for measuring precisely.
* Sizes vary.
 | Test Tube Rack |
| Rubber stopper | * Used to close flasks and test tubes.
 | ANd9GcSziAKDfqKy-SRra_5gWFK6MQIUnpzFATioY5jwQ0GltFa2PVTerlYU6NUNsA |
| Distillation flask | * Used to separate liquids based on boiling point.
 | 840940_chm |
| Ring stand and ring clump | * Base/Pole of set-up for experimenting.
* Holds glassware in place for heating or evaporating.
 | Support Stands with Rings |
| Separator funnel | * laboratory glassware used in liquid-liquid reaction to separate (*partition*) the components of a mixture into two immiscible solvent phases of different densities.
 | https://upload.wikimedia.org/wikipedia/commons/thumb/9/97/Scheidetrichter_zwei_Phasen_brauner_Hintergrund.png/220px-Scheidetrichter_zwei_Phasen_brauner_Hintergrund.png |
| desiccator  | * The purpose of the **desiccator** is to either dry a chemical or keep a chemical from becoming “wet” from atmospheric humidity (water in the air).
 | Vacuum Desiccators at Rs 9325/number | Laboratory Desiccator | ID:  17850110288 |
| Test tube brusher  | * Cleaning.
* You must clean tubes before and after you use.
 | White Nylon Bristle Test Tube Brushes |
| Pipet and blub | * Used to precisely measure the volume of liquids in small amounts.
 | Safety Pipet Filler, SiliconePyrex® Color-Coded Measuring Pipets BrandTech 30607 BLAUBRAND® Bulb Pipette, Glass, Class A, 5 mL; 6/PK from  Cole-Parmer  |
| Disposable pipet | * Disposable pipets used to transfer small amounts of chemicals.
 | Plastic Microchemistry Pipets |
| Capillary tube | * Used to collect liquid through the process of capillary action.
 | Heparinized Capillary Tubes (Vial of 100) |
| Test tube holder  | * Used for carrying or holding hot test tubes.
 | Test Tube Clamp with Grips, Stoddard |
| Thermometer  | * Measuring temperature.
 | Teflon®-Coated Mercury Thermometers |
| Watch glass  | * Used to show chemical reactions.
 | Watch glass, 100 mm dia. |
| Crucible and cover | Made of porcelain; used to heat small amounts of solid substances that are being heated strongly at high temperatures | http://tbn0.google.com/images?q=tbn:X2uyS81Y3t__pM:http://www.perfectpartscompany.com/P606.jpg |
| Crucible tongs | Metal utility tongs used for hot crucibles; spring-like jaws with a jaw opening | http://tbn0.google.com/images?q=tbn:two7LvBPOl9HNM:http://core.ecu.edu/chem/chemlab/equipment/images/tongs.jpg |
| Clay triangles  | * Used to hold a crucible in place on a ring stand.
* Also helps absorb and spread heat of flame.
* Part of ring stand set-up.
 | Triangles |
| Beaker tongs | * Used to carry beakers.
 | Surefast Beaker Clamp |
| String road | * Used to stir substances.
* Clean in between uses.
 | Glass Stirring Rods |
| Mortar and pestle | * Used to grind substances into powder.
 | Porcelain Mortars and Pestles |
| Funnel  | * Used to safely transfer substances from one container to another.
 | Funnel, Polypropylene, Nalgene, 2 5/8 in 1000ml,Vacuum Suction Filtration Device,1 L,Buchner Funnel Apparatus,Heavy  Wall|buchner funnel|filtration vacuumfiltration apparatus - AliExpress |
| Dropper and bottle | * Used to measure out small amounts of liquids for experiments.
 | KkfNznWuRWgPITVBkv-bCR7xIWLrtaXJSMks5VPs3P_D9-zLObWGbJv9WinrFnhx2FITD-LOoAV39YlBizaIVmupTqQKs_tXjgbw7nuEG0f2gzpX-9lv9-eAAfdf1XbIZq71BUBT7HeLQgeX2KKT2fUxZZ4 |
| Filter pepper  | * Use for filtration.
 | MilliporeSigma Quantitative Filter Papers: Ashless Circles:Filtration:Filter  | Fisher Scientific Fast Speed Quantitative Filter Paper Grade 201, SML 12.5cm, Q100 – Lilium  Laboratory Equipment and Supplies Inc. |
| Washing bottle | * Usually contains deionized water.
* Handy for rinsing glassware and for dispensing small amounts of dH2O for chemical reactions.
 | Wash Bottles |
| Bunsen burner  | * Used to heat substances quickly or if > 400oC is needed.
* Do not use with flammable substances.
 | 706706_app |
| Wire gauze  | * Used to absorb and spread the heat of flame.
 | Wire Gauze |
| Digital balance  | * Used to accurately measure mass.
 | http://tbn0.google.com/images?q=tbn:o4DcgudIR0HeCM:http://www.americanweigh.com/images/scoutproLG.jpg |
| Centrifuge  | * Used to separate suspensions (solids from liquids).
 | Spectrafuge 16M Microcentrifuge |
| Fume hood  | * Laboratory **Fume Hoods**. A properly operating and correctly **used fume hood** can reduce or eliminate exposure to volatile liquids, dusts, and mists. It is advisable to use a laboratory **hood** when working with all hazardous substances.
 | Class I Division 1 Explosion-Proof Hoods | Terra Universal |
| Hot plate  | * Hot plates are frequently used in the laboratory to perform chemical reactions, to heat samples
 | When to Use a Magnetic Stirrer in the Lab | Labnet International, Inc.  Global |