**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](http://www.carolina.com/product/crucible+cover,+porcelain,+38+mm.do?keyword=crucible&sortby=bestMatches) |
| Florence flask | * Used to boil liquids. * Also used to collect gases, if applicable. * Sizes vary. | [Pyrex® Florence Boiling Flask](http://www.google.com/imgres?imgurl=https://www.pelletlab.com/v5Files/sfwlHpleNfygCJH2/148862/640/b_l_stopper_05.jpg&imgrefurl=http://www.pelletlab.com/rubber_stoppers&usg=__mmXcKpI3gc_Kn-BBNPMNhZZbvrc=&h=640&w=640&sz=26&hl=en&start=8&zoom=1&tbnid=t1nblAkSNOhQNM:&tbnh=137&tbnw=137&ei=gZhMTsO8OoPnsQLVnuTvBg&prev=/search?q=rubber+stopper&hl=en&gbv=2&tbm=isch&itbs=1) |
| 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 Scale](http://www.carolina.com/product/rubber+tubing,+amber,+1-8-in+bore,+1-32-in+wall,+10+ft.do?keyword=rubber+tubing&sortby=bestMatches)[http://tbn0.google.com/images?q=tbn:CiBjOewsvg86OM:http://www.tea.state.tx.us/student.assessment/resources/online/2006/grade8/science/images/20graphicaa.gif](http://images.google.com/imgres?imgurl=http://www.tea.state.tx.us/student.assessment/resources/online/2006/grade8/science/images/20graphicaa.gif&imgrefurl=http://www.tea.state.tx.us/student.assessment/resources/online/2006/grade8/science/8science.htm&h=327&w=257&sz=7&hl=en&start=7&tbnid=CiBjOewsvg86OM:&tbnh=118&tbnw=93&prev=/images?q=graduated+cylinder&gbv=2&hl=en) |
| 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](http://www.carolina.com/product/rubber+tubing,+amber,+1-8-in+bore,+1-32-in+wall,+10+ft.do?keyword=rubber+tubing&sortby=bestMatches) |
| Test tube and racks | * Used to hold chemicals/tubes while experimenting. * Not for measuring precisely. * Sizes vary. | [Test Tube Rack](http://www.carolina.com/product/crucible+cover,+porcelain,+38+mm.do?keyword=crucible&sortby=bestMatches) |
| Rubber stopper | * Used to close flasks and test tubes. | [ANd9GcSziAKDfqKy-SRra_5gWFK6MQIUnpzFATioY5jwQ0GltFa2PVTerlYU6NUNsA](http://www.google.com/imgres?imgurl=https://www.pelletlab.com/v5Files/sfwlHpleNfygCJH2/148862/640/b_l_stopper_05.jpg&imgrefurl=http://www.pelletlab.com/rubber_stoppers&usg=__mmXcKpI3gc_Kn-BBNPMNhZZbvrc=&h=640&w=640&sz=26&hl=en&start=8&zoom=1&tbnid=t1nblAkSNOhQNM:&tbnh=137&tbnw=137&ei=gZhMTsO8OoPnsQLVnuTvBg&prev=/search?q=rubber+stopper&hl=en&gbv=2&tbm=isch&itbs=1) |
| 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](http://www.google.com/imgres?imgurl=http://www.thesciencefair.com/Merchant2/graphics/00000001/PiPump_3825_2_M2.jpg&imgrefurl=http://www.thesciencefair.com/Merchant2/merchant.mvc?Screen=PROD&Product_Code=3825-2&Category_Code=PIPUMPFILL&usg=__BSgaGqC5EhOmwZ1-3WOk9l6_UBo=&h=440&w=120&sz=22&hl=en&start=1&zoom=1&tbnid=8O5aZ2omDxTOuM:&tbnh=127&tbnw=35&ei=BJRMTsGDGcS2sQK1rdT6Bg&prev=/search?q=pipet+pump&hl=en&gbv=2&tbm=isch&itbs=1) |
| 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](http://www.google.com/imgres?imgurl=http://www.crscientific.com/buretteclamp1a.jpg&imgrefurl=http://www.crscientific.com/buretteclamps.html&usg=__lF84Blnx33h2h6vlGwhhEyrsEEk=&h=158&w=350&sz=10&hl=en&start=1&zoom=1&tbnid=Ys3d2v9tUKUR3M:&tbnh=54&tbnw=120&ei=gpRMToTZGMevsAKa1ajNBg&prev=/search?q=single+burette+clamp&hl=en&gbv=2&tbm=isch&itbs=1) |
| 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](http://www.google.com/imgres?imgurl=http://ecx.images-amazon.com/images/I/11BUuBS7rUL._SL500_AA300_.jpg&imgrefurl=http://www.amazon.com/Japonesque-Dropper-Bottle/dp/B000J242TE&usg=__42GmcYPX94PhOrqML9Q2AE2KO3U=&h=300&w=300&sz=4&hl=en&start=20&zoom=1&tbnid=bwfTihELopQOEM:&tbnh=116&tbnw=116&ei=pZVMTu3cOKOQsQK9nsDdBg&prev=/search?q=dropping+bottle&um=1&hl=en&sa=N&rlz=1T4ADFA_enUS415US420&tbm=isch&um=1&itbs=1) |
| Thermometer | * Measuring temperature. | [Teflon®-Coated Mercury Thermometers](http://www.google.com/imgres?imgurl=https://www.pelletlab.com/v5Files/sfwlHpleNfygCJH2/148862/640/b_l_stopper_05.jpg&imgrefurl=http://www.pelletlab.com/rubber_stoppers&usg=__mmXcKpI3gc_Kn-BBNPMNhZZbvrc=&h=640&w=640&sz=26&hl=en&start=8&zoom=1&tbnid=t1nblAkSNOhQNM:&tbnh=137&tbnw=137&ei=gZhMTsO8OoPnsQLVnuTvBg&prev=/search?q=rubber+stopper&hl=en&gbv=2&tbm=isch&itbs=1) |
| 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](http://images.google.com/imgres?imgurl=http://www.perfectpartscompany.com/P606.jpg&imgrefurl=http://www.perfectpartscompany.com/PerfectApparatusContent.htm&h=122&w=88&sz=12&hl=en&start=1&tbnid=X2uyS81Y3t__pM:&tbnh=89&tbnw=64&prev=/images?q=crucible+and+cover&gbv=2&hl=en) |
| 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](http://images.google.com/imgres?imgurl=http://core.ecu.edu/chem/chemlab/equipment/images/tongs.jpg&imgrefurl=http://core.ecu.edu/chem/chemlab/equipment/ecrucibletongs.htm&h=400&w=400&sz=27&hl=en&start=2&tbnid=two7LvBPOl9HNM:&tbnh=124&tbnw=124&prev=/images?q=crucible+tongs&gbv=2&hl=en) |
| 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](http://images.google.com/imgres?imgurl=http://www.americanweigh.com/images/scoutproLG.jpg&imgrefurl=http://www.americanweigh.com/product_info.php?products_id=42&h=316&w=500&sz=19&hl=en&start=6&tbnid=o4DcgudIR0HeCM:&tbnh=82&tbnw=130&prev=/images?q=electronic+balance&gbv=2&hl=en) |
| 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 |