

CHEMISTRY LAB MATERIALS LIST

2008-9 School Year

Science Fees: Most schools charge a student lab fee to help defray the cost of laboratory materials.

Calculator: The only calculator used in class by the teacher is the TI-83 Plus. Although students may use other scientific calculators, they must be familiar with the keystroke differences between their calculator and the TI-83 Plus. Since a TI-83 Plus is required in BJ LINC math classes, it may be advisable to purchase that model.

The following list provides information regarding the materials, which can be purchased locally, for both semesters' labs. The tentative schedule found in this packet can be used to know when to purchase specific items by noting the lab in which the item is used and finding the date on which that lab is scheduled on the tentative schedule.

Local Items

Quantity/Lab group	Item	Lab Use
1 Container	Salt	3, 5A
1	Pencil	4, 6
3 (colors)	Marker, water-soluble	4
2	Cup, paper, 3-8 ounces	4, 6
2	Paperclip	4
1	Ruler	4
1 bottle	Isopropyl alcohol	15
1 bottle	Ammonia	4, 9, 15
1 bottle	Vinegar	4, 5B, 9, 13, 15
2	AA batteries	5A
1 stick	Pencil lead (for a mech. pencil)	5A
½ gal.	Distilled water	5B
1	Chicken bone, cleaned	5B
1	Hard-boiled egg, with shell on	6
1	Index card	6, 10
1	Hole punch	6
1 bottle	Cooking oil	6
1	Flashlight	6
1	Push pin or needle	6
1	Rod, acrylic or rubber	6
1 piece	Silk or fur	6
1	Bowl, large	7
110	Peanuts	7
80	Candy-coated chocolates	7
90	Raisins	7
60	Dried fruit	7
60	Gummi candies	7
1 sheet	Weighing paper	7
5	Bowls or jars	7
5	Ice cubes	9

1	Small cup	9
1 box	Matches	9, 11
5 drops	Vinegar	9
10 drops	Food coloring	9
5 identical	Textbooks	9
1	Plastic bag	9
1	Needle or paper clip	10
1 drop	Liquid dish detergent	10
1	Toothpick	10, 13
1 pair	Scissors	10
1	Drinking glass	10
1 ft.	Thin string	10
1	9V battery	11
1	8 oz. clear plastic or glass cup	11
20-25 grams	Epsom salts	11
4 tablets	Effervescent antacid and pain reliever	13
6	Paper cups	13
1 cup	Vinegar	13
1	Cotton ball	13
1 piece	Chalk	13
1 drop	Turmeric (spice)	15
1 leaf	Red cabbage	15
5	Resealable zipper bags	15
4 different	Flower petals	15
30 drops	Vinegar	15
5 grams	Cream of tartar	18
5 grams	Honey	18
5 grams	Table sugar	18
5 grams	Another simple sugar	18

Science Supply Company Items

The following list provides information regarding the materials for both semesters' labs which are not usually available locally and need to be ordered.

The item numbers from Frey Scientific Supply Company and Home Science Tools (formerly Home Training Tools) are included in this list. It is best to initially use their Web sites as the item numbers can be entered into the "Search" box and will return information on each item. This will save the time needed to locate the items in a catalog. However, it is possible to obtain a free catalog from either supplier listed and use it to view the pictures of any items on which the specifications listed on the Web sites are not clear. Items may be ordered from any scientific supply company. We do not suggest suppliers based upon whether or not they are the best, but rather because they are well known, and because they have traditionally given reasonably good service. You will need to shop around in order to get the best price. If your order is of significant size, you can send it to several suppliers with a request that they submit a bid.

Items listed with supplier information are simply for the purpose of helping you find a typical item. Order from the company that best meets your needs.

Frey
P.O. Box 8101
Mansfield, OH 44901
800-225-3739
www.freyscientific.com

Home Science Tools
665 Carbon Street
Billings, MT 59102
800-860-6272
www.homesciencetools.com

BJU Press
Customer Services
Greenville, SC 29614
800-845-5731
www.BJUPress.com

Quantity/Lab group	Item	Lab Use	BJU and Frey Item #	Home Science Tools Item #
1	Chemlab 1100 Chemistry Kit	All labs	BJU – 195263	
1	Copper II (cupric) sulfate pentahydrate	8, 18	Comes with Chemlab 1100 if purchased from BJU Press	CH-CUSO4
1	Limewater	18		CH-CAOHSOL
1	Balance	3, 7, 8	Frey – 15572090	BS-2610
2	Beakers – 400 mL	3, 5A, 5B	Frey – 15593979	CE-BEAK400
2	Beakers – 600 mL	3, 5A, 5B	Frey – 15593982	CE-BEAK600
1	Thermometer	11	Frey – 15585027	ME-THER30A
10 drops	Calcium chloride	14	Frey – 15578241	CH-CACL2

Note on Chemlab 1100: The Chemlab 1100 cannot be exchanged for other lab kits. If you purchase the Chemlab 1100 from the BJU Press, you will also receive the copper II (cupric) sulfate pentahydrate and limewater listed above. Item numbers for copper II (cupric) sulfate and limewater are provided in the chart in case you need to order an additional supply.

Hot plate: A hot plate will be required for several labs. It is possible to use a regular stove instead of a hot plate. It is not recommended that you heat glassware directly on your stove burner or gas flame. Place a pan on the stove that contains water, and then place your test-tube or beaker in the water.

Triple Beam Balance: OHAUS Model 750-SW, 2610-g capacity and 0.1-g sensitivity, can be purchased for just over \$100. Other balances may be used as long as they are marked in tenths of a gram so that the hundredths-of-a-gram digit may be interpolated. The brand name of your balance is not important as long as it meets the requirements for the class. In the past, some have purchased a triple beam balance with a 610-g capacity, which does not have the additional masses that come with a 2610-g capacity balance, and is cheaper on some online auction sites. This balance is acceptable for Chemistry and will also meet the requirements for Physics; however, it is often possible to find a 2610-g capacity balance with the additional masses for the same price. A digital scale may be used in place of a balance if it reads to at least the tenths of a gram. It may also be used later for Physics if it has a capacity of at least 500-g. A digital scale is often more expensive than a triple beam balance.

Selected Sources of Scientific Supplies

ARBOR, www.arborsci.com, 1-800-367-6695
BJU PRESS, www.BJUPress.com, 1-800-845-5731
CAROLINA BIOLOGICAL, www.carolina.com, 1-800-227-1150
C&S SALES, www.cs-sales.com, 1-800-292-7711
CYNMAR, www.cynmar.com, 1-800-223-3517
DAIGGER, www.daigger.com, 1-800-621-7193
FREY, www.freyscientific.com, 1-800-225-3739
FLINN, www.flinnsci.com, 1-800-452-1261
HOME SCIENCE TOOLS (formerly Home Training Tools), www.HomeScienceTools.com,
1-800-860-6272
KELVIN, www.kelvin.com, 1-800-535-8469
NASCO, www.eNASCO.com, 1-800-558-9595
PASCO, www.pasco.com, 1-800-772-8700
SARGENT WELCH, www.sargentwelch.com, 1-800-727-4368
SCIENCE KIT AND BOREAL LABS, www.sciencekit.com, 1-800-828-7777