

# Chemistry of Food

## Improvement Activity Equipment List

**Description of Activity:** A semester course designed to focus on the scientific method to study the relationships between food, science, nutrition, and food preparation.

**Curriculum Component:** Food and Nutrition must be offered as part of an approved Career Focus Program of Study in the area of Family and Consumer Sciences, and the course must be taught for a total of 5 years. The curriculum developed by Arkansas FACS teachers will be the approved curriculum.

**Inservice Component:** NOTE: Inservice will is required for this training and is offered on a rotating basis

**Equipment Component:** Estimated cost should not exceed \$7,000. The school district will be responsible for the cost of equipment for this course.

### Approved Purchases:

<u>Quantity</u>	<u>Item/Description</u>	<u>Estimated Cost</u>
<u>Equipment:</u>		
4	Microscopes, 4X, 10X, 40XR, Parafoval Objectives Widefield 10X Eyepiece with Pointer, Disc, Diaphragm, 15W Illuminator, 360 Degree Rotatable Head.	\$2,000.00
25	Safety Goggles, adjustable sizes for eyeglass and contact lens wearers.	\$175.00
2	Electronic balance, must mass 0.01g to 250g	\$780.00
<u>Chemicals:</u>		
100 g	ascorbic acid (for human consumption)	\$11.00
500 mL	glycerol	\$9.00
500 g	lactose (for human consumption)	\$10.00
250 g	maltose (for human consumption)	\$14.00
1 g	methylene blue	\$14.00
500 mL	phenolphthalein	\$6.00
200 g	potassium chloride	\$8.00
500 g	potato starch powder pure corn	\$26.00
100 g	sodium bisulfite (not metabisulfite)	\$8.00
500 g	sodium hydroxide	\$11.00
4 lb.	alconox cleaner	\$21.00

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### Additional Supplies:

6	10 mL graduated cylinders, pyrex	\$60.00
6	100 mL graduated cylinders, pyrex	\$108.00
6	1000 mL beakers	\$60.00
24	100 mL beakers	\$58.00
24	250 mL beakers	\$55.00
24	250 mL Erlenmeyer flasks	\$210.00
20	400 mL beakers	\$56.00
12	alcohol thermometers, -20 to 100 C	\$57.00
12	burets, glass	\$768.00
2	food dehydrators	\$100.00
72	microscope slides	\$8.00
6	ring stands with utility clamps	\$144.00
20	stirring rods	\$6.00
6	test tube racks	\$120.00
144	test tubes, pyrex, 18x150mm	\$87.00
12	test tube brushes	\$24.00
100	disposable polyethylene aprons	\$22.00
20	petri dishes, disposable, polystyrene, sterile	\$8.00

12 rolls	pH paper, 1-15 range	\$62.00
25	pipette, dropping, plastic	\$7.00
5	spatula, micro, stainless steel	\$4.00
1 package	weighing paper (500 sheets)	\$15.00
5	stop watches	\$60.00
1	lab safety chart	\$49.00
1	lab techniques chart	\$49.00
10 packages	Disposable gloves (5 pkgs. Large, 5 pkgs. Medium)	\$24.00
5	Beaker tongs with protective sleeves	\$41.00
1	Fire Blanket	\$75.00
1	Glow Germ Kit	\$53.00
4	blenders or food processors	\$115.00
4	23cm diameter cake pans	\$12.00
4	candy thermometers	\$16.00
4	cutting boards	\$20.00
4	electric hand mixers	\$60.00
4	forks	\$5.00
1	aluminum frying pan	\$15.00
1	aluminum frying pan with non stick coating	\$15.00
1	cast iron frying pan	\$15.00
1	stainless steel frying pan with copper bottom	\$15.00
1	porcelain enamel frying pan	\$15.00
1	stainless steel frying pan	\$15.00
12	funnels	\$18.00

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Additional Supplies: (con't)

1	hot air popcorn popper	\$20.00
4	125 mL measuring cups	\$10.00
4	250 mL measuring cups	\$10.00
4	50 mL measuring cups	\$10.00
12	cooling racks	\$120.00
4	metric rulers	\$6.00
8	large mixing bowls	\$40.00
4	muffin tins	\$12.00
4	paring knives	\$16.00
4	pastry blenders	\$12.00
10	clear glass pie plates	\$40.00
4 packages	pins with plastic heads	\$2.00
4	plastic or wooden mixing spoons	\$3.00
4	plastic rings, 5.3 cm wide x 2.5 cm high	\$5.00
4	rolling pins	\$20.00
8	sauce pans	\$50.00
4	sauce pans extra large	\$25.00
4	sifters	\$10.00
6	slotted spoons	\$25.00
4	rubber spatulas	\$8.00
4	spatulas, straight edge	\$10.00
8	spoons, 5 mL	\$15.00
4	serving spoons	\$10.00
4	strainers	\$15.00
4	tongs	\$10.00
8	heat resistant trays	\$25.00
8	wide mought jars 0.9 L with lids	\$25.00

Estimated Total

\$6,373.00

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