

abeka®

KIT CONTENTS LIST FOR USE WITH:

Chemistry: Precision and Design (Grade 11)
3rd Edition

Home Science Tools is not affiliated with the above curriculum publisher.

<u>Text Reference</u>	<u>Item Description</u>	<u>Item Quantity</u>	<u>Notes</u>
1, 2, 4, 5, 11, 19, 20	Beaker, glass, 400 ml (CE-BE10400)	1	Use beakers to make solutions for each lab.
1, 4, 10, 18, 20, 24	Pipet (medicine dropper) (CE-DROPPER)	2	
1-23	Beaker, glass, 250 ml (CE-BE10250)	2	
1-23	Chemical Splash Safety Goggles, Adult (CE-GOGGLE1)	1	
1-23	Lab Apron No. 1, vinyl, 6 mil (CE-APRON1)	1	
1-23	Safety Gloves, size 8 - 8.5 Medium (CE-SGLOVEM)	1	
1-23	Test Tube Rack, 6 holes (CE-TTRACK1)	1	
1-24	Test Tubes, extra large, 20 x 150 mm (CE-TTUBEXL)	6	12 test tubes included in the kit. Use test tubes instead of 250ml jars to collect oxygen in Lab 15 and perform Part II/III sequentially.
1-25	Test Tube Brush, large (CE-TTBRSH2)	1	
2, 3, 15, 24	File, triangular (CE-FILE)	1	
2, 3, 15, 24	Glass Tube, 5 mm, 12" long (CE-TUBEG12)	2	Use to make salt bridge in Lab 24
2, 4, 5, 7, 8, 11, 17, 18, 19, 23	Wire Gauze, ceramic center, 5" (CE-GAUZE)	1	
2, 5, 6, 11, 16	Test Tube Clamp (CE-TUBHOLD)	1	
2-23	Butane Gas Fuel Refill, 57 g (100 ml) (UN-BUTFUEL)	1	See our website to order additional fuel as needed.
2-23	Portable Micro Lab Burner (CE-BURNLAB)	1	
3, 11, 15	Rubber Stopper, # 6.5, 1-hole (CE-STOP06A)	2	Use one of these 6.5# stoppers for Lab 11 and make the split yourself or the help of an adult.
3, 17, 19	Graduated Cylinder, glass, 100 ml (CE-CYGL100)	1	
3, 4, 5, 6, 7	Copper II Sulfate (cupric), 30 g (CH-CUSO4)	1	
3, 4, 5, 7, 8, 17, 18, 19, 21, 23	Ring Support, 3" (CE-RING3)	1	
3, 4, 5, 7, 8, 17, 18, 19, 21, 23	Support Stand, 4" x 6" base, 18" rod (CE-STAND2)	1	
3, 4, 8, 16, 24	Filter Paper, 11 cm, 10 pack (CE-FILTPAP)	1	
3, 4, 8, 24	Funnel, glass, 75mm dia. (CE-FUNGLS)	1	
3, 5, 10, 20, 21, 22	Sodium Hydroxide, 30 g (UN1823)	1	
3, 5, 6, 8, 12, 17	Weighing Boats, aluminum, 57 mm, 100 pack (BS-WHDSAL3)	1	

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3, 5, 7, 8, 10, 17, 18, 20, 22	Stirring Rod, glass, 6" (CE-STIRROD)	1	
3, 7, 10, 16, 23	Spatula, stainless steel (CE-SPATULA)	1	
3, 9, 11, 15, 17, 24	Glycerin, 30 ml (CH-GLYCERN)	1	
3-18	Superior Balance Digital Pocket Scale, 600 g capacity, 0.1 g precision (BS-SPB600)	1	
4	Carbon, lumps, 30 g (CH-CARBON)	1	
4, 10, 15, 16, 20	Watch Glass, 100 mm (CE-WATCHLG)	1	Perfrom Lab 4 sequentially with the (1) watch glass with each chemical instead of all at one time. Clean the watch glass between each use.
4, 10, 22	Chalk (calcium carbonate) (CH-CHALK)	1	
4, 11	Copper Metal Shot, 30 g (CH-CUPELL)	2	
4, 18	Evaporating Dish, 80 ml (CE-EVAPDSH)	1	White ceramic bowl wrapped in shipping paper
4, 5	Pure cane sugar, single-serve packet (2.8 grams) (GS-SUGPAK)	10	
4, 5, 10, 17, 18, 22, 23	Sodium Chloride, 30 g (CH-NACL)	2	
4, 5, 24	Rubber Stopper, #2, solid (CE-STOP02C)	2	
4, 5, 6, 20, 21, 22, 27	Hydrochloric Acid, 12M, 30 ml (UN1789)	1	Hydrochloric acid can be a substitute for Nitric Acid in Lab 10 Part III and to neutralize Tollen's Reagent waste.
4, 5, 7, 18, 19, 20, 22	Graduated Cylinder, glass, 10 ml (CE-CYGL10)	1	Use graduated cylinder to make solutions for all labs that require dilution.
4, 6, 16	Sulfur, 30 g (UN1350)	1	
4, 7, 10, 18, 21, 22, 24	Beaker, glass, 50 ml (CE-BE10050)	2	Use the 250mL beakers in addition to the 50 mL beakers for Labs.
5	Calcium Metal, turnings, 10 g (UN1401)	1	
5	Magnesium Ribbon, 60 cm (UN-MG)	1	
5	Potassium Iodide, 30 g (CH-KI)	1	
5	Sodium Bicarbonate, 30g (CH-NAHCO3)	1	
5	Sodium Sulfate, 30 g (CH-NA2SO4)	1	
5, 10, 27	Ammonium Hydroxide, 30 ml (UN2672)	1	
5, 15, 23, 24	Steel Wool (GS-STLWOOL)	1	
5, 24	Copper, metal electrode, 4" (EL-ELECTCU)	1	4" long copper electrode (marked with "Cu")
5, 6, 11, 24	Zinc, metal electrode, 4" (EL-ELECTZN)	1	4" long zinc electrode (marked with "Zn"). Beakers can be used to perform Lab 6 in place of test tubes.
5, 7, 15, 17	Crucible & Beaker Tongs (CE-TONG)	1	
5, 8	Lead Nitrate, 30 g (UN1469)	1	
6	Sodium Carbonate, 30 g (CH-NA2CO3)	1	
6	Wire, copper, 14 gauge, 6" (PT-WIRECOP)	1	
6, 10, 27	Silver Nitrate, 2 g (UN1493)	1	
6, 12	Calcium Chloride, 30 g (CH-CACL2)	1	

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6, 12	Potassium Chloride, 30 g <i>(CH-KCL)</i>	1	
6, 16	Mortar and Pestle, 80 ml <i>(CE-MORTAR)</i>	1	Use to grind up sulfur and other chemicals into a finer powder. Use in a well ventilated area or outside.
7	Acetone, 30 ml <i>(UN1090)</i>	1	
7	Zinc Powder, 15 g <i>(CH-ZNPOWD)</i>	1	
8	Wash Bottle, 250 ml, Narrow Mouth <i>(CE-WASHBTL)</i>	0	Optional to purchase separately. Not required for completing experiments.
8	Wax pencil (marks glass) <i>(BE-WAXPENC)</i>	0	Use a crayon or black permanent marker
8, 20	Potassium Chromate, 30 g <i>(UN-K2CRO4)</i>	1	
9	Capillary Tubes, 10 pack <i>(CE-10CAPIL)</i>	1	
9	Vegetable Oil, 6 oz. (sold only in kits) <i>(CH-VEGEOIL)</i>	0	Purchase vegetable oil from local grocery store for bath in Lab 9 as over 16 ounces is required.
9, 11, 17, 19	Thermometer, Celsius, 12" <i>(ME-THER30B)</i>	1	
9, 24	Ruler, 30 cm <i>(ME-RULER)</i>	0	Not included in the kit.
10	Acetic Acid Solution 1 M, 100 mL <i>(CH-ACETIC)</i>	1	Use Acetic Acid in place of household vinegar
10	Baking soda, 50 g <i>(CH-BSODA50)</i>	1	Use also for "Wash Soda"
10	Barium Chloride, 15 g <i>(UN1564B)</i>	1	
10	Barium Hydroxide, 10 g <i>(UN1564A)</i>	1	
10	Fertilizer Soluble, 30 g <i>(CH-FERTIL)</i>	1	
10	Magnesium Sulfate, 100 g <i>(CH-EPSOM)</i>	1	
10, 20	Sulfuric Acid, 18M, 15 ml <i>(UN1830)</i>	1	
10, 22	Ammonium Chloride, 30 g <i>(CH-NH4CL)</i>	1	
10, 22	Litmus Paper, blue, 100 strips <i>(CH-LITBLUE)</i>	1	
10, 22	Litmus Paper, red, 100 strips <i>(CH-LITRED)</i>	1	
11	Styrofoam Cup, 8 oz, each <i>(PT-STYRCUP)</i>	2	
12	Lithium Chloride, 30 g <i>(CH-LICL)</i>	1	
12	Strontium Chloride, 10 g <i>(CH-SRCL2)</i>	1	
12, 15, 18	Wooden Splints, 20 pack <i>(CE-SPLINTS)</i>	1	
13	Molecular Model Set, Student <i>(CE-MODELST)</i>	1	
14	Styrofoam balls, 2" diameter, 2-pack <i>(GS-STYBAL2)</i>	0	Not included in the kit. The model set can be used in place to complete this lab.
14	Toothpicks, pack <i>(GS-TOOTHPI)</i>	0	Not included in the kit. Use the model set to complete this lab 14.
15	Hydrogen Peroxide 6%, 100 ml <i>(CH-H2O2100)</i>	1	
15	Manganese Dioxide, 15 g <i>(UN-MNO2)</i>	1	
15	Rubber Tubing, 4.8 mm, 2' long <i>(CE-TUBERU2)</i>	1	
15, 17, 21	Erlenmeyer Flask, 250 ml <i>(CE-FLAI250)</i>	1	Perform each lab sequentially with the provided flask.

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15, 19, 27	Plastic kit box and cover (sold only in kits) <i>(PT-KITBOX)</i>	1	
16	Magnifying Glass, 2", 3X Lens <i>(OP-MAGNIFY)</i>	1	
17	Calcium Carbonate, chips, 30 g <i>(CH-CACO3)</i>	1	
17	Rubber Stopper, #6.5, 2-hole <i>(CE-STOP06B)</i>	1	
18	Aluminum Sulfate, 30 g <i>(CH-ALSO4)</i>	1	
18	Calcium Acetate, 30 g <i>(CH-CAACET)</i>	1	
18	Economy Laser Pointer, Red <i>(OP-LASECON)</i>	1	
18	Iron III (ferric) Chloride, 30 g <i>(UN-FECL3)</i>	1	
18, 21	Ethyl Alcohol, 95%, 30 ml <i>(UN-ETHYALC)</i>	1	
19	Formaldehyde, 30 ml <i>(UN-FORMALD)</i>	1	
19	Sodium Bisulfite, 30 g <i>(CH-NAHSO3)</i>	1	
19	Sodium Sulfite, 30 g <i>(CH-NA2SO3)</i>	1	
19, 21	Phenolphthalein Solution, 30 ml <i>(UN-PHENOLS)</i>	1	
19, 22	Graduated Cylinder, glass, 25 ml <i>(CE-CYGL025)</i>	1	
20	Cobalt II Chloride, 15 g <i>(CH-COCL2)</i>	1	
21	50 ml Burette, Glass Bead Stopcock <i>(CE-BURSET)</i>	1	
21	Burette Clamp <i>(CE-CLAMP)</i>	1	
22	Glacial Acetic Acid, 30 ml <i>(UN2789)</i>	1	Use the Glacial Acetic Acid to make the Acetate Buffer.
22	Methyl Orange, solution, 30 ml <i>(CH-METHOR)</i>	1	
22	Methyl Violet, 1 g <i>(CH-METHVI)</i>	1	
22	pH 7.0 Calibration Solution, 5 packets <i>(ME-PH7PACK)</i>	0	Order only if you purchase the digital pH meter.
22	pH Meter, Digital, 0-14 pH range <i>(ME-PHMETER)</i>	0	Order if you want to complete the lab with a digital pH meter.
22	pH Papers, 1-14 range, 80 pack <i>(CH-PHSTRIP)</i>	1	
22	Sodium Acetate, 30 g <i>(CH-NAACET)</i>	1	
22	Thymol Blue, 15 ml <i>(CH-THYMBLU)</i>	1	
23	Nail assortment, 30 pieces <i>(GS-NAILS)</i>	1	
24	Alligator Clip Leads, 2 pack <i>(EL-ALCLIP2)</i>	1	
24	Brass Brads, 3/8", 100 pack <i>(GS-BRADS)</i>	1	
24	Copper II Nitrate (cupric), 30 g <i>(UN1477A)</i>	1	
24	Copper piece <i>(EL-CUDISC)</i>	1	
24	Cotton Balls, 12 count <i>(GS-CTTNBL)</i>	1	
24	Digital Multimeter <i>(EL-DIGMULT)</i>	1	

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24	Sodium Nitrate, 30 g <i>(UN1498)</i>	1	
24	Tongue Depressors, 10 pack <i>(GS-TONGDEP)</i>	1	
24	Zinc Nitrate, 30 g <i>(UN1514)</i>	1	
24	Zinc piece <i>(EL-ZNDISC)</i>	1	
27	Dextrose (glucose), 30 g <i>(CH-DEXTROS)</i>	2	
27	Petri Dishes, polystyrene, 90 x 15 mm, 2 pack <i>(BE-PETRI1)</i>	2	
27	Potassium Hydroxide, 30 g <i>(UN1813)</i>	1	

1. The products in this kit are intended for parent/teacher use to complete curriculum lab activities with students.
2. Some items are not designed for or intended primarily for children ages 12 and under.
3. Some materials and many chemicals we provide are dangerous and may be harmful if misused. With your purchase, you are assuming all responsibility for any injuries or damages resulting from the storage, use, and disposal of all materials and chemicals.
4. Some products may differ from the web image (such as clay, food coloring, etc.)
5. Some items readily available at grocery stores or not offered by Home Science Tools are not included.
6. We guarantee that you will be happy with every purchase from HST. All products are covered by our 90-day money-back guarantee.

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