2014-15 PLTW Purchasing Manual PLTW Engineering Workbook





## PLTW Engineering / High School Engineering Program

Course Name	Item Specification/Description	Unit of Measure	Purchase Frequency	Qty Recmnd per 20 Students	Enter Qty to Order	Total Price	Price	Item Number
CCLI	CS-20000 Compact Digital Scale, 2000g. Capacity -1gram readability g, lb, oz, modes.	Each	Е	1	0	\$0.00	\$75.00	S402421
CCLI	6" Steel Dial Calipers, graduated in .001, White faced Dial  **Only (1) caliper is needed for AE**	Each	Е	20	0	\$0.00	\$16.55	NC0627610
AE	Slow Flyer Propeller, 8x3.8SF	Each	Е	5	0	\$0.00	\$2.24	NC0520078
AE	Slow Flyer Propeller, 8x6SF Part # 08060SF	Each	Е	5	0	\$0.00	\$2.24	NC0520079
AE	Propeller Adapter with set screw 4mm	Each	Е	5	0	\$0.00	\$5.69	NC0520230
AE	Rocket Builder's Marking Guide, AC Supply #2227	Each	Е	1	0	\$0.00	\$5.95	NC0519335
AE	Estes Model Rocket AltiTrak Altitude Tracker - 302232 Need at least 2	Each	Е	2	0	\$0.00	\$14.24	S41861
AE	Estes Alpha III E2X Model Rocket Launch Set - 1427	Each	Е	1	0	\$0.00	\$21.84	NC0518277
AE	Rod/Base Assemblies, Base Size, in.: 6 x 9, Rod Length, in.:	Each	Е	1	0	\$0.00	\$15.55	S47807
AE	Catapult construction kit (to make 1 catapult) AC Supply #Mid	Each	С	2	0	\$0.00	\$16.39	NC0520173
AE	Bulk pack of C6-5 Estes Model Rocket Engines, AC Supply	Pkg/24	С	1	0	\$0.00	\$46.02	NC0518275
AE	Bulk Pack of B6-4 Estes Model Rocket Engines, AC Supply #	Pkg/24	С	1	0	\$0.00	\$39.52	S41867A
AE	Estes A8-3 Model Rocket Motors Bulk Pack (24 ea) - 1781	Pkg/24	Е	1	0	\$0.00	\$47.02	S41871A
AE	Estes Model Rocket Igniters (6 ea) - 302301	Pkg/6	Е	2	0	\$0.00	\$3.50	S41857
AE	Estes Model Rocket Recovery Wadding - 302274	Each	Е	2	0	\$0.00	\$3.50	S41853
AE	Estes Model Rocket BT-50 Body Tube (3 pack) - 303086	Pkg/3	С	7	0	\$0.00	\$5.50	NC0518278
AE	Estes Model Rocket NC-50 Nose Cone (5 pack) - 303162	Pkg/5	С	4	0	\$0.00	\$4.74	NC0518279
AE	Estes Model Rocket Regular Motor Mount Kit - 303158	Pkg/2	С	10	0	\$0.00	\$5.22	NC0518280
AE	Estes Model Rocket 12 Inch Parachute	Each	С	20	0	\$0.00	\$3.79	NC0518281
AE	Estes Model Rocket Shock Cords and Mount Pack - 302278	Each	С	10	0	\$0.00	\$4.74	NC0518284
AE	Basswood Strips (3/16 x 3/8 x 24 in.)	Pkg/20	С	2	0	\$0.00	\$10.73	NC0520174
AE	Balsa Sheet (1/8" x 3" x 36")	Pkg/20	С	1	0	\$0.00	\$28.49	NC0520176
AE	Balsa Sheet (3/32" x 3" x 36")	Pkg/20	С	1	0	\$0.00	\$26.59	NC0520178
AE	ACCL100 - Launch Lugs Estes high strength laminated lugs with a mylar plastic core for durability and a paper outer layer for durability. 1/8 in x 2-3/8 in Launch lugs 20 per pk	Pkg/20	С	1	0	\$0.00	\$4.74	NC0519332
BE	Mini Incubator, temperature range - ambient to 60 degree C temperature uniformity - +/- 5 degree C, capacity eighty 6.5 cm plates. Dimensions: exterior28 x 29 x 34 cm (W x D x H), chamber - 23 x 20 x 20 cm (W x D xH). Bio Rad #166-	Each	Е	1	0	\$0.00	\$375.00	S521081
BE	Economical Microcentrifuge 166-0603EDU	Each	Е	1	0	\$0.00	\$157.00	NC0574377

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Note: Microscope slides are listed on the optional page.  BE Hotplate; Isotemp; Ceramic Top; 4 x 4 in. heating surface; Temp control to to 540C; 120V 60 Hz  BE Triple Balance Beam Scale with weight set, 2610g capacity with weight set, 0.1g sensitivity  BE Beaker, Pyrex; Capacity: 500mL/16 oz.; Graduated in mL and ounces  Tubing Assortment, Flint glass; 5 lb package includes 1 lb.  BE Each of the 5,6,7,8, and 9mm sizes, 4' lengths Fisher Science Education #S37612  1000mL Beaker. Corning 1000 Manufactured with spout &	02984 00-16H 7280 3339 7612
Temp control to to 540C; 120V 60 Hz  BE Triple Balance Beam Scale with weight set, 2610g capacity with weight set, 0.1g sensitivity  BE Beaker, Pyrex; Capacity: 500mL/16 oz.; Graduated in mL and ounces  Tubing Assortment, Flint glass; 5 lb package includes 1 lb.  BE Each of the 5,6,7,8, and 9mm sizes, 4' lengths Fisher Science Each E 1 0 \$0.00 \$1	7280
BE with weight set, 0.1g sensitivity  BE Beaker, Pyrex; Capacity: 500mL/16 oz.; Graduated in mL and ounces  Tubing Assortment, Flint glass; 5 lb package includes 1 lb.  BE Each of the 5,6,7,8, and 9mm sizes, 4' lengths Fisher Science Education #S37612  1000mL Beaker. Corning 1000 Manufactured with spout &	3339
Tubing Assortment, Flint glass; 5 lb package includes 1 lb.  BE Each of the 5,6,7,8, and 9mm sizes, 4' lengths Fisher Science Education #S37612  1000mL Beaker. Corning 1000 Manufactured with spout &	
BE Each of the 5,6,7,8, and 9mm sizes, 4' lengths Fisher Science Pkg/5 E 1 0 \$0.00 \$56.80 S3 Education #S37612 1000mL Beaker. Corning 1000 Manufactured with spout &	7612
(over 250ml) have double graduated measuring scale. All have	0012
BE Test Tubes Pyrex Borosilicate 20mm x 150mm, Pack of 72 general-purpose test tubes with medium weight walls and polished rims (Corning No. 9800), Stopper capacity: 32mL, size 1 Frey Scientific #15593484  Pkg/72  E 1 0 \$0.00 \$26.40 S0	0184
BE 1 liter Erlenmeyer Flask, graduation range 250-1,000 ml, 50ml intervals, rubber stopper #9 Pkg/72 E 1 0 \$0.00 \$21.55 S0	0146
BE   250 ml Erlenmeyer Flask, graduation range 50-225ml, 25ml   Pkg/12   E   1   0   \$0.00   \$18.21   S0	0144
nickel-plated steel thumb screws	7815
Stopper, Rubber, Assortment; Supplied in solid, one-hole and BE two-hole forms Size numbers molded into top; in Sizes No. 00-8; 2lb package E 1 0 \$0.00 \$19.47 \$3	4999
BE Pure Latex General Purpose Tubing; Amb Tubing 3/16 x 1/16 Roll E 1 0 \$0.00 \$7.21 S5	457-1
BE Classroom Micropipetter - 0.5 - 10μl Each E 5 0 \$0.00 \$94.05 \$90.00	2432B
BE Classroom micropipet 20-200 ul Each E 5 0 \$0.00 \$94.05 \$90.00	2432F
Micropipetter, 100 to 1000 microliters. Item #166-0553EDU.  BE NOTE: Required if completing BioRad Cloning and Each E 5 0 \$0.00 \$99.00 \$3  Sequencing Explorer Series for Optional Problem 6 in BI	17181
BE Corning Universal Fit Pipette Tips. For use with most 1-200uL single & multichannel pipetters. Yellow color. Sterile Case/960 E 1 0 \$0.00 \$40.65 270	7418
Sequencing Explorer Series for Optional Problem 6 in Bl	2 (sold as 00/cs)
BE Weighing Dishes/Boats (Small and Large) Pkg/500 E 1 0 \$0.00 \$11.39 S6	

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BE	Waterbath, analog, maintains temperatures from 5°C to 100°C, comes with lid. NOTE: If you are completing advanced work in Medical Interventions or optional Problem 6 in BI, consider purchasing the shaking waterbath listed in the Optional section INSTEAD of this item. The shaking water bath is suggested for optimal completion of the protein purification laboratory in MI and of the molecular biology projects in BI.	Each	Ш	1	0	\$0.00	\$370.00	S37220
BE	Incubator - compact unit for cultures, test kits & biologicals. At least a 40L capacity; maintains temperatures up to 65°C.	Each	Е	1	0	\$0.00	\$330.00	S50909
BE	Disposable transfer pipette. 5.0cm x 1.2mm. 1.3mL capacity.	Pkg/500	Е	1	0	\$0.00	\$13.11	13 711 32
BE	Bioremediation by oil eating bacteria, enough for 10 groups NOTE: Perishable. Open all lab kits when they arrive.	Kit	С	1	0	\$0.00	\$79.00	S68637
BE	a-D(+) Lactose Monohydrate (Power/Certified ACS), Fisher Chemical > Amber Glass; 500g, send MSDS sheets with	500g	С	2	0	\$0.00	\$18.18	S25375A
BE	Pipette, Transfer; Samaco; Nonsterile; Graduated; Polyethylene; Low-affinity surface; Type: Standard Bulb; Graduations: 0.25 to 1mL; Capacity: 1:0 mL 51/2 inch (14.0cm) long; Bulb draw: 2.2mL Drops: 25mL.	Box/500	С	1	0	\$0.00	\$14.67	S304674
BE	Disposable serological pipette, polystyrene, negative and reverse graduations, 10ml capacity, VWR #53300-523	Case/200	С	1	0	\$0.00	\$32.00	S68228D
BE	Disposable serological pipette, polystyrene, negative and reverse graduation, 5ml capacity, VWR #32314-008	Case/200	С	1	0	\$0.00	\$58.94	S68228c Case/500
CEA	Triple Balance Beam Scale with weight set, 2610g capacity with weight set, 0.1g sensitivity	Each	Е	1	0	\$0.00	\$78.14	S97280
CEA	Sieve, Soil Testing, #4, 8"Dia.	Each	Е	2	0	\$0.00	\$31.50	NC0615162
CEA	Sieve, Soil Testing, #40, 8" Dia.	Each	E	2	0	\$0.00	\$35.61	04 881 5R
CEA	Brass bottom pan, 8" for soil sieve	Each	Е	2	0	\$0.00	\$16.37	04 886C
CEA	Brass Cover, 8" for sieve pan	Each	E	2	0	\$0.00	\$9.94	04 886A
CEA	Balsawood Sheet 1/8" x 3" x 36"	Each	С	3	0	\$0.00	\$28.49	NC0520176
CIM	12 CC syringe for Hydraulics	Each	С	5	0	\$0.00	\$7.01	NC0434289 (pkg/10)
DE	Magnifying Lens Xlite	Each	Е	1	0	\$0.00	\$7.51	S68536
IED	250mL Polypropylene Graduated Cylinder	Each	Е	10	0	\$0.00	\$6.03	S32814
IED	Button Machine Kit, 2 1/4"  **Please note the price includes freight - Excludes AK, HI and P.Rico)**	Each	E	1	0	\$0.00	\$243.06	S04853
OPT	Linking Cubes	Pkg/500	Е	1	0	\$0.00	\$21.50	S94318

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