

Material By Vendor

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
6.4.2	5	8	Each	Ball Redbook reference text	Amazon
6.4.3	5	8	Each	Ball Redbook reference text	Amazon
7.3.3	5	8	Each	<i>American Horticultural Society plant propagation: The fully illustrated plant-by-plant manual of practical techniques.</i>	Amazon
1.1.1	20	30	Each	<i>Plant and Soil Science: Fundamentals and Applications</i>	Cengage
1.1.3	20	30	Each	<i>Plant and Soil Science: Fundamentals and Applications</i>	Cengage
4.1.3	20	30	Each	Plant and Soil Science: Fundamentals and Applications	Cengage
4.4.1	20	30	Each	Plant and Soil Science: Fundamentals and Applications	Cengage
4.2.3	20	30	Each	Plant and Soil Science: Fundamentals and Applications	Cengage
4.5.2	20	30	Each	<i>Plant and Soil Science: Fundamentals and Applications</i>	Cengage
4.5.4	20	30	Each	<i>Plant and Soil Science: Fundamentals and Applications</i>	Cengage
6.1.3	20	30	Each	<i>Plant and Soil Science: Fundamentals and Applications</i>	Cengage
7.1.2	20	30	Each	<i>Plant and Soil Science: Fundamentals and Applications</i>	Cengage
7.3.1	20	30	Each	<i>Plant and Soil Science: Fundamentals and Applications</i>	Cengage
7.4.1	20	30	Each	<i>Plant and Soil Science: Fundamentals and Applications</i>	Cengage
7.4.4	20	30	Each	<i>Plant and Soil Science: Fundamentals and Applications</i>	Cengage
8.1.1	5	8	Each	<i>Introduction to Horticulture</i> Textbook	Cengage
7.4	1	1	DVD	DVD, Plant Propagation II – teacher notes	CEV
3.1.1	10	15	Cup	Perlite	Grower's Supply
3.2.1	1	1	Sheet	Grodan 1.5 inch rockwool starter	Grower's Supply
3.2.1	5	8	Each	Net pot	Grower's Supply
3.2.1	5	8	Sample	Perlite	Grower's Supply
3.2.3	2	3	Each	1020 flat. standard	Grower's Supply
3.2.3	2	3	Each	Humidity dome	Grower's Supply
3.2.3	1	1	Bottle	Nutrient solution – Floragro®	Grower's Supply
3.2.3	1	1	Bottle	Nutrient solution – Flormicro	Grower's Supply
3.2.3	2	3	Each	Plug tray, 72-cell	Grower's Supply
6.2.3	10	15	Each	Labels, plant, white	Grower's Supply
7.4.1	40	60	Each	Flat, propagation	Grower's Supply
7.4.1	1	2	System	Heating mats	Grower's Supply
7.4.1	20	30	Each	Humidity dome	Grower's Supply
7.4.1	280	420	Each	Labels, plant, white	Grower's Supply

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
7.3.3	20	30	Each	Humidity dome	Grower's Supply
7.4.2	280	420	Each	Labels, plant, white	Grower's Supply
7.3.3	225	340	Each	Labels, plant, white	Grower's Supply
7.3.3	30	45	Each	Plug tray	Grower's Supply
7.3.3	20	30	Each	Plug tray flat	Grower's Supply
7.3.3	20	30	Each	Plug tray flat	Grower's Supply
7.4.2	160	240	Each	Pot, 8"	Grower's Supply
7.4.3	40	60	Each	Flat, propagation	Grower's Supply
7.4.3	280	420	Each	Labels, plant, white	Grower's Supply
7.4.4	280	420	Each	Labels, plant, white	Grower's Supply
7.3.5	225	340	Each	Labels, plant, white	Grower's Supply
7.3.5	30	45	Each	Plug tray	Grower's Supply
7.3.5	20	30	Each	Plug tray flat	Grower's Supply
	20	30	Each	Labels, plant, white	Growers Supply
7.1.3	10	15	Accounts	Classical Genetics Simulator (CGS)	http://cgslab.com/
8.2.1	4	6	Set	Disease information sheets	https://pddc.wisc.edu/fact-sheet-listing-all/
1.1.1	5	8	Set	<i>Exploring Careers Cards</i>	Lab-Aids
1.1.1	1	2	Set	<i>Go-Get-It Notecards, Plant Placards</i>	Lab-Aids
1.1.1	1	2	Set	<i>Go-Get-It Notecards, Plant Subjects</i>	Lab-Aids
2.1.3	5	8	Bottle	Alcohol, diluted	Lab-Aids
2.1.3	10	15	Each	Collection containers with cover	Lab-Aids
2.1.3	10	15	Each	Nematode funnel (soil organism extractor)	Lab-Aids
2.1.3	10	15	Each	Tripod stand, Nematode (soil organism)	Lab-Aids
2.1.3	10	15	Each	Wire disc, soil organism funnel	Lab-Aids
2.2.3	10	15	Sample	Sand	Lab-Aids
2.1.5	10	15	Each	Graduated cup, 30ml	Lab-Aids
2.1.5	20	30	Sample	Gravel, pea	Lab-Aids
2.1.5	10	15	Each	Magnifiers, small plastic	Lab-Aids
2.1.5	20	30	Sample	Sand, coarse river	Lab-Aids
2.1.5	10	15	Each	Soil profile tube	Lab-Aids
2.1.5	10	15	Each	Soil profile tube cap	Lab-Aids
3.1.1	10	15	Each	Graduated cup, 30ml	Lab-Aids
4.1.2	40	60	Each	Coverslip, microscope	Lab-Aids
4.1.2	20	30	Each	Dropper	Lab-Aids
4.1.2	4	6	Bottle	Lugol's solution	Lab-Aids
4.1.2	40	60	Each	Slides, microscope	Lab-Aids
4.1.2	20	30	Each	Tweezes (forceps)	Lab-Aids
4.3.1	10	15	Each	Dicot cross-section	Lab-Aids
4.3.1	10	15	Each	Monocot cross-section	Lab-Aids
4.3.1	5	8	Bottle	Stain, differential dropper bottle	Lab-Aids
4.3.1	10	15	Sample	Stem tissue, macerated	Lab-Aids
4.3.2	30	450	Each	Coverslip, microscope	Lab-Aids
4.2.3	10	15	Each	Coverslip, microscope	Lab-Aids
4.3.2	10	15	Each	Dropper	Lab-Aids
4.1.4	1	1	Vial	Glucose solution, 5%	Lab-Aids
4.3.2	5	8	Bottle	Glycerine dropper bottle	Lab-Aids
4.2.3	10	15	Each	Grass seed sprout	Lab-Aids
4.3.2	20	30	Each	Magnifying lens	Lab-Aids

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
4.2.3	2	2	Each	Paper. germinating	Lab-Aids
4.2.3	1	1	Each	Petrolatum	Lab-Aids
4.2.3	10	15	Each	Plastic pick	Lab-Aids
4.2.3	5	8	Bottle	Salt solution, balanced, dropper bottle	Lab-Aids
4.2.3	10	15	Each	Slide, microscope	Lab-Aids
4.3.2	30	45	Each	Slides, microscope	Lab-Aids
4.1.4	1	1	Vial	Sucrose solution. 5 %	Lab-Aids
4.3.2	10	15	Each	Transfer brush	Lab-Aids
4.5.1	10	15	Each	Blades, macerated	Lab-Aids
4.2.4	1	1	Bottle	Corn syrup	Lab-Aids
4.2.4	10	15	Each	Dialysis tubing (Semi-permeable membrane)	Lab-Aids
4.4.2	10	15	Each	Dropper	Lab-Aids
4.4.2	10	15	Each	Forceps (tweezers), plastic	Lab-Aids
4.2.4	20	30	Each	Glucose testing strips	Lab-Aids
4.4.2	5	8	Bottle	Lugol's solution	Lab-Aids
4.2.4	5	8	Bottle	Lugol's solution	Lab-Aids
4.2.4	2	3	Bottle	Starch, liquid	Lab-Aids
6.1.1	20	40	Each	Containers with covers for collection	Lab-Aids
6.1.1	10	15	Each	Graduated cup, 30ml	Lab-Aids
7.1.1	5	8	Bottle	Aceto-orecein stain dropper bottle	Lab-Aids
7.1.1	10	15	Each	Coverslip, microscope	Lab-Aids
7.1.1	10	15	Sample	Root tip specimens	Lab-Aids
7.1.1	10	15	Each	Slide, microscope	Lab-Aids
7.1.1	5	8	Bottle	Solution A dropper bottle	Lab-Aids
7.1.1	5	8	Bottle	Solution B dropper bottle	Lab-Aids
7.1.1	10	15	Each	Tissue-treating trays with AB cavities	Lab-Aids
7.1.1	10	15	Each	Transfer brush	Lab-Aids
7.4.1	5	8	Bottle	Bleach, 10% solution or alcohol	Lab-Aids
7.3.2	5	8	Bottle	Diastase solution	Lab-Aids
7.3.2	20	30	Each	Dropper	Lab-Aids
7.3.2	5	8	Bottle	Lugol's solution	Lab-Aids
7.3.2	20	30	Each	Plastic picks	Lab-Aids
7.3.2	20	30	Each	Razor blade	Lab-Aids
7.3.2	40	60	Seed	Seed, corn	Lab-Aids
7.3.2	60	90	Seed	Seed, lima bean	Lab-Aids
7.3.2	40	60	Each	Slide, microscope	Lab-Aids
7.3.2	5	8	Bottle	Starch solution	Lab-Aids
7.4.4	5	8	Bottle	Bleach, 10% solution or alcohol	Lab-Aids
8.2.2	2	2	Vial	Bacteria culture, bean – teacher notes	Lab-Aids
8.2.2	2	2	Vial	Bacteria culture, hay – teacher notes	Lab-Aids
8.2.2	2	2	Vial	Bacteria culture, peppercorn – teacher notes	Lab-Aids
8.2.2	10	15	Each	Dropper	Lab-Aids
8.2.2	10	15	Bottle	Methylene blue stain dropper bottle	Lab-Aids
8.2.2	30	45	Each	Plastic transfer pics	Lab-Aids
8.2.2	30	45	Each	Slides, microscope	Lab-Aids
4.2.4	20	30	Each	Cup, plastic, 16 oz.	Local
2.2.1	1	1	Sample	Lime, hydrated	Local- Garden Center
2.2.2	1	1	Sample	Lime, hydrated	Local- Garden Center
2.2.3	50	75	Grams	Fertilizer, MiracleGro®	Local- Garden Center

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3.1.1	10	15	Cup	Bark	Local- Garden Center
3.1.1	10	15	Cup	Dry potting media	Local- Garden Center
3.1.1	10	15	Cup	Osmocote®	Local- Garden Center
3.1.1	10	15	Cup	Pumice	Local- Garden Center
3.1.1	10	15	Cup	Sand	Local- Garden Center
3.2.3	1	1	Bottle	pH down solution	Local- Garden Center
3.2.3	1	1	Bottle	pH up solution	Local- Garden Center
3.2.3	50	75	Each	Plant, Lettuce starts	Local- Garden Center
4.3.2	50	80	Each	Pots, 4"	Local- Garden Center
4.3.2	25	40	Each	Seedlings, dicots, various sizes	Local- Garden Center
4.3.2	25	40	Each	Seedlings, monocots, various sizes	Local- Garden Center
4.4.2	10	15	Each	Plant, Coleus, variegated leaves	Local- Garden Center
6.2.1	15	24	Each	Plant, Coleus, mature	Local- Garden Center
6.2.1	5	8	Each	Pot, Peat azalea, 4"	Local- Garden Center
6.2.1	5	8	Each	Pot, Plastic azalea, 4"	Local- Garden Center
6.3.1	20	30	Each	Potted plant – Teacher Notes	Local- Garden Center
6.2.3	10	15	Each	Potted plant	Local- Garden Center
6.3.3	1	1	Each	Plant, green	Local- Garden Center
	100	150	Bulbs	Bulbs, Tulip bulbs – according to Teacher Notes	Local- Garden Center
	20	30	Each	Pot, 8" azalea	Local- Garden Center
	1	1.5	Bale	Potting media	Local- Garden Center
7.4	6	10	Each	Potting bench(optional)	Local- Garden Center
7.4.1	20	30	Each	Knife, garden	Local- Garden Center
7.4.1	1	1	Bale	Media, potting	Local- Garden Center
7.4.1	1	1	Bale	Media, rooting	Local- Garden Center
7.4.1	10	15	Each	Plant, Begonia, mature	Local- Garden Center
7.4.1	10	15	Each	Plant, Coleus, mature	Local- Garden Center
7.4.1	1	1	Each	Rooting powder (optional)	Local- Garden Center
7.4.2	20	30	Specimen	Bulb, Daffodil	Local- Garden Center
7.4.2	5	8	Each	Fungicide dust	Local- Garden Center
7.4.2	20	30	Each	Knife, garden	Local- Garden Center
7.4.2	1	1	Bale	Media, potting	Local- Garden Center
7.4.2	20	30	Specimen	Plant, Chrysanthemum or potted grass	Local- Garden Center
7.4.2	40	60	Each	Pot, 16"	Local- Garden Center
7.4.2	20	30	Each	Spade, hand(optional)	Local- Garden Center
7.4.3	1	1	Bale	Media, potting	Local- Garden Center
7.4.3	1	1	Each	Rooting powder (optional)	Local- Garden Center
7.4.4	20	30	Each	Knife, garden	Local- Garden Center
7.4.5	10	15	Each	Knife, grafting	Local- Garden Center
9.1.2	1	1	Bag	Soil, garden or media mix	Local- Garden Center
2.2.1	50	75	Each	Cup, plastic 16 oz.	Local- Grocery
2.2.1	1	1	Roll	Paper towel	Local- Grocery
2.2.1	5	5	Each	Plastic bag, sealable, gallon size	Local- Grocery
2.2.1	100	150	Each	Spoon, plastic	Local- Grocery
2.2.1	2	3	Gallon	Water, distilled	Local- Grocery
2.2.2	50	75	Each	Cup, plastic, 16 oz.	Local- Grocery
2.1.3	1	1	Roll	Paper towel	Local- Grocery
2.1.3	10	15	Each	Plastic bag, sealable quart size	Local- Grocery

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
2.2.2	5	5	Each	Plastic bag, sealable, gallon size	Local- Grocery
2.2.2	100	150	Each	Spoon, plastic	Local- Grocery
2.2.2	2	3	Gallon	Water, distilled	Local- Grocery
2.1.4	10	15	Each	Pan, collection	Local- Grocery
2.2.3	1	1	Roll	Paper towel	Local- Grocery
2.1.4	10	8	Each	Sponge, 6 in.3 of dry	Local- Grocery
2.2.3	100	150	Each	Spoon, plastic	Local- Grocery
2.2.3	2	3	Gallon	Water, distilled	Local- Grocery
2.1.5	24	30	Each	Cup, plastic, 9 oz.	Local- Grocery
3.1.1	1	1	Roll	Paper towel	Local- Grocery
3.1.1	80	120	Each	Plastic bag, sealable quart size	Local- Grocery
3.2.1	15	15	Each	Plastic bag sealable, quart size	Local- Grocery
4.1.2	1	1	Each	Onion	Local- Grocery
4.1.2	1	1	Each	Produce- Potato	Local- Grocery
4.2.2	1	1	Roll	Paper towel	Local- Grocery
4.1.4	1	1	Roll	Paper towel	Local- Grocery
4.4.1	400	600	Each	Plastic bag, sealable, quart size	Local- Grocery
4.1.4	1	1	Gallon	Water, distilled	Local- Grocery
4.1.4	1	1	Pkg	Yeast, dry package, 7g	Local- Grocery
4.5.1	10	15	Specimen	Flowers, fresh	Local- Grocery
4.4.2	10	15	Each	Spoon, plastic	Local- Grocery
4.4.2	1	1	Gallon	Water, distilled	Local- Grocery
4.5.3	10	10	Each	Samples, flowers	Local- Grocery
6.1.1	1	1	Roll	Paper towel	Local- Grocery
6.1.1	10	15	Each	Spoon, plastic	Local- Grocery
6.1.1	1	1	Gallon	Water, distilled	Local- Grocery
6.1.2	30	45	Each	Cotton balls	Local- Grocery
6.1.2	3	5	Each	Gallon containers for mystery solution	Local- Grocery
6.2.1	1	1	Roll	Paper towel	Local- Grocery
6.2.1	25	34	Each	Plastic bag, sealable, gallon size	Local- Grocery
6.1.2	1	1	Gallon	Water, distilled	Local- Grocery
6.1.2	1	1	Roll	Aluminum foil	Local- Grocery
6.2.2	25	34	Each	Plastic bag, sealable, gallon size	Local- Grocery
7.3.1	1	1	Roll	Paper towel	Local- Grocery
7.2.2	10	15	Each	Plates, paper	Local- Grocery
7.2.2	10	15	Each	Produce- Bean, fresh green bean	Local- Grocery
7.2.2	10	15	Each	Produce- Pepper, bell	Local- Grocery
7.1.4	250	400	Each	Beans, red	Local- Grocery
7.1.4	250	400	Each	Beans, white	Local- Grocery
7.1.4	10	15	Each	Cup, plastic 16 oz	Local- Grocery
7.4.1	20	30	Each	Plastic bag sealable, quart size	Local- Grocery
7.4.2	20	30	Each	Produce- Potato	Local- Grocery
7.3.3	4	6	Each	Sponges	Local- Grocery
7.3.4	1	1	Bag	Ice cubes	Local- Grocery
7.3.4	1	1	Roll	Paper towel	Local- Grocery
9.1.2	1	1	Roll	Plastic wrap	Local- Grocery
2.1.1	20	30	Each	Spray bottle	Local- Hardware
2.2.1	1	1	Box	Aluminum sulfate	Local- Hardware
2.1.4	10	15	Each	Steel wool, 6 in.3	Local- Hardware
2.1.7	20	30	Each	Screwdriver, flathead	Local- Hardware

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
3.2.1	5	8	Sample	Sand	Local- Hardware
6.1.1	1	1	Box	Fertilizer, MiracleGro®	Local- Hardware
6.2.1	1	1	Each	Lights, grow light system	Local- Hardware
6.2.1	5	8	Each	Pot, Clay azalea, 4"	Local- Hardware
6.2.1	1	1	Bale	Potting media	Local- Hardware
6.1.2	30	45	Each	Tomato starts	Local- Hardware
6.2.2	1	1	Each	Fan, small electric	Local- Hardware
6.2.2	1	1	Each	Heater, small electric	Local- Hardware
6.2.2	1	1	Each	Light source, 100-watt	Local- Hardware
	1	1	Each	Bulb, 18" cool florescent light	Local- Hardware
	1	1	Each	Bulb, 18" warm fluorescent light	Local- Hardware
	1	1	Each	Bulb, Blacklight incandescent	Local- Hardware
	1	1	Each	Bulb, Natural sunlight incandescent	Local- Hardware
	1	1	Each	Bulb, Soft white incandescent	Local- Hardware
	3	3	Each	Light fixture, 18" fluorescent lighting	Local- Hardware
	3	3	Each	Light fixture, Incandescent	Local- Hardware
7.3.3	1	1	Bale	Germination media	Local- Hardware
7.3.4	500	750	Seed	Seed, pea	Local- Hardware
7.3.5	1	1	Bale	Media, germination	Local- Hardware
7.3.5	10	15	Sheets	Sandpaper	Local- Hardware
8.2.2	1	1	Each	Lighter	Local- Hardware
	1	1	Each	Bulb, 18" aquarium grow light	Local- Hardware
3.1.1	1	1	Each	Measuring cup	Local- Home Goods
4.2.4	10	15	Each	Clothespin	Local- Home Goods
6.2.1	1	1	Each	Electronic balance, 5kg or Postal Scale	Local- Home Goods
	80	120	Each	Clothespin	Local- Home Goods
7.2.3	10	15	Each	Knife, kitchen	Local- Home Goods
8.2.2	1	1	Each	Microwave	Local- Home Goods
9.1.2	10	15	Each	Lamp with 100-watt light bulb	Local- Home Goods
2.1.1	10	15	Sets	Soil, five different samples of garden soil	Local- Miscellaneous
2.2.1	5	5	Sample	Soil samples, premixed – see <i>Teacher Notes</i>	Local- Miscellaneous
2.2.2	1	1	Each	Soil samples, premixed – see <i>Teacher Notes</i>	Local- Miscellaneous
2.1.3	10	15	Each	Soil, samples with organic matter	Local- Miscellaneous
2.1.3	10	15	Sample	Soils, fresh from a garden	Local- Miscellaneous
2.2.3	10	15	Sample	Soil, garden	Local- Miscellaneous
2.1.5	10	15	Sample	Soil, loam garden	Local- Miscellaneous
2.1.6	3	3	Sample	Soil, samples with a visibly different hue, chroma or values	Local- Miscellaneous
2.1.7	1	1	Pit	Soil pit – or baggies of soil horizons	Local- Miscellaneous
3.2.3				Hydroponic Construction Materials	Local- Miscellaneous
4.2.2	20	30	Specimen	Specimen, Fibrous root	Local- Miscellaneous
4.2.2	20	30	Specimen	Specimen, taproot	Local- Miscellaneous
4.2.2	20	30	Specimen	Storage root specimen	Local- Miscellaneous
4.2.4	1	1	Source	Water, warm	Local- Miscellaneous
4.5.4	10	15	Various	Display materials (optional)	Local- Miscellaneous

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5.1.1	10	15	Set	Plant specimens or pictures (20)	Local- Miscellaneous
5.1.3	10	15	Sets	Tree leaf samples, (10) different	Local- Miscellaneous
6.1.1	10	15	Sample	Soil sample "A", premixed	Local- Miscellaneous
6.1.1	10	15	Sample	Soil sample "B", premixed	Local- Miscellaneous
6.2.1	1	1	Each	Greenhouse or environmental chamber	Local- Miscellaneous
6.1.2	1	1	Each	Greenhouse or environmental chamber (optional)	Local- Miscellaneous
6.3.2	10	15	Misc	Cardboard boxes (see Teacher Notes)	Local- Miscellaneous
	40	60	Each	Plant starts – Teacher Notes	Local- Miscellaneous
	1	1	Each	Greenhouse	Local- Miscellaneous
	1	1	Each	Refrigerator	Local- Miscellaneous
7.3.1	20	30	Each	Seed, bean germinating	Local- Miscellaneous
7.3.1	20	30	Each	Seed, corn germinating	Local- Miscellaneous
7.2.3	20	20	Sample	Seeds, assorted, mature seed-bearing structures	Local- Miscellaneous
7.2.4	7	10	Sets	Articles (Teacher Notes)	Local- Miscellaneous
7.4.3	20	30	Each	Vine plant – Teacher Notes	Local- Miscellaneous
7.3.5	120	180	Seed	Seed, Rosebud or Locust	Local- Miscellaneous
7.4.5	100	150	Each	Budding tie	Local- Miscellaneous
8.1.3	10	15	Each	Sampling frame	Local- Miscellaneous
8.1.3	10	15	Each	Tape measure, 12 ft	Local- Miscellaneous
1.1.1	1	1	Roll	Tape, transparent	Local- Office
1.1.2	20	30	Each	Binders, 3", three-ring, clear view	Local- Office
1.1.2	440	660	Each	Tab dividers and tab label inserts, 5-tab insertable dividers for 3-ring binders	Local- Office
1.1.3.	20	30	Each	Pencils, assorted, colored	Local- Office
1.1.4	440	660	Each	Tab dividers and tab label inserts, 5-tab insertable dividers for 3-ring binders	Local- Office
2.1.1	10	15	Each	Ruler, metric	Local- Office
2.2.1	10	15	Each	Marker, Permanent pen	Local- Office
2.2.2	10	15	Each	Calculator	Local- Office
2.1.3	10	15	Each	Rubber bands	Local- Office
2.1.3	2	3	Rolls	Tape, transparent	Local- Office
2.2.3	10	15	Each	Marker, Permanent pen	Local- Office
2.2.3	5	7	Rolls	Tape, masking	Local- Office
2.1.5	20	30	Sheets	Paper, graph (optional)	Local- Office
2.1.7	20	30	Each	Clipboard	Local- Office
3.1.1	20	30	Each	Calculator	Local- Office
3.1.1	1	1	Each	Marker, Permanent	Local- Office
3.1.2	20	30	Each	Calculator	Local- Office
3.2.1	20	30	Each	Sticky notes	Local- Office
3.2.2	10	15	Sets	Markers, colored	Local- Office
3.2.2	40	60	Sheet	Paper, poster	Local- Office
3.2.2	10	15	Sets	Pencils, colored	Local- Office
3.2.3	10	15	Sets	Markers, colored pens	Local- Office
3.2.3	40	60	Sheet	Paper, poster	Local- Office
3.2.3	10	15	Sets	Pencils, colored	Local- Office
3.2.3	5	8	Each	Ruler	Local- Office
4.1.1	20	30	Each	Glue stick, paste	Local- Office
4.1.1	20	30	Each	Marker, Permanent	Local- Office

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4.1.1	20	30	Sheet	Paper, poster	Local- Office
4.1.1	20	30	Set	Pencils, colored	Local- Office
4.1.1	1	1	Box	Pushpins	Local- Office
4.1.1	20	30	Each	Scissors	Local- Office
4.4.1	20	30	Each	Marker, Permanent pen	Local- Office
4.4.1	20	30	Sheet	Paper, construction	Local- Office
4.4.1	5	8	Book	Plant reference books	Local- Office
4.3.2	5	8	Each	Ruler, standard	Local- Office
4.3.2	5	8	Each	Scissors	Local- Office
4.4.1	1	1	Each	Stapler,	Local- Office
4.3.3	5	8	Each	Calculator	Local- Office
4.5.1	10	15	Each	Glue stick, paste	Local- Office
4.3.3	5	8	Each	Glue stick, paste	Local- Office
4.5.1	10	15	Each	Marker, Permanent	Local- Office
4.2.4	10	15	Each	Marker, Permanent	Local- Office
4.3.3	5	8	Set	Markers, color	Local- Office
4.3.3	5	8	Sheet	Paper, poster	Local- Office
4.5.1	10	15	Sheet	Paper, white construction	Local- Office
4.5.1	10	15	Set	Pencils, assorted, colored	Local- Office
4.3.3	5	8	Set	Pencils, assorted, colored	Local- Office
4.4.2	10	15	Set	Pencils, colored	Local- Office
4.4.2	10	15	Each	Ruler, standard	Local- Office
4.3.3	5	8	Each	Ruler, standard	Local- Office
4.3.3	5	8	Each	Scissors	Local- Office
4.5.1	5	10	Roll	Tape, transparent	Local- Office
4.4.2	1	1	Roll	Tape, transparent	Local- Office
5.1.1	10	15	Pad	Sticky notes	Local- Office
5.1.3	10	15	Set	Markers, color	Local- Office
5.1.3	10	15	Each	Paper, poster large	Local- Office
5.1.3	10	15	Set	Pencils, assorted colored	Local- Office
5.1.4	10	15	Set	Markers, color	Local- Office
5.1.4	10	15	Set	Pencils, assorted colored	Local- Office
6.1.1	10	15	Each	Marker, Permanent	Local- Office
6.1.2	10	15	Each	Marker, Permanent	Local- Office
6.1.2	10	15	Each	Ruler	Local- Office
6.1.3	20	30	Each	Calculator	Local- Office
	20	30	Each	Marker, Permenant	Local- Office
6.2.2	10	15	Each	Pen, dry erase	Local- Office
6.2.2	10	15	Each	Ruler, metric	Local- Office
	20	30	Each	Scissor	Local- Office
6.1.4	20	30	Each	Calculator	Local- Office
6.4.1	20	30	Each	Marker, Highlighter	Local- Office
6.2.3	10	15	Each	Marker, Permanent	Local- Office
	20	30	Each	Scissor	Local- Office
	20	30	Each	Calendar, current year	Local- Office
	20	30	Each	Calculator	Local- Office
	20	30	Each	Calculator	Local- Office
6.3.4	20	30	Each	Calendar	Local- Office
	20	30	Each	Calendar, current year	Local- Office
	20	30	Each	Calendar, upcoming year	Local- Office
	20	30	Each	Marker, Highlighter	Local- Office

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
7.2.2	20	30	Each	Marker, Permanent	Local- Office
	10	15	Each	Calculator	Local- Office
7.4.1	1	1	Each	Camera, digital (optional)	Local- Office
7.2.3	10	15	Set	Markers, colored	Local- Office
7.2.3	10	15	Set	Pencils, assorted, colored	Local- Office
7.2.3	10	15	Each	Ruler	Local- Office
7.2.3	10	15	Sets	Sticky notes	Local- Office
7.4.2	1	1	Each	Camera, digital (optional)	Local- Office
7.4.2	20	30	Each	Marker, Permanent pen	Local- Office
7.2.4	7	10	Sets	Markers (optional)	Local- Office
7.2.4	10	15	Set	Markers, colored	Local- Office
7.2.4	7	10	Sheet	Paper, poster (optional)	Local- Office
7.3.4	10	15	Each	Marker, dry-erase	Local- Office
7.3.5	10	15	Each	Marker, Permanent	Local- Office
7.4.4	20	30	Each	Marker, Permanent pen	Local- Office
7.4.4	40	60	Each	Rubber bands, large	Local- Office
8.1.1	10	15	Each	Glue stick, optional	Local- Office
8.1.1	10	15	Set	Markers, optional	Local- Office
8.1.1	10	15	Sheet	Posterboard, optional	Local- Office
8.1.1	10	15	Pair	Scissors, optional	Local- Office
8.1.1	2	3	Roll	Tape, transparent, optional	Local- Office
8.1.2	1	1	Each	Picture of crop damage	Local- Office
8.1.3	10	15	Each	Calculator	Local- Office
9.1.2	20	30	Each	Ruler, standard	Local- Office
9.1.2	2	3	Roll	Tape, transparent	Local- Office
7.4.4	20	30	Each	Plant- Cactus, barrel small	Local-Hardware
6.2.2	10	15	Each	Plant cuttings	Local-Miscellaneous
7.4.1	20	30	Sets	Rocks – Teacher Notes	Local-Miscellaneous
7.3.3	100	150	Each	Seed, radish or marigold	Local-Miscellaneous
7.4.5	20	30	Specimen	Sapwood whip, fresh fruit tree	Local-Miscellaneous
4.1.4	20	30	Each	Marker, Permanent	Local-Office
7.4.1	20	30	Each	Marker, Permanent pen	Local-Office
7.3.3	20	30	Each	Ruler, standard	Local-Office
7.4.3	1	1	Each	Camera, digital (optional)	Local-Office
7.4.3	20	30	Each	Marker, Permanent	Local-Office
7.4.3	10	15	Set	Pencils, assorted, colored	Local-Office
5.1.1	1	1	Kit	Crop Identification (C24345) (optional)	NASCO
5.1.1	1	1	Kit	Forest Tree Identification (C12755N) (optional)	NASCO
5.1.1	1	1	CD	Horticultural Plant Identification (C29091) (optional)	NASCO
2.1.2	5	8	Set	Soil structure kit or six types of soil structure samples	PSSASD: http://pssasd.drivehq.com/PSSASD-soil-structure.htm
4.1.2	1	1	Kit	Plant Science Kit (Optional, see Teacher Notes)	Reality Works
4.4	1	1	Kit	Plant Science Kit (Optional, see Teacher Notes)	Reality Works®

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
4.3.2	1	1	Model	Dicot stem model (Optional, see Teacher Notes)	Reality Works®
6.1.2	1	1	Each	Plant Lab Educational Hydroponic System (optional) <i>See Teacher Notes</i>	Realityworks®
2.2.1	10	15	Each	Graphical Analysis® App (If using Go Direct™ sensors)	Vernier
2.2.1	10	15	Each	LabQuest2 (Not needed if using Graphical Analysis® app and Go Direct™ sensors)	Vernier
2.2.1	1	2	Pkgs	pH buffer capsules	Vernier
2.2.1	10	15	Each	Vernier pH or Go Direct™ pH sensor,	Vernier
2.2.2	10	15	Each	Graphical Analysis® App (If using Go Direct™ sensors)	Vernier
2.2.2	10	15	Each	LabQuest2 (Not needed if using Graphical Analysis® app and Go Direct™ sensors)	Vernier
2.2.2	1	2	Pkgs	pH buffer capsules	Vernier
2.2.2	10	15	Each	Vernier pH or Go Direct™ pH sensor,	Vernier
2.2.3	10	15	Each	Graphical Analysis® App (If using Go Direct™ sensors)	Vernier
2.2.3	10	15	Each	LabQuest2 (Not needed if using Graphical Analysis® app and Go Direct™ sensors)	Vernier
2.2.3	10	15	Each	Vernier conductivity or Go Direct™ conductivity sensor	Vernier
3.2.3	5	8	Each	Graphical Analysis® App (If using Go Direct™ sensors)	Vernier
3.2.3	5	8	Each	LabQuest2 (Not needed if using Graphical Analysis® app and Go Direct™ sensors)	Vernier
3.2.3	5	8	Each	Vernier conductivity or Go Direct™ conductivity sensor	Vernier
3.2.3	5	8	Each	Vernier optical dissolved oxygen or Go Direct™ optical dissolved oxygen sensor	Vernier
3.2.3	5	8	Each	Vernier pH or Go Direct™ pH sensor	Vernier
4.1.4	10	15	Each	Graphical Analysis® App (If using Go Direct™ sensors)	Vernier
4.1.4	10	15	Each	LabQuest2 (Not needed if using Graphical Analysis® app and Go Direct™ sensors)	Vernier
4.1.4	10	15	Each	Respiration chamber, Vernier 250ml	Vernier
4.1.4	10	15	Each	Vernier CO2 gas	Vernier

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
				or Go Direct™ CO2 gas sensor	
4.1.4	10	15	Each	Vernier temperature or Go Direct™ temperature sensor	Vernier
4.2.4	10	15	Each	Graphical Analysis® App (If using Go Direct™ sensors)	Vernier
4.2.4	10	15	Each	LabQuest2 (Not needed if using Graphical Analysis® app and Go Direct™ sensors)	Vernier
4.2.4	10	15	Each	Plastic tubing clamp (Included in Vernier gas sensor kit)	Vernier
4.2.4	1	1	Each	Syringe (Included in Vernier gas sensor kit), 20ml	Vernier
4.2.4	10	15	Each	Vernier gas pressure sensor	Vernier
4.2.4	10	15	Each	Vernier pressure or Go Direct™ pressure sensor	Vernier
4.2.4	10	15	Each	Vinyl tubing, 20cm (Included in Vernier gas sensor kit)	Vernier
6.2.2	10	15	Each	Graphical Analysis™ App (If using Go Direct™ sensors)	Vernier
6.2.2	10	15	Each	LabQuest2 (Not needed if using Graphical Analysis® app and Go Direct™ sensors)	Vernier
6.2.2	10	15	Kit	Vernier gas pressure accessories (comes with gas pressure sensor)	Vernier
6.2.2	10	15	Each	Vernier gas pressure sensor or Go Direct™ gas pressure sensor	Vernier
6.2.3	10	15	Each	LabQuest2	Vernier
6.2.3	10	15	Each	Vernier soil moisture sensor	Vernier
	1	1	Each	Computer with Spectral Analysis	Vernier
	1	1	Each	Vernier Go Direct™ SpectroVis Plus	Vernier
	1	1	Each	Vernier Spectrophotometer Optical Fiber	Vernier
7.3.3	10	15	Each	Syringes, 20cc Included with the Vernier gas pressure sensor.	Vernier
7.3.4	10	15	Each	Graphical Analysis® App (If using Go Direct™ sensors)	Vernier
7.3.4	10	15	Each	LabQuest2 (Not needed if using Graphical Analysis® app and Go Direct™ sensors)	Vernier
7.3.4	10	15	Each	Vernier 250ml respiration chamber	Vernier
7.3.4	10	15	Each	Vernier CO ₂ or Go Direct™ CO ₂ sensor	Vernier
7.3.4	10	15	Each	Vernier temperature sensor or Go Direct™ temperature sensor	Vernier
9.1.2	10	15	Each	Go Direct™ CO2 sensor	Vernier
9.1.2	10	15	Each	Graphical Analysis™ App	Vernier

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
				(If using Go Direct™ sensors)	
9.1.2	10	15	Each	LabQuest2 (Not needed if using Graphical Analysis™ app and Go Direct™ sensors)	Vernier
9.1.2	20	30	Each	Vernier temperature or Go Direct™ temperature sensor	Vernier
2.1.1	20	30	Each	Lab apron (optional)	Ward's
2.2.1	30	45	Each	Beakers, 250ml	Ward's
2.2.1	1	2	Each	Bottle, 1L	Ward's
2.2.1	10	15	Each	Graduated cylinder, 100 ml	Ward's
2.2.1	20	30	Each	PPE: safety glasses, lab aprons, and disposable gloves	Ward's
2.2.1	10	15	Bottle	Rinse bottle, squeezable filled with distilled water	Ward's
2.2.2	10	15	Each	Beaker, 600ml	Ward's
2.2.2	30	45	Each	Beakers, 250ml	Ward's
2.2.2	1	2	Each	Bottle, 1L	Ward's
2.1.3	10	15	Pieces	Cheesecloth	Ward's
2.2.2	5	8	Each	Electronic balance	Ward's
2.1.3	5	8	Each	Electronic balance	Ward's
2.1.3	20	30	Pairs	Gloves, disposable	Ward's
2.2.2	10	15	Each	Graduated cylinder, 100 ml	Ward's
2.1.3	10	15	Each	Graduated cylinder, 100ml	Ward's
2.1.3	10	15	Each	Microscope, dissecting	Ward's
2.1.3	20	30	Each	Petri dish	Ward's
2.1.3	1	1	Pkg	Physarum agar pour pack (6)	Ward's
2.1.3	10	15	Each	Pipet, 1ml plastic	Ward's
2.2.2	20	30	Each	PPE: safety glasses, lab aprons, and disposable gloves	Ward's
2.2.2	10	15	Bottle	Rinse bottle, squeezable filled with distilled water	Ward's
2.1.3	20	30	Each	Safety glasses	Ward's
2.2.2	20	30	Each	Weigh dishes small, 10ml, 4.6×4.6×0.8cm	Ward's
2.1.3	10	15	Each	Weigh dishes- small, 10ml, 4.6×4.6×0.8cm	Ward's
2.2.3	30	45	Each	Beakers, 250ml	Ward's
2.1.4	5	8	Each	Electronic balance	Ward's
2.2.3	10	15	Each	Graduated cylinder, 100ml	Ward's
2.1.4	10	15	Each	Graduated cylinder, 100ml	Ward's
2.2.3	10	15	Sample	Peat moss	Ward's
2.2.3	20	30	Each	PPE: safety glasses, lab aprons, and disposable gloves	Ward's
2.2.3	10	15	Bottle	Rinse bottle, squeezable filled with distilled water	Ward's
2.2.3	20	30	Each	Weigh dishes	Ward's
2.1.5	10	15	Each	Graduated cylinder, 100ml	Ward's
2.1.5	1	1	Bag	Peat moss, approximately 8 qt bag or 1.35kg	Ward's

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
2.1.5	10	15	Each	Stopwatch	Ward's
2.1.6	5	8	Each	Globe® Soil Color Books	Ward's
2.1.6	20	30	Each	Spray bottle	Ward's
2.1.7	20	30	Each	Spray bottle	Ward's
3.1.1	5	8	Each	Electronic balance	Ward's
3.1.1	20	30	Pair	Gloves, disposable(optional)	Ward's
3.1.1	10	15	Each	Graduated cylinder, 100ml	Ward's
3.1.1	10	15	Cup	Peat moss	Ward's
3.1.1	10	15	Cup	Vermiculite	Ward's
3.2.1	5	8	Sample	Vermiculite	Ward's
4.1.2	10	15	Each	Microscope, compound	Ward's
4.1.2	20	30	Sheet	Paper, lens	Ward's
4.1.2	20	30	Each	Razor blade	Ward's
4.2.2	10	15	Each	Microscope, dissecting	Ward's
4.2.2	10	15	Each	Petri dish, plastic	Ward's
4.2.2	20	30	Each	Razor blade	Ward's
4.1.4	20	30	Each	Beaker, 400ml	Ward's
4.1.4	10	15	Each	Beaker, 600ml	Ward's
4.3.2	10	15	Each	Microscope, compound	Ward's
4.2.3	10	15	Each	Microscope, compound	Ward's
4.3.2	2	2	Each	Petri dish	Ward's
4.2.3	10	15	Each	Petri dish, plastic	Ward's
4.1.4	40	60	Each	Pipet, 3ml	Ward's
4.3.2	20	30	Each	PPE: safety glasses, lab apron, and disposable gloves	Ward's
4.2.3	20	30	Each	Razor blade	Ward's
4.1.4	10	15	Each	Test tube rack	Ward's
4.1.4	40	60	Each	Test tube, 16 x 125 mm	Ward's
4.4.2	10	15	Each	100ml graduated cylinder	Ward's
4.4.2	20	30	Each	Beaker, 600ml	Ward's
4.2.4	10	15	Each	Beaker, 600ml	Ward's
4.4.2	20	30	Each	Chromatography filter paper strips	Ward's
4.2.4	10	15	Each	Dialysis tubing closure	Ward's
4.5.1	10	15	Kit	Dissection kit	Ward's
4.4.2	20	30	Pairs	Gloves, disposable	Ward's
4.2.4	20	30	Pair	Gloves, disposable	Ward's
4.4.2	400	600	ml	Isopropyl alcohol	Ward's
4.4.2	20	30	Each	Lab apron	Ward's
4.5.1	10	15	Each	Microscope, dissecting	Ward's
4.2.4	1	1	Roll	Parafilm	Ward's
4.5.1	10	15	Each	Petri dish	Ward's
4.4.2	10	15	Each	Petri dish, plastic	Ward's
4.3.3	20	30	Each	PPE: safety glasses, lab apron, and disposable gloves	Ward's
4.2.4	10	15	Each	Ring stand	Ward's
4.4.2	20	30	Each	Safety glasses	Ward's
4.2.4	20	30	Pair	Safety glasses	Ward's
4.4.2	10	15	Each	Stopwatch	Ward's
4.2.4	10	15	Each	Stopwatch	Ward's
4.2.4	10	15	Each	Thermometer, Celsius	Ward's
6.1.1	10	15	Each	Graduated cylinder, 100ml	Ward's

APP	Qty/ 20	Qty/ 30	Unit	Item Specifications	Vendor
6.1.1	10	15	Each	Pipet, 3ml	Ward's
6.1.1	10	15	Each	Soil test, Rapitest® for N-P-K	Ward's
6.1.2	2	3	Each	Air pump, aquarium	Ward's
6.1.2	10	15	Each	Air stone, small (7/16")	Ward's
6.1.2	8	12	Each	Air supply tubing splitters	Ward's
6.1.2	30	45	Feet	Air supply tubing, vinyl	Ward's
6.1.2	10	15	Each	Beaker, 600ml	Ward's
6.1.2	20	30	Pairs	Gloves, disposable	Ward's
6.2.1	5	8	Each	Graduated cylinder, 100ml	Ward's
6.1.2	20	30	Each	Lab apron	Ward's
6.1.2	1	1	Set	LaMotte™ Plant Nutrition Chemical Set	Ward's
6.1.2	5	8	Kit	LaMotte™ Plant Tissue Macronutrient Test Kit	Ward's
6.1.2	20	30	Pairs	Safety glasses	Ward's
6.1.2	10	15	Each	Specimen jar lid	Ward's
6.1.2	10	15	Each	Specimen jar, 32 oz	Ward's
6.1.2	10	15	Each	Spray bottles	Ward's
6.2.1	1	1	Each	Thermometer, Celsius	Ward's
6.1.2	10	15	Each	Thermometer, Celsius	Ward's
6.2.1	25	34	Each	Twist ties	Ward's
6.2.2	5	8	Each	Electronic balance, 150g x 0.1g	Ward's
6.2.2	1	1	Roll	Parafilm	Ward's
6.2.2	10	15	Each	Razor blade	Ward's
6.2.2	10	15	Each	Ring stand	Ward's
6.2.2	30	45	Each	Ring stand clamps	Ward's
6.2.2	1	1	Each	Spray bottle	Ward's
6.2.2	25	34	Each	Twist ties	Ward's
7.1.1	10	15	Each	Microscope, compound	Ward's
7.2.2	10	15	Kit	Dissection kit	Ward's
7.3.1	2	2	Each	Rootview growth chambers	Ward's
7.2.3	10	15	Kit	Dissection kit	Ward's
7.3.2	20	30	Pair	Gloves, disposable	Ward's
7.3.2	20	30	Pair	Safety glasses	Ward's
7.3.4	20	30	Each	Beaker, 100ml	Ward's
7.4.4	40	60	Pair	Nitrile gloves	Ward's
7.4.5	40	60	Pair	Nitrile gloves	Ward's
8.2.2	1	1	Each	Beaker, 600mL	Ward's
8.2.2	10	15	Each	Burner, alcohol or Bunsen	Ward's
8.2.2	10	15	Each	Microscope, compound	Ward's
9.1.2	20	30	Each	Beakers, 600mL	Ward's
7.4.3	1	1	Each	Rooter-pot (optional)	Ward's 207870