

## KIT CONTENTS LIST FOR USE WITH: **Biology (Grade 10)**

**5th Edition**

**BJU Press®**

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<u>Text Reference</u>	<u>Item Description</u>	<u>Item Quantity</u>	<u>Notes</u>
1B,5A,6B,8A,12A,13A,13B,16A,16B,21A	Home LED Microscope <i>(MI-4100LST)</i>		A microscope is required for several labs, but not included in this kit due to expense. If you already own a microscope, you do not need to purchase another.
1B,5A,6B,8A,12A,13A,13B,16A,16B,21A	Lens Cleaning Paper, 50 pack <i>(MI-PAPER)</i>	1	
1A	Half-Meterstick, 50 cm, hardwood <i>(ME-METER1)</i>	1	Lesson 1A calls for a full meterstick. However, the half meterstick will work adequately for the experiment.
1B, 22A	Tissue paper, 10"x15" <i>(PT-PAPTISS)</i>		Lesson 1B: Optional. Use facial tissue or wrapping tissue to compare with the lens cleaning paper. Lesson 22A: Use tissue as indicated in the text.
1B, 8A, 13B, 16A, 16B, 21A	Bob Jones Biology Slide Set <i>(MS-SETBJ10)</i>	1	Lesson 13B: Use the slides in place of a live culture.
2A	Clear 17oz Bottle <i>(PT-BTCL502)</i>		Optional. Useful for possible disinfecting solution.
2A	Light, small beam penlight <i>(OP-LIGHT3)</i>	1	
2A	Pebbles, fine gravel, 1 lb. <i>(GS-PEBBLE)</i>		Optional. Useful for possible disinfecting solution.
2A	Rubber bands, 1.4 oz. bag <i>(GS-RUBBAND)</i>		Optional. Useful for possible disinfecting solution.
2A	Sand, coarse, 1 lb <i>(GS-SANDCRS)</i>		Optional. Useful for possible disinfecting solution.
2A	Sand, fine, 1 lb. <i>(GS-SANDFIN)</i>		Optional. Useful for possible disinfecting solution.
2A, 3B, 5B, 6A, 7B, 13A, 15B, 16A, 16B, 24A	8oz Distilled Water in bottle <i>(CH-DISTH2O)</i>		Use any water source.
2A, 5A, 12A	Swab applicator, sterile, 2 pack <i>(PT-SWABS)</i>	3	Lesson 2A: Use one from one pack. Save the other in the pack for Lesson 5A. Lesson 5A: Use one from one pack.  Lesson 12A: Use two packs.
2A,12A	Agar, nutrient, 8 g, dehydrated <i>(CH-AGARN08)</i>	1	
2A,12A,15A,16A,16B,17A	Petri Dishes, polystyrene, 90 x 15 mm, 20 pack <i>(BE-PETRI20)</i>	1	Lesson 2A&12A: Seal petri dishes in a bag before throwing them in the trash.
2A,19B	Cheesecloth, bleached <i>(GS-CHCLOTH)</i>	1	Lesson 2A: Useful for possible disinfecting solution. Lesson 19B: Cut two small pieces. Put rodent food in each piece. Wrap up as a sac and make a knot at the top.
2A,2B,12B	pH Papers, 1-14 range, 80 pack <i>(CH-PHSTRIP)</i>	1	
2A,2B,7A,21B	Digital Stop Watch, 2" <i>(ME-STOPWAT)</i>		Use a timer on a cellphone or watch.
2B	Hydrogen Peroxide 6%, 100 ml <i>(CH-H2O2100)</i>		Purchase 3% solution at local grocery store. If you purchase this suggested 6% solution, make sure to dilute the solution to 3% for all labs by mixing approximately 1 part hydrogen peroxide with 1 part water.
2B	Leaf Set <i>(PT-LEAVES)</i>		Use any leaves available to you.
2B	Nail, 6D, bright finish <i>(PT-NAIL6F)</i>	1	

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2B, 3A, 3B,5B,6B,7A,9A,15B,23B	Plastic Graduated Cup, 8 fl oz. (CE-GRADCUP)	4	All Lessons: Wash and reuse cups for each lesson. Lesson 3A: Use in place of a dip net. Lesson 9A&15B: Use in place of a small container.
2B, 7B,13A	Yeast, packet (LM-YEAST)	3	Lesson 2B: Only use a small portion for each step of this lab. A single packet will be used during the entire lab.Lesson 13A: Use as substitute for carmine powder.
2B, 9A	Pony Beads, Red, 9mm x 6mm, 100 pack (PT-BEAD100R)	1	Lesson 2B: Use one bead. Clean and save it for Lesson 9A.
2B,12B,15A,23B	Test Tube Rack, 20 mm, 40 holes (CE-TTR2040)	1	
2B,15A,23B	Test Tube Brush, small (CE-TTBRUSH)	1	
2B,15A,23B	Test Tubes, large 16 x 150 mm (CE-TTUBELG)	5	
2B,20A,23A	Thermometer, Celsius, 12" (ME-THER30B)	1	Lesson 20A: Use in place of the Vernier LabQuest 2.
2B,23B	Test Tube Clamp (CE-TUBHOLD)		
2B,3B,5B,12B	Wax pencil (marks glass) (BE-WAXPENC)		Use any labeling method you choose. The kit comes with maskign tape that can be used to label with another type of writing implement.
2B,6A,6B,12B,23B	Chemical Splash and Impact Safety Goggles, Adult (CE-GOGGLE1)	1	Not listed as a required item, but necessary for safety.
2B,6A,6B,12B,23B	Lab Apron No 3, plastic, 2 mil (CE-APRON3)	1	Not listed as a required item, but necessary for safety.
2B,6A,6B,12B,14A,23B	Safety Gloves, size 8 - 8.5 Medium (CE-SGLOVEM)	1	Not listed as a required item, but necessary for safety. Lesson 14A: Use in place of garden gloves.
3A, 17B, 19B	Mealworms, 30 pack, Pre-paid Coupon (LM-MWCOUP)	1	Make sure to send in coupon for mealworms approximatley 2 weeks prior to needing them. Lessons 3A & 17B: Use mealworms in place of crickets.Lesson 19B: Use mealworms as one source of rodent food.Save in terrarium between experiments.
3A,17B, 18B	Critter Habitat - Aquarium, small (BE-AQUASML)		Any large container will work.
3B	Peat Moss, 60 cubic inches (GS-PEATMOS)	1	
3B,5B,12B,23A	Digital Scale, 2000 g x 0.1 g (BS-DB2000)		Purchase separately if needed. You may have a food scale or other digital scale from a previous science year.
3B,6B,7B,12B,23A	Graduated Cylinder, polypropylene, 50 ml (CE-CYPP50)	4	Use in place of 100mL and 250mL graduated cylinders.
4A, 4B, 12A, 24A	Tape Measure, Flexible, 150 cm (ME-TAPE1)	1	Lessons 4A&4B: Use as field tape.
4A,4B,24A	Nature Notebook (BE-NOTEBK)		Any notebook will work.
5A	Allium (onion) root tip slide, l.s. (MS-ALLROOT)		Optional replacement for making onion slide is a prepared slide.
5A	Corks, No. 2, pack of 2 (CE-CORK02)	1	
5A	Washers, 1" diameter, each (PT-WASHBLK)	1	Use in place of the hexagonal nut.
5A,14B	Razor Blade, single edge, 1 pack (CE-RAZOR)		Use the scalpel in the dissection kit.
5A,6B,13A,13B,16A	Microscope Slide Set, Basic (MS-SLIDSET)	1	
5A,6B,13B	Methylene Blue, 1%, 30 ml (CH-METHBLU)	1	
5A,7A,14B,16A,16B,17A,2 4B	Advanced Dissecting Tools (DE-SET1)	1	
5B,12B, 15A, 16A, 16B	Pipet, disposable, 1 ml, 10 pack (CE-PIPET)	1	

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5B,23B	Dialysis Tubing, Semi-Permeable Membrane, 12" <i>(BE-MEMBR LG)</i>	2	Lesson 5B: Cut strips in half or thirds. Use three of the cut pieces. Tie one end of each piece of tubing in a knot and use the rubber bands to secure the other ends. Lesson 23B: Use one piece cut during Lessn 5B.
6A	Dissolved Oxygen Concentration Kit <i>(KT-DISOXY)</i>	1	
6B	Dishwashing Liquid Detergent, 15 ml <i>(CH-DISHDET)</i>		Purchase at your local grocery store.
6B	Mortar and Pestle, 130 ml <i>(CE-MORT130)</i>		Use a blender as indicated in the text.
6B	Phenol red pH indicator, 30 ml <i>(CH-PHENRED)</i>	1	
6B, 15B, 23B	Salt, 30 g (unlabeled) <i>(CH-SALT30G)</i>		Purchase at your local grocery store. Lesson 6B&15B: Mix 3 parts with 50 parts water to make salt solution for Lesson 6B and saltwater for Lesson 15B. Lesson 23B: Use to make mixed solutes solution.
6B,12B,23A, 24A	Stirring Rod, glass, 6" <i>(CE-STIRROD)</i>	1	Lesson 12B: Clean the stirring rod between solutions.
6B,22A	Isopropyl Alcohol, 90%, 30 ml <i>(UN-ISOPALC)</i>	2	
7A	30g Baking Soda (unlabeled) <i>(CH-BKSOD30G)</i>		Purchase at your local grocery store. Mix approximatley 1 part baking soda with 3 parts water to make a sodium bicarbonate solution.
7A	Syringe, 10 cc <i>(CE-SYRIN10)</i>	1	
7A,17A,25A	Colored Pencils <i>(BE-CPENCIL)</i>		Use any coloring supplies, label the lines in your graph, or make different line types.
7B	3"x5" ziplock bags, 2 mil <i>(PK-ZIP3X5)</i>	3	
7B, 23B	Cornmeal, 10 g <i>(CH-CORNMEAL)</i>		Purchase at local grocery store. Lesson 23B: Use as starch to make mixed solutes solution.
7B, 23B	Glucose Syrup, 15 ml <i>(CH-GLUCOSE)</i>	1	Lesson 23B: Use to make mixed solutes solution.
7B,12A,14A,17A	Marker, black, permanent <i>(BE-MARKBLK)</i>		Use any labeling method you choose. The kit comes with masking tape that can be used to label with other type of writing implement.
7B,15A	Measuring Spoons, Set of 6 <i>(CE-MESPOON)</i>		
7B,19B	Wheat Bran, 4 oz. <i>(LM-BRANWHT)</i>	1	
9A	Pony Beads, White, 9mm x 6 mm, 100 pack <i>(PT-BEAD100W)</i>	1	
12A	6x10 poly bags, 1.5 mil <i>(PK-BAG6X10)</i>	3	
12A	Hand Sanitizer, 1 oz <i>(CH-SANITIZR)</i>		Purchase at your local grocery store.
12A,20A	Castile Soap, Unscented, 60mL <i>(CH-CSTL60)</i>		Use any soap.
12B	Acetic Acid Solution 1 M, 100 mL <i>(CH-ACETIC)</i>	1	
12B	Fertilizer, 10-10-10 blend, 30 g <i>(CH-FERT10)</i>	1	
12B	Filter Paper, 11 cm, 10 pack <i>(CE-FILTPAP)</i>	1	Use in place of weighing paper.
12B	Magnesium Hydroxide, 30 g <i>(CH-MG(OH)2)</i>	1	
12B	Oleophilic Bacteria, 10 g <i>(CH-OLEOBAC)</i>	1	
12B	Vegetable Oil, 2 oz. <i>(CH-OIL2OZ)</i>		Purchase at local grocery store.
12B,13A	Cotton Balls, 12 count <i>(GS-CTTNBL)</i>	1	Lesson 12B: Use 4. Lesson 13A: Use a cotton fiver in place of glycerin or methyl cellulose.

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13A	Methyl Cellulose, 1.5%, 30 ml (CH-METHCEL)		Optional. Use cotton fibers from the cotton balls to slow the paramecium down.
13A	Protozoa Culture Kit (LM-PROTIST)	1	
13A	Toothpicks, pack (GS-TOOTHPI)		Use forceps or probes in dissecting tools set to transfer yeast.
14A	5x7 ziplock bags, 2 mil (PK-ZIP5X7)	10	
14A	Trees Golden Guide (BK-GTREESP)		Optional. Purchase if you don't have access to a field guide.
14A	Wildflowers Golden Guide (BK-GFLOWER)		Optional. Purchase if you don't have access to a field guide.
14A, 14B, 16A, 16B	Magnifier, double lens, 5X/10X (OP-MAG10LG)	1	
14B, 15B	Seeds, baby lima bean, pack (LM-SEEDBEA)	1	
14B, 15B	Seeds, corn, pack (LM-SEEDCOR)	1	
15A	Spatula, stainless steel (CE-SPATULA)		Use a spoon.
15A,23B	Benedict's Solution, 100 ml (CH-BENSOL)	1	
15A,23B	Iodine (Lugol's) Biological Stain Solution, 30 ml (CH-IODINE)	1	
15B	1 oz Cobalt Blue PET Boston Round Bottle (PT-BPET1OZ)	1	Use with spray top to make spray bottle.
15B	20-410 White Fine Mist Sprayer with Dip Tube (PT-BOTSPRY)	1	Use with bottle to make spray bottle.
15B,20A,22A	Absorbent Pad, about 8" x 15" (PT-ABSOPAD)		Lesson 15B & 22A: Use paper towel as indicated in the text.  Lesson 20A: Use towel, cloth, or paper as indicated in the text.
16A,16B	Brine Shrimp Eggs, 6g vial (LM-BRSHRIM)	1	Lesson 16A: Follow instructions to raise brine shrimp in as little as 24 hours. Use petri dish as holding location to raise brine shrimp. Lesson 16B: You can feed brine shrimp to the planaria.
16B	Index Card, Lined, 3X5 Individual (PT-INDX3X5)	1	
16B	Magnesium Sulfate, 100 g (CH-EPSOM)		Purchase at local grocery store.
16B	Planaria (brown) - Live Culture (LD-PLANAR)		Lesson 16B: Purchase separately approximately 2 weeks prior to completing the experiment.
17A	Crayfish Specimen, 4"-6", Plain (PM-CRAYFSH)	1	
17A, 19B, 20A	Masking Tape, 0.94" X 40 yds (GS-MASKTP)	1	Lesson 19B: Use to build your Y Maze.
17A,24B	Dissecting Tray, Styrofoam, 8" X 10" (DE-TRAYS)	2	
17A,24B	Dissection Pins, 6 pack (DE-PINS)	1	Additional pins to those provided in the dissection kit.
19A	Birds Golden Guide (BK-GBIRDSP)		Optional. Use birding app as indicated in the text.
19B	12x10x6 corrugated shipping box (PK-12X10X6)		Use th cardboard box the kit came in to build your maze.
19B	Bird Seed, 1/2 lb (BE-BIRSD1)	1	
1B,13B	Microscope Immersion Oil (MI-IMMOIL)		Optional item. Purchase only if you have a microscope that can view up to 1000x magnification.
21A	Human bone slide, ground, c.s. (MS-HUBONE)	1	
21A	Human Skeleton Model, 9.5" (CM-SKELSML)		

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22A	Lung Volume Kit <i>(BE-LUNGKIT)</i>	1	
22A	Stethoscope, Bowles <i>(BE-STETH)</i>		
23A	Blood Pressure Monitor Kit <i>(BE-BPMKIT)</i>	1	
23A	Crucible & Beaker Tongs <i>(CE-TONG)</i>	1	
23A	Evaporating Dish, 100 ml <i>(CE-EVAPD90)</i>	1	
23A	Grape Juice, 5.5 oz Can <i>(GS-GRAPEJU)</i>		
23A	Marshmallows, Large, 12 oz <i>(CE-MARSHM)</i>		Purchase at local grocery store.
23A	Matches, pack of 32 <i>(GS-MATCHES)</i>	1	
23A	Paper Clips, small size, box <i>(GS-PCLIPSM)</i>	1	
23A	Ring Support, 3" <i>(CE-RING3)</i>	1	
23A	Support Stand, 4" x 6" base, 18" rod <i>(CE-STAND2)</i>	1	
23B	Albumin, 10 g <i>(CH-ALBMN10)</i>	1	Use to make mixed solutes solution.
23B	Biuret Reagent, 30 ml <i>(UN-BIURET)</i>	1	
23B	Digital Multimeter <i>(EL-DIGMULT)</i>	1	
24A	Markers, washable, 12 pack <i>(BE-MARKERS)</i>		
24A	Tuning Fork, C, 256 cps <i>(MC-TF0256)</i>	1	
24A	Tuning Fork, C, 512 cps <i>(MC-TF0512)</i>	1	
24B	Rat Dissection Guide <i>(DE-GDRAT)</i>	1	
24B	Rat Specimen, 7"-9", Double Injected <i>(PM-RAT2)</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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