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KIT CONTENTS LIST FOR USE WITH:

Physics: The Foundational Science (Grade 12)
2nd 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, 5, 8, 9, 12, 15, 16	Tape Measure, Steel, 3 meters (ME-TAPEMEA)	1	
1, 7, 12, 15	Meterstick, 100 cm (ME-METER2)	1	Ships separately from kit.
1, 7, 12, 15	Optic Bench Kit (KT-OPBENCH)	1	Use the parts from this kit in multiple labs
2, 11	Graduated Cylinder, polypropylene, 50 ml (CE-CYPP50)	2	
2, 3	Density Cylinders Set of 4 (MC-DENSCYL)	1	Density Cylinder Information: Aluminum - 2,700 kg/m ³ Brass - 8,600 kg/m ³ Steel - 7,874 kg/m ³ Copper - 8,960 kg/m ³
2, 3, 4	Vernier Caliper (ME-CALIPER)	1	This is a manual caliper and comes in a blue pouch.
2, 3, 6, 9, 10	Aluminum Pie Plate, 5" diameter (PT-PIEPAN5)	1	Use as a weigh boat for the pocket scale.
2, 3, 6, 9, 10	Superior Balance Digital Pocket Scale, 600 g capacity, 0.1 g precision (BS-SPB600)	1	The platform on this pocket scale is small. The included pie plate can be used as a weigh boat as needed.
2, 4	Sand, coarse, 1 lb (GS-SANDCRS)	2	Use to make weights for Labs 4, 6, 7, 8 & 11.
2, 4, 5, 6, 7, 8, 11	Rubber bands, 1.4 oz. bag (GS-RUBBAND)	1	Use for weights and projectile launcher
2, 4, 6, 7, 8, 11	5x8 poly bags, 1.5 mil (PK-BAG5X8)	5	Use these plastic bags to make weights for Labs 4, 6, 7, 8, 11
3	Graduated Cylinder, polypropylene, 100 ml (CE-CYPP100)	0	Use the 50ml graduated cylinder.
3	Spring scale, 100 g/1 N (BS-SCALE4)	1	
3	Vegetable Oil, 6 oz. (sold only in kits) (CH-VEGEOIL)	1	Use the vegetable oil in place of the laundry detergent for Lab 3 Part II
3, 11	Plastic Graduated Cup, 8 fl oz. (CE-GRADCUP)	2	Use these graduated cups for the coldwater in Lab 11
3, 4, 5, 6, 8, 9, 10	String, heavy cord, 25' (MC-STRING)	1	
4	Dowel, 1/8", 12" long (sold only in kits) (PT-DOWL125)	2	Use these smaller diameter dowels in place of pine rulers for Lab 4.
4	Weight, 50 g, with hook (BS-WTE050)	0	Make your own 50, 100, 200 & 500 gram weights using a scale, sand, a rubber band and plastic bags.
4, 5	C-clamp, 2" (GS-CLAMP)	0	Instead of clamps use heavy books or objects on top of the dowels instead of clamps.
5	Corks, No. 2, pack of 2 (CE-CORK02)	1	

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5	Dowel, 1/4", 12" long <i>(PT-DOWL250)</i>	1	Use this 1/4" dowel for Lab 5 to make the launcher; Screw 1 eye hook near an end of the dowel and 1 eye hook in the pre-drilled hole in the PVC pipe. Insert the dowel into the PVC pipe and stretch the rubber band around the screw eye hooks.
5, 10, 12	PVC Pipe, 1/2" Sch 40, 12" piece <i>(PT-PVCPPIPE)</i>	1	Use this to build launcher in Lab 5 as it has a pre-drilled hole for a screw eye (1/4" dowel goes inside). Use this PCV pipe in Lab 12 as a dowel rod to generate waves. Use this PVC pipe in place of glass tube for Lab 10.
5, 6, 8, 12, 14	Protractor, 6" semi-circle <i>(ME-PROTRSM)</i>	1	
5, 8, 10, 12	Digital Stop Watch, 2" <i>(ME-STOPWAT)</i>	1	
5, 9	Screw eye, brass, 9/16" <i>(PT-SCREYE2)</i>	10	
6	Friction Block, wood <i>(MC-BLOCK1)</i>	1	
6	Spring scale, 500 g/5 Newton <i>(BS-SCALE2)</i>	1	Use the 500g/5Newton Spring Scale for Lab 6
6, 7	Wood Ramp, economy <i>(MC-RAMP1)</i>	1	
6, 7, 8	Weight Set, Hooked 10 to 1000g <i>(BS-WTHOOK1)</i>	0	Make your own 50, 100, 200 & 500 gram weights using a scale, sand, a rubber band and plastic bags.
7	Burette Clamp <i>(CE-CLAMP)</i>	1	
7	Hooke's Law spring, 10 cm <i>(MC-SPRHOOK)</i>	1	
7, 8, 9	Support Stand, 4" x 6" base, 18" rod <i>(CE-STAND2)</i>	1	
9	Ball, wood, 2" diameter <i>(PT-BALLWD2)</i>	1	
9	Ball, wood, 3" diameter <i>(PT-BALLWD3)</i>	2	
9, 17	Card stock, 110#, 8-1/2" x 11", white <i>(PT-CARDSTK)</i>	1	
10	Centripetal Force Kit <i>(MC-CENTRIP)</i>	1	Use the Centripetal Force Kit to study concepts in Lab 10.
10, 16	Rubber stopper, #4, 1-hole <i>(CE-STOP04A)</i>	2	Use the stoppers in place of erasers for Lab 16.
11	Alcohol Lamp Burner, Wickless <i>(CE-LAMP)</i>	1	Use a microwave or stove to heat water for Lab 11
11	Beaker Tongs <i>(CE-TONBEAK)</i>	1	Kitchen tongs or a hot pad will work.
11	Beaker Tongs <i>(CE-TONBEAK)</i>	1	
11	Beaker, glass, 250 ml <i>(CE-BE10250)</i>	2	
11	Styrofoam Cup, 8 oz, each <i>(PT-STYRCUP)</i>	2	
11	Thermometer, Celsius, 12" <i>(ME-THER30B)</i>	1	
11	Thermometer, Celsius, 12" <i>(ME-THER30B)</i>	1	
11, 16, 17, 18, 19	Copper Wire, insulated, #24, 15' <i>(EL-WIRE24H)</i>	1	Cut a piece of this insulated wire to make a stir rod if paper clips are not available.
12	Absorbent Pad, about 8" x 15" (sold only in kits) <i>(PT-ABSOPAD)</i>	2	Use this in place of sponges; roll up or fold
12	Rubber Stopper, #0, solid <i>(CE-STOP0XC)</i>	1	
12,13	Clay, modeling, 4 oz. stick <i>(GS-CLAY)</i>	2	Includes 2 sticks; color may vary. Substitute clay for paraffin blocks in Lab 12 and use as mirror stands in Lab 13.
12,14	Glass Plate, 5" x 5" <i>(CE-GLASS5)</i>	1	Use the mirrors and glass plate for the barriers in Lab 12. Create your own ripple tank with instructions in the lab book.

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13	Deluxe Red Laser Pointer <i>(OP-LASRED)</i>	1	
13	Mirror, glass plane, 4"x 2" <i>(OP-MIRROR4)</i>	4	Mirrors can be used as barriers in Lab 12.
14	Prism, glass, 25mm x 75mm <i>(OP-PRISM)</i>	1	
14, 16, 17	Dissection Pins, 6 pack <i>(DE-PINS)</i>	1	Use these pins in place of sewing pins.
16	Aluminum foil sheet, 9 x 10 <i>(PT-FOIL)</i>	2	
16	Balloons, medium, 9" <i>(GS-BALLOMD)</i>	1	
17	Bar Magnets, 3" Alnico I, 2 pack <i>(MG-BAR3AL)</i>	1	
17	Battery, 9-volt, alkaline <i>(EL-BALK9V)</i>	1	
17	Iron Metal Filings, 30 g <i>(CH-IRON)</i>	1	This comes in a small shrink wrapped vial for shipping.
18	Bulb Socket, 1-bulb <i>(EL-LAMPSOC)</i>	5	
18	Bulb, screw style, 3.7-volt <i>(EL-LAMP3.7)</i>	5	
18, 19, 20	Battery Holder for D Cell <i>(EL-BATTHLD)</i>	4	
18, 19, 20	Battery, D, heavy duty, 2 pack <i>(EL-BATTD2)</i>	2	
18,20	Alligator Clip Leads, 2 pack <i>(EL-ALCLIP2)</i>	3	
19	Digital Multimeter <i>(EL-DIGMULT)</i>	1	
20	Capacitor, 100 microfarad <i>(EL-CAP100M)</i>	1	25V, 100mF capacitor
20	LED, yellow, diffuse type, 5mm <i>(EL-LEDYELL)</i>	1	
20	Resistor, 30 ohm, 1/4 watt <i>(EL-RES030)</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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