## **Supplies Included**

Aluminum bar, Labs 12A, 14A Axles (2), Lab 9A Badminton birdie (2), Labs 4B, 8A Ball, golf, Lab 8A Ball, tennis, Labs 4A, 8A Balloons, Lab 2B Battery, D-cell (3), Labs 16A, 17 A, 17B, 17C, 19A Battery, 6-volt, Lab 18 Battery, 9-volt, Lab 19B Battery holder, Lab 17 A Beaker, 30 mL, Lab JJB Bolt, steel, Labs 14A, 19B Car, matchbox, Labs 2A, 5 C Cart, dynamic (2) Labs 6B, 9 B Clamp, Lab 19A Cloth, silk, Labs 15A, 15B Cloth, wool, Labs 15A, 15B Compact disc, Lab 22 Compass, magnetic, (2), large and small Labs 3B, 18 Copper bar, Lab 12A Cord, Lab 5C Cup,foam, 8 oz. (3), Lab 12A Cup,foam, 14 oz., Lab 15B Cylinder, graduated, 100 mL, Labs 1 OB, 12A, 14A DC motor, Lab 19A Dish, refractional (semicircular dish), Labs 20B,21A Dice (2, different colors), Lab 13 Diffraction grating, Lab 24

Fishing line (10-lb., 1.5 m), Lab 7A Foam cover for cups, Lab 12A Goggles, Labs 7 A, 8B, 11 C Knife switch, Labs 19A, 19B Laser pointer, Lab 22 LED, 4 different colors, Lab 24 Lens, convex (converging), Lab 21B Level, Lab 3A Magnets, bar (2), Lab 18 Marker, fine point, Labs 7 A, 20B, 22 Mass, 50 g, Labs 5B, 6B Mass, 100 g (5), Labs 6A, JOA Mass, slotted, 250 g (3), Lab 5A Mass set, metric, Labs 9B, 19A Mirror, concave, Lab 20C Mirror, plane, Labs 20B, 21A Mirror, support, Labs 20B, 20C Multimeter (2), Labs 16A, 16B, 17A, 17B, 17C, 19A, 20A, 24 Photovoltaic cell, Lab 20A Pins, map, Labs 2B, 20B, 21A Pipet, thin-stem, Lab 11 B Protractor, clear, Labs 2A, 3A, 5A, 6A, 6B, 10A, 20B, 21A, 21B, 22, 25B Resistors (5), Lab 17A, 17B, 17C Rheostat (0-170 0), Lab 19A Rod, glass, Labs 15A 15B Rod, polyethylene Lab 14A Rubber bands, Labs 8B, 11 C Ruler, metric, Labs 4A, 8A, JJB, 14A, 16B, 18, 20B, 20C, 21A, 21B, 25B Scale, digital, Labs 6B, 7A, 8A, 8B,

9B Scale, spring (2), Labs 5A, 5C, 6A, 7 A, 12A, 14A Spool, Lab 19A Spring, metal, Lab 9B Spring clamp, Labs 11 B, 11 C Stoppers, rubber, two-hole (5), Lab 7 A Straw, Labs 9A, 15B String, Labs 5A, 6A, 6B, 1 OA, 12A, 14A, 15B, 19A Syringe with cap, 60 cc, Lab 11 C Tape measure, metric, Labs IA, JB, 2A, 2B, 3B, 4A, 4B, 5B, 5C, 6B, 7A, 8A, 8B, 9B, 10B, 24 Tape, magnetic, Lab 19B Tape, masking, Labs 3A, 5A, 7A, 9A, 10B, 15B, 18, 20B, 21A Tape, Velcro<sup>®</sup>, Lab 9 B Thermometer, Labs 11 C, 12A, Tube, clear, 15 cm (2), Labs 10B, 15R Tube, clear, plastic, 20 cm, with scale, Lab 1 OB Tubing, plastic, Lab 7A Tuningfork, 1024 Hz, Lab 10B Wheels (4), Lab 9A Wire, 12", #12, Labs 2B, 18 Wire, insulated, Lab 19B Wire leads with alligator clips (6), Labs 16A, 16B, 17A, 17B, 17C, 18, 19A, 20A, 24 Wood blocks (2), Lab 22



## **Supplies Needed**

Lab 1A	Computer paper, computer with spreadsheet program
Lab 1B	Computer paper, computer with spreadsheet program
Lab 2A	Books, computer with video analysis and curve-fitting software, ramp (3'; x 6" x 3/4" board or shelf), video camera feature of a smartphone
Lab 2B	Metal pan, smartphone with physics app, timer
Lab 2C	Smartphone with physics app
Lab 3A	Wood dowel (3/8" x 1 m)
Lab 3B	Computer paper
Lab 4A	Computer with video analysis software, video camera feature of a smartphone
Lab 4B	Computer with video analysis software, video camera feature of a smartphone
Lab 5A	Card table, graph paper
Lab 5B	Computer with video analysis software, fan cart, video camera feature of a smartphone
Lab 5C	Bathroom scale, bucket (5-gallon), craft sticks, dowel (1 /4" diameter, 8" length), water (or sand), white glue
Lab 6A	Object to slide (that weighs less than the maximum reading on the spring scale), wooden board (3 'x 1 'x $3/4$ ") or a bookcase shelf
Lab 6B	Books, cloth towels, computer with video analysis and spreadsheet software, ramp (about 3 'x 6" x 3/4" board or shelf), video feature of a smartphone
Lab 7A	Timer/stopwatch
Lab 7B	Board (15 cm x 1 cm), clamps or tape, computer with spreadsheet program, smartphone with physics app, spinning stool or Lazy Susan turntable
Lab 8A	Computer with video analysis and spreadsheet software, video feature of a smartphone
Lab 8B	Action figure
Lab 9A	Egg, paper
Lab 9B	Computer with video analysis and spreadsheet software, video feature of a smartphone
Lab 10A	Support for pendulum, timer
Lab 10B	Water
Lab 11A	None
Lab 11B	Books (thin), food coloring, graph paper, water
Lab 11C	Heat source, hot mitts, ice, kitchen tongs, pan (bowl or jar —approx. 1 qt.), water
Lab 12A	Hot tap water, ice, paper towels
Lab 12B	Materials to build a solar oven as determined by teacher
Lab 13	None
Lab 14A	Salt, water, water glass
Lab 14B	Computer paper, pennies, tape (clear plastic)

## **Supplies Needed**

Lab 15A	Any materials needed as determined by individual students inquiry lab
Lab 15B	Aluminum foil, scissors, water faucet
Lab 16A	Aluminum foil, colored pen or pencil, glass baking pan (or colorless plastic tray), graph paper, salt, small metal cans (round), water
Lab 16B	Aluminum foil (two sheets of 20 cm x 28 cm), physics textbook, scissors
Lab 17A	None
Lab 17B	None
Lab 17C	None
Lab 18	Books, cardboard, cardboard box, computer paper
Lab 19A	Support stand, timer
Lab 19B	Cardboard box (15 cm x 15 cm x 3 m), platform
Lab 20A	Bulbs (clear, incandescent, 25W, 50W, 75W, 100W), hot mitts, lamp base, support for optics
Lab 20B	Colored pencils, corrugated cardboard, paper
Lab 20C	Computer paper; light source with support
Lab 21A	Computer paper, corrugated cardboard
Lab 21B	Clear tape, computer paper; lamp, supports for lamp and converging lens
Lab 22	Cardboard screen, computer paper, tape
Lab 23	Computer with internet access
Lab 24	Computer with spreadsheet software; DC power supply, supports for tape measure, tape
Lab 25A	Box with cover, M&Ms® candies (64)
Lab 25B	None