



RECOMMENDED MINIMUM CORE INVENTORY TO SUPPORT STANDARDS-BASED INSTRUCTION

HIGH SCHOOL GRADES SCIENCES

High School Physics

Quantity per lab group	Quantity per classroom/adjacent work area	Description
SAFETY EQUIPMENT		
	classroom set	Aprons
	1	Wye wash station
	1	Fire blanket
	1	Fire extinguisher
	1	First aid kit
1/student		Goggles
	1	Goggles sanitizer (holds 36 pairs of goggles)
	1	Television or digital projector
	1	VGA Adapters for various digital devices
COMPUTER ASSISTED LEARNING		
	1	Television or digital projector
	1	VGA Adapters for various digital devices
EQUIPMENT/SUPPLIES		
<i>Mechanics/Force Equipment</i>		
1		Accelerometer (alternate computer-based probeware/sensors may be used)
	1	Air track and accessories (air source, air table, track w/ spark timing system)
	1	Archimedes Principle kit
1		Balance (0.1g accuracy)
	1	Bicycle wheel gyroscope
1		Boyle's Law apparatus
1		Cart, halls (4 aluminum low friction wheels, total length 6")
	40	C clamps
1		Collision in two dimension kit (track, balls: 2-steel,1-glass, 1-wood)
	40	Drawing compasses
	1	Electronic timer / photogates (alternate computer-based probeware/sensors may be used)



CALIFORNIA'S ADVOCATE FOR HIGH QUALITY SCIENCE EDUCATION

Quantity per lab group	Quantity per classroom/adjacent work area	Description
	1	Force table
1		Inclined plane set
1		Mass set (10g to 1000g)
2		Meter sticks
1		Momentum/collision apparatus
1		Motion sensor
	1	Newton's cradle "collision balls"
1		Pendulum set
2		Plumb bobs
	40	Protractors
2		Pulley apparatus
	20	Ring stand clamps
	20	Ring stands (or other lab counter top support)
	40	Rulers, 12-18" (with metric markings)
1		Spring scales (1 kg)
1		Spring scales (500 g)
1		Spring scales (250 g) (alternate computer-based probeware/sensors may be used)
2		Stop watches (alternate computer-based probeware/sensors may be used)
1		Stroboscope (hand and/or electronic)
1		Weight set, hooked 7 weights 10g--1Kg in plastic holding block
<i>Mechanics/Thermodynamics Equipment</i>		
	1	Ball and ring apparatus
1		Calorimeter
1		Compound bar
	1	Convection box
1		Convection of liquids tube
1		Heat transfer kit
1		Metals set for density and specific heat labs
<i>Waves/Optics Equipment</i>		
2		Diffraction gratings and/or spectroscopes
	3	Dishes, semicircular or "D" for refraction experiments (pkg/12)
1		Laser, small pointer
1		Lens set (concave, convex, biconcave, biconvex, prisms)
1		Mirrors, concave
1		Mirrors, convex

Developed by California Science Teachers Association to support the implementation of the California Next Generation Science Standards. Approved by the CSTA Board of Directors November 17, 2015.



CALIFORNIA'S ADVOCATE FOR HIGH QUALITY SCIENCE EDUCATION

Quantity per lab group	Quantity per classroom/adjacent work area	Description
2		Mirrors, flat
	1	Radiometer, Crookes
	1	Resonance tube set (open-ended tubes)
1		Resonance tubes (narrow plastic tubes work)
1		Ripple tank and accessories (motor-driven rippler bar, vertical light support, shaped wooden barrier blocks, extra glass plate, parabolic reflector, white plastic viewing screen, high power light source, 2 adjustable hand strobe discs)
	1	Rotating platform
	1	Spectrum tubes, assorted gases set
	1	Spectrum tube power supply
	1	Strobe light
2		Super slinkiest
2		Thermometers (-20° to 110° C) (alternate computer-based probeware/sensors may be used)
1		Tuning fork set (8 piece set w/ variety of frequencies) (alternate computer-based probeware/sensors may be used)
	1	Tuning fork set, resonant
	1	Video camera
<i>Electricity and Magnetism Equipment</i>		
1		Ammeter, dual range 0-1amp and 0-5amp for student use
	2	Animal fur and rods for electrostatics demonstrations
2		Bar magnets
2		Circuit equipment (circuit board, switches, LEDs, capacitors, resistors, transistors, miniature lamps, lamp sockets, buzzers, rheostats, solenoids, batteries, battery holders, wires (black & red hook-up wire), alligator clips, insulators, potentiometers)
1		Compass, magnetic
1		Coulomb's Law apparatus
	1	Electroscope
2		Electrostatic lab
2 ea.		Electrodes (copper and zinc)
	1	Faraday's Electromagnetic Induction apparatus
	1	Hand-held electric generator
4		Miniature compasses for B field observations
1		Multimeters, digital (or ammeters/voltmeters/ galvanometers) (alternate computer-based probeware/ sensors may be used)

Developed by California Science Teachers Association to support the implementation of the California Next Generation Science Standards. Approved by the CSTA Board of Directors November 17, 2015.



CALIFORNIA'S ADVOCATE FOR HIGH QUALITY SCIENCE EDUCATION

Quantity per lab group	Quantity per classroom/adjacent work area	Description
	1	Van de Graaff generator
	1	Wimshurst generator
1		Power supplies, variable output
2		Resistors
	1	Van de Graaff or Wimshurst generator
2		Wire and connector set
<i>Miscellaneous Equipment</i>		
	1	Barometer, aneroid for classroom, inches, centimeters, & millibars
2		Clamp, right angle rod clamps, 9/16" one end 1/2" other, Cast iron 1/4" thumbscrew
1		Clamp, adjustable as to angle, fits rods up to 5/8", aluminum
	1 roll	Vacuum hose, ID 3/8" (pkg/10 ft)
	1	Vacuum pump plate, acrylic fits 9" diameter, hose ID 3/8"
	1	Vacuum pump, 85 liters/min, fits hose ID 3/8"
FACILITIES		
A source of water and access to waste disposal (i.e., lab stations/sinks) are recommended for classrooms in which physics is taught.		