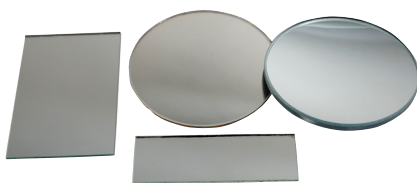


# Recommended Minimum Core Inventory for NGSS

## High School Physics, Class of 32 Students

Qty. Per Classroom	Equipment / Supplies	FREY Catalog #	Catalog Unit \$	Total
<b>SAFETY EQUIPMENT</b>				
32	Aprons Vinyl, 27" x 36"	1477657	\$5.69	\$182.08
1	Disposable Aprons, pk/100	2003375	\$9.29	\$9.29
1	Eye Wash Station Double Bottle, 32 oz	529331	\$71.99	\$71.99
1	Fire Blanket	1488340	\$149.99	\$149.99
1	Fire Extinguisher	1469473	\$142.69	\$142.69
1	First Aid Kit, 25 Student	1451983	\$70.09	\$70.09
32	Goggles Direct Vent Fog Free	577918	\$3.89	\$124.48
1	Goggles Sanitizer (holds 35 pairs of goggles)	1574050	\$911.99	\$911.99
<b>EQUIPMENT / SUPPLIES</b>				
<b>Mechanics / Force Equipment</b>				
8	*Accelerometer	1477526	\$29.09	\$232.72
1	Air Track Complete	1592922	\$1,001.79	\$1,001.79
1	Air Table	1577077	\$737.99	\$737.99
1	Archimedes Principle Kit	20-1583	\$95.99	\$95.99
8	Balance (0.1g accuracy)	2012761	\$223.19	\$1,785.52
1	Bicycle Wheel Gyroscope	1539815	\$75.09	\$75.09
8	Boyle's Law Apparatus	589953	\$19.99	\$159.92
8	Cart, halls (4 aluminum low friction wheels, total length 6")	1512359	\$16.79	\$134.32
40	C Clamps, 3"	574122	\$5.79	\$231.60
8	Collision in Two Dimension Kit (track, balls: 5-steel)	1017039	\$19.99	\$159.92
4	Drawing Compasses, pk/12	081885	\$13.99	\$55.96
1	*Electronic Timer / Photogates	N792-1100	\$364.95	\$364.95
1	Force Table	30-1510	\$218.69	\$218.69
8	Inclined Plane Set	30-1500	\$55.99	\$447.92
8	Mass Set (1g to 1000g), set 13	1324364	\$210.09	\$1,680.72
16	Meter Sticks	081901	\$3.19	\$51.04
8	Momentum / Collision Apparatus	589908	\$17.99	\$143.92
8	Motion Sensor for NeuLog	1526596	\$83.49	\$667.92
1	Newton's Cradle "Collision Balls"	1493984	\$22.09	\$22.09
8	Pendulum Set, drilled ball set 12	1445065	\$58.79	\$470.32
16	Plumb Bobs	583911	\$7.99	\$127.84
4	Protractors, pk/12	084410	\$7.99	\$31.96
16	Pulley Apparatus	532028	\$8.69	\$139.04
20	Ring Stand Clamps, 3"	030-8769	\$9.49	\$189.80

Qty. Per Classroom	Equipment / Supplies	FREY Catalog #	Catalog Unit \$	Total
20	Ring Stands, 5" x 8"	574173	\$15.29	\$305.80
40	Rulers, 12 (with metric markings)	089837	\$1.59	\$63.60
8	Spring Scales (1 kg)	193-5894	\$12.79	\$102.32
8	Spring Scales (500 g)	193-5883	\$12.79	\$102.32
8	*Spring Scales (250 g)	193-5872	\$12.79	\$102.32
8	*Stopwatch, pk/2	576952	\$6.69	\$53.52
8	Stroboscope	N594864	\$259.99	\$2,079.92
8	Weight set, hooked 10 weights 10g–1Kg in plastic holding block	1488752	\$105.79	\$846.32
<b>Mechanics / Thermodynamics Equipment</b>				
1	Ball and Ring Apparatus	589530	\$14.79	\$14.79
8	Calorimeter	599082	\$17.09	\$136.72
8	Conductometer	564649	\$21.99	\$175.92
1	Convection Box	584295	\$29.99	\$29.99
8	Convection of Liquids Tube	598890	\$17.09	\$136.72
8	Heat Transfer Kit	1387286	\$38.89	\$311.12
8	Metals Set for Density and Specific Heat Labs	599154	\$23.09	\$184.72
<b>WAVES/OPTICS EQUIPMENT</b>				
8	Spectroscopes, set 2	590100	\$14.39	\$115.12
8	Lens, semicircular	532033	\$9.19	\$73.52
8	Laser, small pointer	99-6400	\$6.79	\$54.32
8	Lens Set (concave, convex, biconcave, biconvex, prisms)	532036	\$62.69	\$501.52
8	Mirrors, Concave	574260	\$4.69	\$37.52
8	Mirrors, Convex	573171	\$4.89	\$39.12
16	Mirrors, Flat	562388	\$1.19	\$19.04
1	Radiometer, Crookes	181-2055	\$16.59	\$16.59
1	Resonance Tube	561259	\$13.99	\$13.99
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)	1396496	\$973.19	\$973.19
1	Rotating Platform	590262	\$49.99	\$49.99
<b>Spectrum Tubes, Assorted Gases Set</b>				
1	Air Spectrum Tube	1445001	\$46.99	\$46.99
1	Carbon Dioxide Spectrum Tube	1445000	\$46.99	\$46.99
1	Helium Spectrum Tube	1444998	\$46.99	\$46.99
1	Neon Spectrum Tube	1444999	\$46.99	\$46.99
1	Hydrogen Spectrum Tube	1444997	\$46.99	\$46.99
1	Spectrum Tube Power Supply	1444995	\$284.09	\$284.09
16	Super Slinky	580264	\$43.99	\$703.84



Qty. Per Classroom	Equipment / Supplies	FREY Catalog #	Catalog Unit \$	Total
16	*Thermometers (-20° to 110°C)	1017390	\$3.49	\$55.84
8	Tuning Fork Set (8 piece set w/variety of frequencies)	531830	\$35.99	\$287.92
1	Tuning Fork Set, resonant	560722	\$50.89	\$50.89
<b>ELECTRICITY AND MAGNETISM EQUIPMENT</b>				
8	Ammeter, dual range 0-1amp and 0-5amp for student use	584733	\$19.79	\$158.32
8	Bar Magnets Pair	568409	\$10.99	\$87.92
16	Circuit Board	573252	\$15.99	\$255.84
2	Basic Electronic Parts	574054	\$111.99	\$223.98
2	Electricity Kit	574169	\$129.99	\$259.98
1	Compass, magnetic, pk/12	030-5887	\$23.99	\$23.99
8	Coulomb's Law Apparatus	589581	\$57.09	\$456.72
8	Electroscope	589779	\$39.09	\$312.72
8	Electrostatic Charge Lab	1559719	\$42.59	\$340.72
16	Electrodes Copper	1296262	\$3.99	\$63.84
16	Electrodes Zinc	1296305	\$3.99	\$63.84
1	Hand-Held Electric Generator	1412715	\$15.19	\$15.19
8	Compass, magnetic pk 4	562352	\$3.09	\$24.72
8	*Multimeters, digital	N531976	\$54.99	\$439.92
1	Van de Graaff generator	527279	\$195.69	\$195.69
1	Wimshurst generator	230-7182	\$211.69	\$211.69
8	Power Supplies, variable output	531970	\$239.19	\$1,913.52
2	Resistors 5W, 250 OHM pk/10	574551	\$6.29	\$12.58
1	Thiourea Paper Strips, pk/12 vials, 100 strips	589122	\$19.99	\$19.99
<b>MISCELLANEOUS EQUIPMENT</b>				
1	Barometer, aneroid ,inches, centimeters, & millibars	1387083	\$43.29	\$43.29
16	Clamp, right angle rod clamps,	564856	\$4.29	\$68.64
8	Clamp, adjustable as to angle, fits rods up to 5/8", aluminum	1503170	\$14.69	\$117.52
1	Vacuum Hose, ID 3/8" (pkg/500 ft)	1477597	\$50.99	\$50.99
1	Vacuum Pump Plate, acrylic fits 9" diameter, hose ID 3/8"	596647	\$158.09	\$158.09
1	Vacuum Pump, 85 liters/min, fits hose ID 3/8"	527310	\$1,043.69	\$1,043.69
	<b>Total</b>			<b>\$25,590.58</b>
<b>Supplied by teacher</b>				
1	Digital Projector			
1	VGA Adapters for Various Digital Devices			
1	Video Camera			



Qty. Per Classroom	Equipment / Supplies	FREY Catalog #	Catalog Unit \$	Total
<b>* ALTERNATE</b>				
<b>Alternate computer-based probeware/sensors may be used for Accelerometer</b>				
1	NeuLog WiFi Module	N1590619	\$149.99	\$149.99
8	NeuLog Acceleration Sensor	N1526610	\$86.69	\$693.52
<b>Alternate computer-based probeware/sensors may be used for Timer/Photogates</b>				
1	NeuLog WiFi Module	N1590619	\$149.99	\$149.99
2	NeuLog Photogate Sensor	N1526592	\$47.49	\$94.98
<b>Alternate computer-based probeware/sensors may be used for Spring Scales</b>				
1	NeuLog WiFi Module	N1590619	\$149.99	\$149.99
8	NeuLog Force Sensor	N1526594	\$107.99	\$863.92
<b>Alternate computer-based probeware/sensors may be used for Stopwatch</b>				
1	NeuLog WiFi Module	N1590619	\$149.99	\$149.99
16	NeuLog Photogate Sensor	N1526592	\$47.49	\$759.84
<b>Alternate computer-based probeware/sensors may be used for Thermometers</b>				
1	NeuLog WiFi Module	N1590619	\$149.99	\$149.99
8	NeuLog Temperature Sensor	N1526586	\$32.79	\$262.32
<b>Alternate computer-based probeware/sensors may be used for Multimeters</b>				
1	NeuLog WiFi Module	N1590619	\$149.99	\$149.99
8	NeuLog Voltage Sensor	N1526584	\$40.89	\$327.12
8	NeuLog Current Sensor	N1526585	\$40.89	\$327.12