

Recommended Minimum Core Inventory for NGSS

High School Chemistry, Class of 32 Students

Qty. Per Classroom	Equipment / Supplies	FREY Catalog #	Catalog Unit \$	Total
SAFETY EQUIPMENT				
1	Acid Corrosive Storage Cabinet	528445	\$602.09	\$602.09
1	Corrosive Storage Cabinet	528446	\$1,009.95	\$1,009.95
1	Chemical Spill Kit	1491078	\$146.29	\$146.29
1	Chemical Storage Reference	Chemical Storage Reference - Ask your Frey Scientific Representative how to safely store your chemicals with our Color Code System.		
1	Emergency Shower and Eyewash	572443	\$3,135.95	\$2,983.95
1	Gravit-Eye Portable Eye Wash Station, 16 gallon	1320143	\$333.39	\$333.39
1	Fire Blanket w/ Hanging Pouch, 6' L x 5' W	1488340	\$149.99	\$149.99
1	Dry Chemical Fire Extinguisher	1471240	\$153.79	\$153.79
1	First Aid Station for 25 people	1451983	\$70.09	\$70.09
1	Flammables Storage Cabinet, 23-1/4" x 35" x 12 gallon, yellow	601016	\$960.95	\$960.95
1	Fume Hood Labconco Basic 47	526701	\$10,081.49	\$10,081.49
32	Indirect Vent Safety Goggles	577927	\$3.89	\$124.48
1	Goggle Sanitizer Cabinet	1574050	\$911.99	\$911.99
32	Rubberized Aprons, 27" x 42"	589239	\$8.39	\$268.48
EQUIPMENT / SUPPLIES				
1	Balance, Ohaus Pioneer Precision, 0.001 mg, 160g capacity	2001994	\$1,254.69	\$1,254.69
5	Balance, Ohaus Navigator Electronic, .01g, 510g capacity	2012765	\$328.79	\$1,643.95
3	Beakers, 50 mL, Pyrex Vista Low Form Borosilicate, pk/12	529623	\$35.09	\$105.27
3	Beakers, 100 mL, Pyrex Vista Low Form Borosilicate, pk/12	529624	\$35.09	\$105.27
2	Beakers, 250 ml, Pyrex Vista Low Form Borosilicate pk/12	529626	\$37.39	\$74.78
2	Beakers, 400 ml, Pyrex Vista Low Form Borosilicate, pk/6	529627	\$43.99	\$87.98
2	Beakers, 1000 ml, Pyrex Griffin Low Form Borosilicate, pk/6	594045	\$68.39	\$136.78
8	Beaker Tongs	563630	\$5.89	\$47.12
1	Bell Jar	590802	\$118.79	\$118.79
4	Bottle, carboy round, LDPE 10 L	1503924	\$51.69	\$206.76
4	Bottle, carboy round, LDPE 5 L	1503923	\$34.79	\$139.16
2	Bottle, narrow mouth, 1000 mL pk/6	583528	\$39.79	\$79.58
2	Bottle, narrow mouth, 500 mL pk/12	583525	\$44.99	\$89.98
2	Bottle, narrow mouth, 250 mL pk/12	583522	\$31.79	\$63.58
2	Bottle, narrow mouth, 125 mL pk/12	582673	\$22.19	\$44.38
1	Bottle, wide mouth, 125 mL pk/12	1399983	\$26.89	\$26.89
1	Bottle, wide mouth, 500 mL pk/12	1399985	\$55.79	\$55.79

Qty. Per Classroom	Equipment / Supplies	FREY Catalog #	Catalog Unit \$	Total
2	Glassware Disposal Box	581649	\$99.49	\$198.98
2	Brushes, bottle/ beaker	574034	\$4.79	\$9.58
2	Brushes, burette	1399063	\$4.69	\$9.38
4	Brushes, test tube	560098	\$8.69	\$34.76
8	Buchner Funnel, 350 mL	1488833	\$21.69	\$173.52
8	Bunsen Burner Ignitors, strikers, lighters	561124	\$3.69	\$29.52
16	Bunsen Burner Natural Fuel	569006	\$17.49	\$279.84
16	Buret, 50 mL x 0.1 mm Pyrex Modular Geissler	593571	\$102.89	\$1,646.24
8	Buret Clamp, Double Polyethylene	581355	\$9.99	\$79.92
1	Utility Cart, 34-3/8" W X 17-1/2" D X 33" H	574109	\$246.95	\$246.95
2	Micro Centrifuge Tubes, pk/50	99-0272	\$4.99	\$9.98
3	Centrifuge, Benchmark MyFuge Mini	1462543	\$359.89	\$1,079.67
4	Counter Brush	1367761	\$35.99	\$143.96
8	Crucible Tongs	563618	\$4.19	\$33.52
2	Crucibles, 30 mL, with cover pk/6	1488792	\$36.49	\$72.98
8	Demonstration Molecular Model Set	573831	\$48.89	\$391.12
1	Desiccant, Calcium Chloride 12 mesh 500g	578226	\$6.89	\$6.89
1	Desiccator Plate, 115 mm dia white	1488870	\$21.49	\$21.49
1	Desiccator, 10 inches, Glass	2022105	\$201.49	\$201.49
16	Diffraction Gratings / spectrosopes	1399065	\$40.89	\$654.24
17	Dropping (dispensing) Bottles, 30 mL pk/6	581556	\$26.09	\$443.53
1	Lab Oven Gravity Convection 600 Watts - 10Gc	592641	\$718.19	\$718.19
1	Drying Rack, Wall Mount ABS Plastic, White, 2-Tier	1292803	\$252.79	\$252.79
1	Dust Pan	458156	\$13.29	\$13.29
1	Chemical Observation Set	1368247	\$132.89	\$132.89
16	Evaporating Dish, porcelain	574218	\$2.09	\$33.44
8	Meker Burner Natural Gas	1399105	\$71.99	\$575.92
1	Flasks, Erlenmeyer, 1 L pk/6	529662	\$55.99	\$55.99
2	Flasks, Erlenmeyer, 125 mL pk/12	529659	\$45.19	\$90.38
2	Flasks, Erlenmeyer, 250 mL pk/12	529660	\$46.79	\$93.58
2	Flasks, Erlenmeyer, 2 L	593700	\$24.99	\$49.98
8	Flask, volumetric, 100 mL	593610	\$26.89	\$215.12
16	Burner Lighter	561124	\$3.69	\$59.04
16	Forceps	595230	\$2.09	\$33.44
16	Funnels, plastic, 2.75" diameter pk/12	593952	\$139.19	\$2,227.04
8	Funnels, plastic, 5" diameter	594312	\$5.29	\$42.32
8	Gas Measuring Tube, glass graduated, 50 mL	584277	\$18.29	\$146.32
25	Glass Tubing, 1lb	584265	\$8.69	\$217.25
2	Graduated Cylinder 10 mL pk/12	531710	\$65.99	\$131.98
2	Graduated Cylinder 50mL pk/12	531713	\$65.99	\$131.98



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2	Graduated Cylinder 100 mL pk/12	531715	\$65.99	\$131.98
2	Graduated Cylinder 500mL	593661	\$48.09	\$96.18
2	Graduated Cylinder 1000 mL	593664	\$81.29	\$162.58
8	Hot Hands Hand Protector	568217	\$24.59	\$196.72
8	Hot Plate - Variable Temperature	528332	\$215.59	\$1,724.72
8	Inoculating Loop, Nichrome	573834	\$3.49	\$27.92
1	Magnetic Stirrer Bar Set	581313	\$38.79	\$38.79
1	Magnetic Stirrer Plate	2027696	\$342.69	\$342.69
8	Magnifying Glass	086239	\$10.39	\$83.12
1	Glass Dropper Pipettes 3 inches pk/12	569723	\$3.39	\$3.39
2	Aluminum Electrode Strips	1296261	\$2.19	\$4.38
2	Carbon Electrode Strips	1296110	\$5.99	\$11.98
2	Copper Electrode Strips	1296262	\$3.99	\$7.98
2	Iron Electrode Strips	1296263	\$1.99	\$3.98
2	Tin Electrode Strips	1296108	\$5.99	\$11.98
2	Zinc Electrode Strips	1296305	\$3.99	\$7.98
8	Conductivity Tester	530794	\$33.99	\$271.92
8	Conductivity Pen Meter	1464869	\$86.49	\$691.92
2	Microplates 24 Well, pk/12	585837	\$86.09	\$172.18
16	Molecular Model Set 187 Pieces	573831	\$48.89	\$782.24
2	Mortar and Pestle Set, 150 mL, Porcelain	1488824	\$12.59	\$25.18
1	pH Meter, Hanna Portable Replacement Electrode	1330114	\$90.79	\$90.79
1	Ohaus pH Pen Meter, 0.1 pH Resolution	1464859	\$65.19	\$65.19
1	Periodic Table Wall Chart 49.5" x 38" Laminated	1502721	\$61.49	\$61.49
1	Pipettes, Disposable, grad. 5 mL, 150 mm pk/500	1448764	\$23.09	\$23.09
1	Pipettes, Disposable, grad. 5 mL, 138 mm pk/100	1448763	\$12.39	\$12.39
8	Pipette Pump	581493	\$11.09	\$88.72
8	Pneumatic Trough, 7" x 10" x 4"	585180	\$38.49	\$307.92
16	Ring Stand, 6" x 9" base, 24" rod	574242	\$50.19	\$803.04
16	Support Ring, 3"	562379	\$8.29	\$132.64
2	Rubber Policeman with Rod pk/12	1429085	\$12.79	\$25.58
2	Plastic Ruler, Inches and Metric 12 in, Clear, pk/10	365433	\$7.19	\$14.38
16	Single Burette Clamp, 3/8 L x 1-3/8 W in, Nickel Plated Steel	1492592	\$6.19	\$99.04
2	Spatula Spoon Combo, pk/10	1399426	\$18.29	\$36.58
1	Spectrophotometer	529576	\$1,268.09	\$1,268.09
4	Spectroscope Kit, pk/2	590100	\$14.39	\$57.56
1	Spectrum Tube Power Supply	1444995	\$284.09	\$284.09
1	Spectrum Tube Hydrogen	1444997	\$46.99	\$46.99
1	Spectrum Tube Helium	1444998	\$46.99	\$46.99
1	Spectrum Tube Neon	1444999	\$46.99	\$46.99



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1	Spectrum Tube Carbon Dioxide	1445000	\$46.99	\$46.99
1	Spectrum Tube Air	1445001	\$46.99	\$46.99
1	Spectrum Tube Water Vapor	1445002	\$46.99	\$46.99
1	Spectrum Tube Argon	1445003	\$46.99	\$46.99
1	Spectrum Tube Nitrogen	1445004	\$46.99	\$46.99
16	Spotting/Color Plate, 12 Wells, Porcelain	1488854	\$7.59	\$121.44
1	Still, Waterwise 9000 Purifier Distiller	591138	\$622.99	\$622.99
9	Stirring Rods 6", pk/12	525526	\$4.49	\$40.41
8	Stopwatch, 100 min, 1/100th sec pk/2	576952	\$6.69	\$53.52
2	Stoppers Assorted Rubber, 1 lb.	574115	\$12.19	\$24.38
1	Stoppers Assorted Cork pk/100	569486	\$29.49	\$29.49
4	Storage Box, 36 Quarts, Clear/Black	1397154	\$19.59	\$78.36
2	Syringes, 30cc, Pack of 6	190-9270	\$10.69	\$21.38
4	Test Tube Clamps pk/6	568490	\$7.59	\$30.36
8	Test Tube Rack, 40 Tube, Polypropylene, Blue	1503934	\$19.49	\$155.92
2	Test Tubes, 16mm x 150mm, pk/72	593478	\$62.29	\$124.58
8	Thermometer, 200 mm Partial Immersion - 10° to 110°C	1017408	\$17.69	\$141.52
8	Crucible Triangle, 2.5 inches	574113	\$2.29	\$18.32
3	Vacuum Tubing, 3/16" ID, 5/16 OD 50 Feet	1477595	\$26.59	\$79.77
1	Vacuum Pump	527310	\$1,043.69	\$1,043.69
8	Utility Carrier Tray	1016974	\$20.69	\$165.52
2	Voltaic Cell Set	564844	\$36.29	\$72.58
1	Volumetric Flasks with Caps, Pyrex Vista, 500 mL, pk/6	531736	\$117.59	\$117.59
1	Volumetric Flask, Pyrex Vista, 1000 mL	529676	\$43.99	\$43.99
8	Wash Bottle, Polyethylene, 250 mL	581211	\$5.59	\$44.72
4	Watch Glasses, Borosilicate, 90mm, pk/12	593313	\$45.29	\$181.16
5	Weighing Boats with Tabs Aluminum pk/100	1428543	\$9.59	\$47.95
3	Ceramic Fiber Wire Gauze 4 x 4 inches, pk/6	584256	\$5.79	\$17.37
1	Wrench, 8" Adjustable	1047809	\$47.59	\$47.59
CONSUMABLES				
1	Aluminum Foil, 12" x 25'	1584507	\$5.19	\$5.19
1	Balloons, package of 144	200099	\$19.59	\$19.59
1	Filter paper, qualitative #613, 9cm pk/100	598992	\$8.49	\$8.49
1	Paper Towels pk/30	1322721	\$49.29	\$49.29
1	Parafilm 2" x 250Ft	1603820	\$44.09	\$44.09
2	Vinyl Gloves, Latex Free Powder Free, Sz. Medium, pk/100	1311207	\$17.59	\$35.18
2	Vinyl Gloves, Latex Free, Powder Free, Sz. Large pk/100	1311208	\$17.59	\$35.18
2	Write-On Label Tape, 3/4 in X 40 yd, White, Pk/4	1475769	\$67.49	\$134.98
5	Cellulose Sponge, 6 x 3-1/2 x 1-3/8 Inches, Medium	085845	\$2.89	\$14.45
2	Styrofoam Cups - 6oz - pk/50	01-1119	\$6.39	\$12.78



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1	Stopcock/Vacuum Grease	593076	\$67.99	\$67.99
1	Wood Splints - pk/500	568862	\$5.09	\$5.09
ESSENTIAL CHEMICALS				
1	Acetic Acid Glacial ACS Grade 2.5L Safety Bottle	H577626	\$109.59	\$109.59
1	Acetone Lab Solution 500mL	580779	\$11.89	\$11.89
1	Aluminum Chloride Reag 100g	1495503	\$20.39	\$20.39
1	Aluminum Nitrate Reag 500g	577740	\$21.79	\$21.79
1	Ammonium Chloride, Reag Grade 500g	577797	\$11.89	\$11.89
3	Ammonium Hydroxide Reag Grade Sol. 6.0M 500mL	1462172	\$9.09	\$27.27
1	Boiling Chips	1495524	\$5.49	\$5.49
1	Bromine Water Kit	1462176	\$22.09	\$22.09
2	Buffer Solution pH10 500mL	578136	\$9.69	\$19.38
2	Buffer Solution pH4 500mL	578115	\$10.79	\$21.58
3	Calcium Chloride Anhydrous Lab Lumps 4-8 Mesh 500g	578220	\$6.79	\$20.37
5	Calcium Metal Reag 100g	H578184	\$19.89	\$99.45
1	Calcium Nitrate 4 Hydrate Lab Grade Granular 500g	578271	\$22.89	\$22.89
5	Candles, voltaic pk/10	030-0442	\$7.99	\$39.95
1	Charcoal, Lab Grade Activated 500g	578334	\$22.59	\$22.59
1	Citric Acid 500g	578406	\$16.49	\$16.49
1	Cooper II Carbonate 500g	578556	\$70.49	\$70.49
1	Cooper II Chloride Anhydrous Reag Powder 500g	578568	\$46.79	\$46.79
1	Cooper II Nitrate 2.5 Hydrate Reag Crys 100g	578577	\$12.59	\$12.59
1	Copper Sulfate Reag Grade Fine Crystals 500g	578604	\$17.49	\$17.49
1	Copper Metal Turnings 100g	578505	\$20.99	\$20.99
2	Ethyl Alcohol Reag solution 4L	H578709	\$51.99	\$103.98
9	Food Coloring set with 4 colors	576242	\$11.99	\$107.91
3	Grease Pencils Black pk/12	1125448	\$18.79	\$56.37
1	Hydrochloric Acid Sol. Conc 2.5L	H578928	\$83.69	\$83.69
2	Hydrogen peroxide 3% Sol 500mL	578982	\$14.49	\$28.98
1	Iron II Chloride Reag 100g	578790	\$14.09	\$14.09
1	Iron III Chloride Reag 100g	578751	\$11.39	\$11.39
1	Iron Filings 100g	1016745	\$3.69	\$3.69
1	Iron II Sulfate 7 Hydrate Lab 500g	1495549	\$8.79	\$8.79
1	Iron III Nitrate Reag 100g	578766	\$7.69	\$7.69
1	Lycopodium Lab powder 100g	579189	\$44.69	\$44.69
1	Magnesium Ribbon	H573162	\$5.99	\$5.99
1	Magnesium Sulfate 7 Hydrate Lab crys 2.5kg	579273	\$26.79	\$26.79
3	Manganese IV Dioxide Reag powder 100g	579300	\$11.89	\$35.67
5	Manganese Nitrate Reag Sol 50% 100mL	1495572	\$15.09	\$75.45
1	Methanol Reag Grade Safety Bottle 4L	H573804	\$29.09	\$29.09



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1	Mineral Oil 1L	1016751	\$26.59	\$26.59
1	Nickel Nitrate 6 Hydrate Reag crystal 100g	579510	\$19.49	\$19.49
1	Nitric Acid Reag acs 68-70% sol. 500mL	H579540	\$40.69	\$40.69
1	Oxalic Acid Dihydrate Lab Crystal 500g	579564	\$26.49	\$26.49
1	Phenol Red 5g	579630	\$14.29	\$14.29
1	Phenolphthalein, Lab Powder 100g	579612	\$14.09	\$14.09
3	Phenolphthalein, Lab Sol 1% 500mL	579624	\$9.79	\$29.37
5	Potassium Bromide Reag Crystal 100g	579684	\$9.39	\$46.95
1	Potassium Hydroxide Lab Sol 0.1M Aqueous Solution 1L	1495589	\$17.19	\$17.19
1	Potassium Iodate Reag Powder 500g	579804	\$184.09	\$184.09
5	Potassium Nitrite Lab grade Crystals 100g	579837	\$17.29	\$86.45
1	Potassium Permanganate 500g	580809	\$23.69	\$23.69
5	Potassium Thiocyanate Reag Crystals 100g	579906	\$11.99	\$59.95
1	Sand 5kg	1515186	\$26.09	\$26.09
1	Silver Nitrate 100g	579990	\$380.89	\$380.89
1	Sodium Metal 125g	H573822	\$101.09	\$101.09
1	Sodium Acetate Trihydrate 500g	580014	\$18.39	\$18.39
1	Sodium Bicarbonate, Lab Powder 2.5kg	568091	\$25.09	\$25.09
1	Sodium Bromide Reag Crystal 100g	1495599	\$8.79	\$8.79
1	Sodium Carbonate Anhydrous, Reg 2.5kg	1016759	\$27.19	\$27.19
3	Sodium Chloride Gran Reag 735g	576236	\$7.99	\$23.97
1	Sodium Fluoride Reag Powder 100g	1495604	\$12.89	\$12.89
3	Sodium Hydroxide Lab pellet 500g	580173	\$15.49	\$46.47
1	Sodium Metabisulfite 500g	1495607	\$15.39	\$15.39
1	Sodium Phosphate Tribasic 500g	580731	\$20.79	\$20.79
1	Sodium Phosphate Dibasic 500g	1495608	\$31.09	\$31.09
1	Sodium Phosphate Monobasic 500g	1515187	\$36.29	\$36.29
1	Sodium Sulfate 500g	580296	\$8.29	\$8.29
1	Sodium Thiosulfate 500g	1014905	\$14.09	\$14.09
1	Starch Soluble powder 500g	580359	\$9.89	\$9.89
1	Strontium Chloride 6 hydrate Reag granular 500g	580398	\$25.19	\$25.19
1	Sucrose 500g	568112	\$15.69	\$15.69
1	Sulfur Precipitated Powder Lab 500g	580452	\$12.39	\$12.39
1	Sulfuric Acid Reag ACS Sol 500mL	580464	\$28.29	\$28.29
2	Universal Indicator 250mL	580593	\$8.49	\$16.98
1	Zinc Tech Grad Mossy 500g	568127	\$28.59	\$28.59
1	Zinc Nitrate 6 Hydrate Lab crystalline flakes 500g	580695	\$35.89	\$35.89
	Total			\$48,234.15
Supplied by teacher				
1	Chemical Waste Containers			
1	Television or digital projector			
1	VGA Adapters for various digital devices			