

Basic Lab Equipment Needed for Any Lab

(NSTA recommends 24 students per lab)

We recommend that you print this guide and use it as a resource when shopping at Carolina.com.



Description	Specifications	Item Number	Package Qty	Qty Needed for 24 Students
Alconox®		842400	1	1
Apron		706245	10	3
Assorted Glass Rods		711307	12	1
Balances	Triple Beam	702020	1	8
Balances	Electronic	702012	1	2
Beaker Tongs		702980	1	8
Beaker with Handle	1,000 mL	721444	1	8
Beaker	50 mL	731003	12	2
Beaker	250 mL	731009	12	2
Beaker	400 mL	731010	6	4
Beaker	1,000 mL	731013	6	4
Broken Glass Collector		647163	1	1
Burner	NG	706706	1	8
Burner	LP	706704	1	8
Drying Rack		731895	1	2
Erlenmeyer Flask	100 mL	731028	12	2
Erlenmeyer Flask	250 mL	731029	12	2
Erlenmeyer Flask	500 mL	731030	6	2
Eye Wash Station		646787	1	2

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Basic Lab Equipment Needed for Any Lab (continued)

Description	Specifications	Item Number	Package Qty	Qty Needed for 24 Students
Filter Paper	9 cm	712801	100	1
Filter Paper	24 cm	712806	100	1
FlexCam® 2		595644	1	1
Flint		706632	15	2
Funnel	4"	734014	1	8
Funnel	6"	734016	1	8
Goggles	High School	646704A	10	3
Goggles	Middle School	646704B	20	2
Graduated Cylinder	10 mL	731015	6	4
Graduated Cylinder	25 mL	731017	6	4
Graduated Cylinder	100 mL	731021	2	12
Graduated Cylinder	500 mL	731023	2	2
Graduated Cylinder	1,000 mL	721794	1	3
Hand Lens		602276	1	24
Hot Plate/Stirrer	7 x 7"	701012	1	4
Kevlar® Glove		701642	1	2
Lab Cart		704785	1	1
Lighter		706630	1	8
Meter Stick with Metal Ends		702624	1	8
Nitrile Glove	Small	706335	100	1
Nitrile Glove	Medium	706336	100	1
Nitrile Glove	Large	706337	100	1
Nitrile Glove	X-Large	706338	100	1
Petri Dish	100 x 15 mm	741250	20	4
Pipet, Plastic	3 mL	736984	100	1
Pipet, Plastic	5 mL	736986	100	1
Ruler		702601	12	2
Safety Poster		572065	1	1
Spatula (microspoon)		702700	1	12
Sterilizing Goggles Cabinet		646846	1	1

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Basic Lab Equipment Needed for Any Lab (continued)

Description	Specifications	Item Number	Package Qty	Qty Needed for 24 Students
Stir Bar		701088	1	1
Stir Bar Retriever		701089	1	2
Stoppers	#2 Assorted	712488	1	1
Stopwatch		962106	1	8
Storage Bottle	Amber	716222	1	6
Storage Bottle	Clear	715761	12	1
Support Stand with Rings		707170	1	8
Test Tube	16 x 150 mm	731052	48	2
Test Tube	24 x 150 mm	731055	24	4
Test Tube Brush		706064	1	8
Test Tube Clamp		702900	1	12
Test Tube Rack		731968	1	8
Thermometer	Alcohol Immersion	745414	1	12
Utility Clamp		707378	1	8
Volumetric Flask	100 mL	721159	6	1
Volumetric Flask	500 mL	721162	6	1
Volumetric Flask	1,000 mL	721163	1	3
Wash Bottle	500 mL	716594	1	24
Weigh Boat		702332	500	1
Wire Gauze with Ceramic Center		706902	1	8

See next page for essential products for specific labs.

Essential Products for Chemistry - High School

Description	Item Number
Buffer, pH 4, 500 mL	849653
Buffer, pH 7, 500 mL	849683
Buffer, pH 10, 500 mL	849713
Carolina™ Chemistry Topic Bundles: Acids, Bases, and pH	840862
Carolina™ Chemistry Topic Bundles: Gas Laws	840860
Carolina ChemKits®: Balancing Chemical Equations	840656
Carolina ChemKits®: Chemical Bonding	840835
Carolina ChemKits®: Chemical Equilibrium & Le Chatelier's Principle	840709
Carolina ChemKits®: Introduction to Paper Chromatography	840642
Carolina ChemKits®: Introduction to Stoichiometry Value Kit	840718
Carolina ChemKits®: It's Not the Heat, It's Thermochemistry	840744
Carolina ChemKits®: Periodic Table Inquiry	840074
Carolina ChemKits®: Petri Dish Electrolysis	840830
Carolina ChemKits®: Radioactive Decay and Half-Life Simulations	840715
Carolina ChemKits®: Mystery Chemical Reactions	840660
Carolina ChemKits®: Types of Chemical Reactions	840740
Carolina™ Digital Spectrophotometer	653303
Carolina™ MolyMod® Molecular Model Set	840181
Economy Atomic Model Class Set	840243
Hydrion® Spectral pH Strips, pH 0-14, Pack of 100	894726
Inquiries in Science®: Determining Chemical Formulas Kit	251206
Interactive Atom Class Set	840233
Magnetic Water Classroom Pack	840141
MolyMod® Atomic Orbital Set	840188
MolyMod® Shapes of Molecules Set	840187
Periodic Table of the Elements Chart, Large	579620
Test Strip, Litmus Blue, Pack of 12	895390
Test Strip, Litmus Red, Pack of 12	895510

Continued on the next page.

Essential Products for Chemistry - High School (continued)

Description	Item Number
Chemicals:	
Acetic Acid, 1 M, Laboratory Grade, 1 L	841333
Acetone, Laboratory Grade, 500 mL	841481
Ammonium Hydroxide, 1 M, Laboratory Grade, 1 L	844033
Bogen Universal Indicator, Laboratory Grade, 100 mL	848263
Calcium Carbonate, Laboratory Grade, 500 g	851750
Calcium Chloride, Granular, Laboratory Grade, 500 g	851870
Copper Sulfate, Pentahydrate, Laboratory Grade, 500 g	856550
Corn Starch, Powder, Laboratory Grade, 500 g	892502
Dextrose, Monohydrate, Powder, Laboratory Grade, 500 g	857488
Ethanol, 70%, Laboratory Grade, 500 mL	861261
Food Coloring (4 assorted colors)	898030
Hydrochloric Acid, 1 M, Laboratory Grade, 500 mL	847841
Hydrochloric Acid, 6 M, Laboratory Grade, 500 mL	867868
Iodine-Potassium Iodide (IKI) Solution, Laboratory Grade, 500 mL	869055
Iron (III) Chloride Solution, 1 M, Laboratory Grade, 100 mL	862480
Iron Filings, 12 oz	758322
Magnesium, Ribbon, Laboratory Grade, 25 g	873120
Methanol, Reagent Grade, 500 mL	874950
Phenolphthalein, 1% in 95% Alcohol, Laboratory Grade, 500 mL	879995
Potassium Chloride, ACS Grade, 500 g	882910
Potassium Hydroxide, 1 M, Laboratory Grade, 500 mL	883497
Potassium Iodide, Laboratory Grade, 100 g	883789
2-Propanol, 70%, Laboratory Grade, 500 mL	884831
Sodium Acetate, Trihydrate, Reagent Grade, 500 g	888050
Sodium Bicarbonate (baking soda), Laboratory Grade, 2 kg	888361
Sodium Borate, Decahydrate, Laboratory Grade, 500 g	888560
Sodium Carbonate, Anhydrous, Reagent Grade, 500 g	888770
Sodium Chloride, ACS Grade, 500 g	888880
Sodium Hydroxide, 1 M, Laboratory Grade, 500 mL	889571

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Essential Products for Chemistry - High School (continued)

Description	Item Number
Chemicals (continued):	
Sodium Hydroxide, 3 M, Laboratory Grade, 500 mL	889585
Sodium Polyacrylate, Snow Polymer, Laboratory Grade, 100 g	891500
Sulfuric Acid, 1 M, Laboratory Grade, 1 L	893423
Sulfuric Acid, 3 M, Laboratory Grade, 500 mL	893431
Zinc, Sheet, 1/32" thick, Laboratory Grade, 6 x 12"	899346

See next page for essential products for more specific labs.

Essential Products for Chemistry - Middle School

Description	Item Number
Buffer, pH 10, 500 mL	849713
Buffer, pH 4, 500 mL	849653
Buffer, pH 7, 500 mL	849683
Carolina ChemKits®: Balancing Chemical Equations	840656
Carolina ChemKits®: Mystery Chemical Reactions	840660
Carolina ChemKits®: Periodic Table Inquiry	840074
Carolina ChemKits®: Properties of Matter	840921
Carolina ChemKits®: Slime Time	840808
Carolina Chemonstrations®: Elephant Toothpaste Kit	840315
Carolina Chemonstrations®: Like a Salt to a Flame Kit	840307
Carolina Chemonstrations®: Rainbow Indicators Kit	840333
Carolina Chemonstrations®: Reaction in a Bag Kit	840382
Carolina Chemonstrations®: Super Water-Absorbent Polymers Kit	840303
Carolina™ Element Set	840101
Carolina™ Molymod® Molecular Model Set	840181
Economy Atomic Model Class Set	840243
Hydrion® Spectral pH Strips, pH 0-14, Pack of 100	894726
Inquiries in Science®: Changing States of Matter Kit	251201
Interactive Atom Class Set	840233
Magnetic Water Classroom Pack	840141
Periodic Table of the Elements Chart, Large	579620
Red Cabbage Jiffy Juice Kit	840466
Study of Density Kit	840942
Test Strip, Litmus Blue, Pack of 12	895390
Test Strip, Litmus Red, Pack of 12	895510

See next page for essential products for more specific labs.

Essential Products for Physical Sciences - High School

Description	Item Number	Qty Needed for 24 Students Working in Groups of 3
Acrylic Lens Set, 38 mm	754900	1
Alligator Clip Leads, 12", Pack of 10	975542	2
Aluminum Weigh Boats, Pack of 100	702338	1
Ball and Ring Apparatus	753370	1
Balloons, Round, 9", Pack of 100	974032	1
Bicycle Wheel Gyroscope	752198	1
Carolina ChemKits®: Balancing Chemical Equations	840656	1
Carolina ChemKits®: Elements, Compounds, and Mixtures	840968	1
Carolina ChemKits®: Gas Laws	840289	1
Carolina ChemKits®: Gas Laws and Engineering Airbags	840825	1
Carolina ChemKits®: Introduction to Paper Chromatography	840642	1
Carolina ChemKits®: Mystery Chemical Reactions	840660	1
Carolina ChemKits®: Periodic Table Inquiry	840074	1
Carolina ChemKits®: Petri Dish Electrolysis	840830	1
Carolina ChemKits®: Radioactive Decay and Half-Life Simulations	840715	1
Carolina ChemKits®: Types of Chemical Reactions	840740	1
Carolina ChemKits®: Vitamin C in Fruit Juices (by redox titration)	840994	1
Carolina STEM Challenge®: Egg Drop Kit	750046	1
Carolina STEM Challenge®: Mousetrap Cars Kit	750042	1
Carolina STEM Challenge®: Paint Stirrer Catapult Kit	750028	1
Carolina STEM Challenge®: Roller Coasters Kit	750036	1
Carolina STEM Challenge®: Structures Kit	750044	1
Carolina™ Introduction to Electricity Kit	755961	1
Carolina™ Introduction to Heat and Temperature Kit	753545	1
Carolina™ Introduction to Magnetism Kit	758231	1
Carolina™ Introduction to Simple Machines Kit	751131	1
Carolina™ Introduction to Waves Kit	754086	1
Carolina™ MolyMod® Molecular Model Set	840181	1

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Essential Products for Physical Sciences - High School (continued)

Description	Item Number	Qty Needed for 24 Students Working in Groups of 3
Carolina™ Stopwatch	962106	8
Chemical Spill First Response Kit	647005	1
Clamp Pulley	752023	8
Cloud Chamber	759240	8
Collapsible Can	752900	1
Compass, Pencil, School	644375	24
Constant Speed Vehicle	751484	8
Crucible, High Form 15 mL	742501	8
DC Motor	755990	8
Deluxe Density Cube Set	752476	1
Economy Atomic Model Class Set	840243	1
Economy Digital Timer and Photogate	751831	8
Fan Cart	751497	1
Fire Blanket	646919	1
Fire Syringe	753600	1
Flame Test Kit	840936	1
Friction Apparatus	751842	8
Gas Law Apparatus	840412	8
Glass Stir Rods, 10 x 300 mm, Pack of 12	711311	2
Hall's Carriage	751480	8
Heavy-Duty Fire Extinguisher (2.5 lb)	646945	1
Inquiries in Science®: Determining Chemical Formulas Kit	251206	1
Inquiries in Science®: Discovering Acids and Bases Kit	251214	1
Inquiries in Science®: Reconstructing Atomic Theory Kit	251202	1
Inquiries in Science®: Simulating Nuclear Transformations Kit	251216	1
Interactive Atom Set	840228	1
Kimwipes®, 15 x 17", Box of 140	633951	2
Lead with Alligator Clips	756498	8

See next page for essential products for more specific labs.

Essential Products for Physical Sciences - High School (continued)

Description	Item Number	Qty Needed for 24 Students Working in Groups of 3
Meter Stick	702620	24
Mortar and Pestle, Porcelain, 320 mL	742894	8
Narrow Coiled Spring	754098	1
Ohaus® Pull-Spring Scales, 1,000 g x 25 g/10 N x 0.25 N	702059	8
Ohaus® Pull-Spring Scales, 100 g x 1 g	702050	8
Ohaus® Pull-Spring Scales, 2,000 g x 50 g/20 N x 0.5 N	702061	8
Ohaus® Pull-Spring Scales, 200 g x 2 g	702051	8
Ohaus® Pull-Spring Scales, 250 g x 10 g/2.5 N x 0.1 N	702056	8
Ohaus® Pull-Spring Scales, 5,000 g x 100 g/50 N x 1 N	702062	8
Ohaus® Pull-Spring Scales, 500 g x 20 g/5 N x 0.2 N	702058	8
Ohaus® Pull-Spring Scales, 500 g x 5 g	702052	8
Oily Waste Can	647173	1
OSHA-Compliant First Aid Kit	646512	1
Overflow Can	752451	8
Periodic Table of the Elements Chart, Large	579620	2
Pneumatics and Hydraulics Kit	753103	1
Protractor, 6", Pack of 12	917440B	3
Resonance Apparatus	754310	8
Rotating Platform	752215	1
Ruler, Metric and US, Plastic, Pack of 12	702611	2
Ruler, Metric, Pack of 10	702613	3
Slotted Mass Set with Weight Hanger	751442	8
Spillnot	752219	1
String, Super Twine, 200-ft Roll	973423	3
Tape Measure, Metric, Pack of 10	973006	1
Thermometer Rack	745485	1
Unbreakable Mirror, 5 x 7"	754993	8
Vernier® Caliper	702647	8
Wave Demonstration Set	754100	1

Essential Products for Physical Sciences - High School (continued)

Description	Item Number	Qty Needed for 24 Students Working in Groups of 3
Chemicals:		
Acetic Acid, 1 M, Laboratory Grade, 1 L	841333	1
Acetone, Laboratory Grade, 500 mL	841481	1
Ammonium Hydroxide, 1 M, Laboratory Grade, 1 L	844033	1
Bogen Universal Indicator	848263	1
Buffer, pH 4	849655	1
Buffer, pH 7	849685	1
Buffer, pH 10	849714	1
Calcium Carbonate, Laboratory Grade, 500 g	851750	1
Calcium Chloride, Granular, Laboratory Grade, 500 g	851870	1
Copper Electrodes, Pack of 12	757488A	1
Copper Sulfate Pentahydrate, Laboratory Grade, 500 g	856550	1
Corn Starch, Powder, Laboratory Grade, 500 g	892502	1
Dextrose, Monohydrate, Powder, Laboratory Grade, 500 g	857488	1
Ethanol, 70%, Laboratory Grade, 500 mL	861261	1
Food Coloring, Assorted Colors, Pack of 4	972159	1
Hydrochloric Acid, 1 M, Laboratory Grade, 500 mL	847841	1
Hydrochloric Acid, 6 M, Laboratory Grade, 500 mL	867868	1
Iodine-Potassium Iodide (IKI) Solution, Laboratory Grade, 500 mL	869055	1
Iron (III) Chloride Solution, 1 M, Laboratory Grade, 100 mL	862480	1
Iron Filings, 12 oz	758322	1
Lemon Juice, 8 oz	872320	1
Litmus Blue/Red Test Strips, Pack of 100	895511	1
Magnesium Ribbon, Laboratory Grade, 25 g	873120	1
Methanol, Reagent Grade, 500 mL	874950	1
pH Test Strips, pH 1-12, 5-ft Roll	894980	1
Phenolphthalein, 1% in 95% Alcohol, Laboratory Grade, 500 mL	879995	1
Potassium Chloride, ACS Grade, 500 g	882910	1

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Essential Products for Physical Sciences - High School (continued)

Description	Item Number	Qty Needed for 24 Students Working in Groups of 3
Chemicals (continued):		
Potassium Hydroxide, 1 M, Laboratory Grade, 500 mL	883497	1
Potassium Iodide, Laboratory Grade, 100 g	883789	1
2-Propanol, 70%, Laboratory Grade, 500 mL	884831	1
Sodium Acetate Trihydrate, Crystal, Reagent Grade, 500 g	888050	1
Sodium Bicarbonate (baking soda), Laboratory Grade, 2 kg	888361	1
Sodium Borate Decahydrate, Laboratory Grade, 500 g	888560	1
Sodium Carbonate, Anhydrous, Laboratory Grade, 500 g	888770	1
Sodium Chloride, ACS Grade, 500 g	888880	1
Sodium Hydroxide, 1 M, Laboratory Grade, 500 mL	889571	1
Sodium Hydroxide, 3 M, Laboratory Grade, 500 mL	889585	1
Sodium Polyacrylate, Snow Polymer, Laboratory Grade, 100 g	891500	1
Sulfuric Acid, 1 M, Laboratory Grade, 1 L	893423	1
Sulfuric Acid, 3 M, Laboratory Grade, 500 mL	893431	1
Zinc, Sheet, 1/32" thick, Laboratory Grade, 6 x 12"	899346	1

See next page for essential products for more specific labs.

Essential Products for Physics - High School

Description	Item Number	Qty Needed for 24 Students Working in Groups of 3
Absolute Zero Demonstrator	753690	1
Acrylic Prism Set	754930	8
Air Track	751820	2
Alnico Magnet Set	758206	8
Ballistic Pendulum Apparatus	751694	1
9-V Battery, Rechargeable NiMH	756318R	8
AA Battery, Rechargeable NiMH, Pack of 4	756316R	8
AAA Battery, Rechargeable NiMH, Pack of 4	756315R	8
C Battery, Rechargeable NiMH, Pack of 2	756314R	8
D Battery, Rechargeable NiMH, Pack of 2	756317R	8
Battery Charger, NiMH (for AA and AAA only)	756320	1
Carolina™ Introduction to Gravity Kit	751580	1
Centripetal Force Chamber	752209	1
Class II Red Laser Pointer	755432	8
Cloud Chamber	759240	8
Collision in 2-D Apparatus	751512	8
DC Motor	755990	8
Diffraction Grating, Pack of 12	755230	1
Dynamic Trolley Pair	751493	1
Elasticity of Gases Apparatus	753100	1
Electrostatic Demonstration Kit	755820	1
Energy Transfer Balls	753609	1
Exploring Specific Heat Capacity and Thermal Conductivity Kit	753485	1
Flying Plane	752224	8
Happy and Sad Balls	751640	1
Hooke's Law Apparatus	751950	8
Inclined Plane Set (with pulley)	751452	8
Laser Refraction Tank	754621	1
Leyden Jar	756237	8

Continued on the next page.

Essential Products for Physics - High School (continued)

Description	Item Number	Qty Needed for 24 Students Working in Groups of 3
Light Box and Optical Set	755160	6
Light Meter	755166	1
Linear Polarized Film Slides, Pack of 16	755249	1
Meterstick Optical Bench Set with Meterstick	755073	8
NeuLog™ Physics Bundle	369580	8
NeuLog™ Temperature Logger Sensor	369632	8
NeuLog™ USB Bridge Module	369733	8
NeuLog™ WiFi™ Connection Bundle	369510	8
Precision Linear Expansion Apparatus	753576	8
Resonance Apparatus	754310	8
Ring and Disc Set	751898	1
Safe Spectrum System 8-Tube Power Supply	755502	1
Safe Spectrum System Spectrum Tube, Air	755582	1
Safe Spectrum System Spectrum Tube, Argon	755560	1
Safe Spectrum System Spectrum Tube, Carbon Dioxide	755584	1
Safe Spectrum System Spectrum Tube, Helium	755566	1
Safe Spectrum System Spectrum Tube, Hydrogen	755568	1
Safe Spectrum System Spectrum Tube, Neon	755574	1
Safe Spectrum System Spectrum Tube, Nitrogen	755576	1
Safe Spectrum System Spectrum Tube, Water Vapor	755580	1
Second Law of Motion Demonstrator	751520	1
Spectroscope, Pack of 24	755310	1
Spectrum Analysis Chart	579760	1
Spillnot	752219	1
Sympathetic Resonator Set	754265	1
Tuning Fork Set	754215	1
Tuning Fork, 512 Hz	754208	8
Van de Graaff Generator, 350 kV	756214	1
Van de Graaff Replacement Belt, 350 kV	756215	1

Continued on the next page.

Essential Products for Physics - High School (continued)

Description	Item Number	Qty Needed for 24 Students Working in Groups of 3
Visual Scientifics Starter Set	753175	8
Whiteboard Optics Set (without board)	755196	1
Wimshurst Machine	756201	1