Carolina Investigations® for Use with AP® Kits

Kits that support the AP® curriculum and your classroom



Looking for lab solutions that align with the College Board's AP® course requirements? In this guide, we'll help you identify the kits you'll need to teach the material covered on the AP Biology, AP Chemistry, and AP Environmental Science exams. Learn more at Carolina.com.



Carolina Investigations® for Use with AP® Biology

Our exclusive approach to laboratory investigations that support the AP® Biology curriculum



We build our kits from the ground up—creating new inquiry-based labs or adding inquiry twists to traditional investigations—so they align with the AP® Biology framework and bring inquiry into your classroom. Like our original kits for AP® Biology, we made sure the new kits still engage students and encourage success. These kits aren't just meant to address the curriulum; they are also designed to give your students an unmatched opportunity to use the Science Practices in your classroom.

	Catalog				Enduring
	No.	Kit Title	Unit	Topic	Understanding
<u></u>	747650	Osmosis and Diffusion	2	2.3, 2.8	ENE-1, ENE-2
	747820	Evolving Enzymes	3	3.3, 3.7	ENE-1, SYI-3
	747840	Plant Pigments and Photosynthesis	3	3.5	ENE-1
	747830	Photosynthesis Using Leaf Disk Assay	3	3.5	ENE-1
<u>^2</u>	747760	Photosynthesis and Cellular Respiration with Algae Beads	3	3.5, 3.6	ENE-1
<u>^</u> 1	747600	Cell Respiration	3	3.6	ENE-1
	747740	Cell Communication	4	4.1, 4.3	IST-3
	747720*	Exploring Mendelian Genetics	5	5.3	IST-1
	747770	Electrophoresis and Simulated Genetic Screen	6	6.8	IST-1
	747780	Transformation	6	6.8	IST-1
<u>^</u> 1	747520	Natural Selection	7	7.2, 7.3	EV0-1
<u></u> ^3	747510	Population Genetics and Evolution	7	7.4, 7.5	EV0-1
	747530	Origin of Life	7	7.13	SYI-3
	747750	Exploring Animal Behavior with Isopods	8	8.1	ENE-3, IST-5
<u></u> 1	747610	Transpiration	8	8.1	ENE-3
	181079	Primary Consumer Energy Flow	8	8.2	ENE-1
<u></u> 1	747810	Species Interaction	8	8.2	ENE-1
	747805	Qualitative Analysis and Statistics			
	747620	Physiology of the Circulatory System			





Carolina Investigations® for Use with AP® Environmental Science

Our exclusive approach to laboratory investigations that support the AP® Environmental Science curriculum



Encourage your students to make real-world connections with Carolina Investigations® kits for use with AP® Environmental Science. As students use these kits, they are encouraged to engage in inquiry-based thinking while using Science Practices in the classroom. Set your students up for success on the APES exam with our effective lab solution.

	Catalog No.	Kit Title	Unit	Topic	Enduring Understanding
	180800	Investigating Natural Waters	1, 4, 8	1.3, 4.6, 8.2	ERT-1, ERT-4, STB-3
<u>^</u> 1	180806	Biogeochemical Cycles	1	1.4, 1.5, 1.6	ERT-1
<u></u>	180809	Primary Productivity and Energy Flow	1	1.8, 1.10	ENG-1
	180803	Primary Consumer Energy Flow	1	1.9, 1.10	ENG-1
	180815	Exploring Biodiversity	2	2.1	ERT-2
<u></u> \$^3	180818	Population Growth with Lemna minor	3	3.4, 3.5	ERT-3
	180860	Exploring Human Population Dynamics	3	3.3, 3.6, 3.8, 3.9	ERT-3, EIN-1
<u></u>	180821	Soil Formation and Properties	4	4.2, 4.3	ERT-4
<u></u>	180812	Soil Productivity	4	4.3	ERT-4
	180824	Coriolis Effect and Atmospheric Circulation	4	4.4, 4.5, 4.7	ERT-4, ENG-2
<u></u> \$^3	180827	Agriculture and Feeding a Growing Population	5	5.11, 5.12, 5.15	EIN-2, STB-1
	180863	Heat Transfer and Geothermal Systems	6	6.10	ENG-3
	180833	Indoor Air Pollution	7	7.5	STB-2
	180839	Wet Scrubbers and Air Pollution	7	7.6	STB-2
<u></u> \$^3	180836	Acid Deposition	7	7.7	STB-2
<u>^</u> 1	180842	Cultural Eutrophication and Biodegradable Waste	8	8.5	STB-3
<u></u> \$^3	180845	Wastewater Treatment	8	8.11	STB-3
	180854	Impacts on Freshwater Ecosystems: Salt Toxicity	8	8.2, 8.12, 8.13	EIN-3, STB-3
<u></u> \$^3	180848	Ocean Acidification	9	9.7	STB-4
	180851	Loss of Biodiversity	9	9.1	EIN-4





Carolina Investigations® for Use with AP® Chemistry

Our exclusive approach to laboratory investigations that support the AP® Chemistry curriculum



Help your students succeed on the AP® Chemistry exam with Carolina Investigations® kits for use with AP® Chemistry. With updated materials, our lab investigations encourage students to use scientific inquiry while building laboratory skills. Each kit has correlations for your AP® Chemistry course and are designed to support your teaching efforts and meet the goals of the AP® Chemistry curriculum.

Catalog No.	Kit Title	Unit	Topic	Enduring Understanding
840578	Stoichiometry of Chemical Reactions	1, 3, 4	3.7, 4.5	SPQ-3, SAP-4
840576	Types of Chemical Bonds	2, 3	2.1, 2.2, 2.3. 2.4, 3.1, 3.2	SAP-3, SAP-5, SAP-6
840574	Principles of Chromatography	2, 3	3.9	SPQ-3
840586	Investigating Chemical and Physical Changes	2, 3, 4	2.1, 3.1, 4.4	TRA-1
840606	Spectrophotometric Analysis of Color	3	3.11, 3.12, 3.13	SAP-8
840570	Gravimetric Analysis	4	4.3, 4.5	TRA-1, SPQ-4
840572	Using a Titration to Determine the Amount of Calcium in Milk	4	4.5, 4.6, 4.2	SPQ-4, TRA-1, SAP-
840584	Microscale Titration: How Much Vitamin C is in Fruit Juices?	4	4.6, 4.7, 4.9	SPQ-4, TRA-2
840596	Concentration of Acetic Acid in Household Vinegar	4, 8	4.6, 4.8, 8.2, 8.3, 8.5, 8.7	SPQ-4, TRA-2, TRA- SAP-9, SAP-10
840588	Investigating Rate Laws with Malachite Green	5	5.1, 5.2	TRA-3
840602	Analyzing Reaction Rates with Calcium Carbonate	5	5.1, 5.2, 5.3	TRA-3, TRA-4
840590	Factors Affecting Reaction Rates	5	5.1, 5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.11	TRA-3, TRA-4, TRA- ENE-1
840592	Investigating Heat Transfer and Enthalpy Using Calorimetry	6	6.1, 6.2. 6.3, 6.4, 6.6, 6.8	ENE-2, ENE-3
840594	Le Châtelier's Principle and Equilibrium Shifts	7	7.1, 7.2, 7.3, 7.4, 7.5, 7.7, 7.8, 7.9, 7.10, 7.11, 7.12	TRA-6, TRA-7, TRA- SPQ-5
840600	Evaluating the Extent of Buffering Capacity of Various Household Products	8	8.7, 8.8, 8.9, 8.10	SAP-10
840598	Preparation of a Buffered Solution	8	8.7, 8.8, 8.9, 8.10	SAP-10
840604	Electrochemical Cells	9	9.5, 9.7, 9.8, 9.9, 9.10	ENE-6

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