

Lab-Aids Correlations for

New York City PK-8 Science Scope and Sequence 2018¹

Middle Level, Grades 6-8

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This document is intended to show the alignment of our third (NGSS) edition SEPUP programs with the New York City PK-8 Scope and Sequence 2018.

ABOUT OUR PROGRAMS

All LAB-AIDS core science programs are research-based and emphasize direct experience and an inquiry approach to teaching and learning science. Since 1963, our programs have provided robust support for literacy skill development and have featured assessment approaches and strategies to document what all students should know and be able to do as a result of program use. Our programs feature extensive use of instructional technology and include comprehensive teacher professional development support. For more information, please visit www.lab-aids.com and navigate to the program of interest.

ABOUT SEPUP

Materials from the Science Education for Public Understanding Program (SEPUP) are developed at the Lawrence Hall of Science, located since 1987 at the University of California, Berkeley, and are distributed nationally by Lab-Aids. SEPUP materials were developed with the support of grants from the National Science Foundation. The third edition (3e) program materials feature 2018-19 copyright and publication dates and fully support the instructional shifts and three-dimensional learning targets identified in the middle level performance expectations (PEs) of the Next Generation Science Standards². The middle school program is comprised of 17 units from the life, earth, and physical sciences and were field tested in selected school systems across the country prior to commercial publication. For more information, please visit www.sepuplhs.org.

Grade 6	Grade 7	Grade 8
Fields and Interactions (available Jan	Chemistry of Materials	Force and Motion (available Aug
2019)		2018)
Energy	Chemical Reactions	Solar System and Beyond
Ecology	From Cells to Organisms	Reproduction
Land, Water, and Human	Body Systems	Evolution
Interactions		
Weather and Climate	Earth's Resources	Waves
	Geological Processes	

RECOMMENDED SEPUP UNIT SCOPE AND SEQUENCE FOR NEW YORK CITY

¹ https://www.weteachnyc.org/media2016/filer_public/c8/f8/c8f8c331-596f-4705-b445-

b35dc3e2adb3/science_scope_and_sequence.pdf

² https://www.nextgenscience.org/

UNIT ALIGNMENT TO NYC PE 6-8 GRADE LEVEL BUNDLES

These grade level documents were prepared with information on the Learning Pathway documents designed by SEPUP to guide their work on the NGSS redesign project. The Pathways show a single PE, and the treatment of the elements – the DCI, SEP, and CCC – in activities within the units to show how the PE standard is addressed. For more information, visit <u>http://www.sepuplhs.org/pathways.html</u>.

NYC		Performance		Suggested SEPUP
Unit	Unit Title	Expectations ³	Where found in SEPUP 3e ⁴	Units
1	1 Electricity and Magnetism	MS-PS2-3	Fields and Interactions TBA	Fields and Interactions
		MS-PS2-5	Fields and Interactions TBA	
		MS-PS3-6	Fields and Interactions TBA	
2	2 Engineering	MS-PS1-6 [†]	Chemical Reactions	Energy
	and Energy	MS-PS3-3	Energy 1, 7, 8, 9, 10, 11, 12*	
	Transformation	MS-PS3-4	Energy 1, 4, 6, 7, 8*	
3	3 Ecosystems	MS-LS2-1	Ecology 1, 2, 5, 6, 7, 8, 9*	Ecology
		MS-LS2-2	Ecology 2, 6, 7, 8, 10*	
		MS-LS2-3	Ecology 7, 8, 11, 12*	
		MS-LS2-4	Ecology 1, 2, 3, 4, 5, 6, 12, 13, 14*	
		MS-LS2-5	Ecology 2, 3, 4, 5, 13, 14, 15*	
4	Investigating	MS-PS1-7	Chemistry of Materials ⁵	Land, Water, and
	Weather and	MS-ESS2-4	Land, Water, and Human	Human
	Climate		Interactions 2, 5, 7, 8, 9*	Interactions
		$MS-ESS2-5^{\dagger}$	Weather and Climate 2, 3, 4, 7, 9,	
			10, 11, 12, 13*	
		$MS-ESS2-6^{\dagger}$	Weather and Climate 2, 3, 4, 5, 6, 7,	
			8, 9, 10, 11, 13, 14*	
5	Human Impact	$MS-ESS3-2^{\dagger}$	Geological Processes 1, 3, 4, 6, 7, 8,	Weather and
	on Earth's		11, 18*	Climate
	Climate	MS-ESS3-3 [†]	Land, Water, and Human	
			Interactions 2, 3, 4, 5, 6, 9, 13, 14,	
			15, 16*	
		MS-ESS3-5	Weather and Climate 1, 14, 15, 16*	

Grade 6

^{3 †}Indicates standard covered in the Grade 7 SEPUP Scope and Sequence

⁴ * Indicates opportunity to assess the PE

⁵ This New York standard is covered in the Grade 7 SEPUP Scope and Sequence.

Grade 7

NYC Unit	Unit Title	Performance Expectations ⁶	Where found in SEPUP 3e	Suggested SEPUP Units
	Structure and Properties of	MS-PS1-1	Chemistry of Materials 2, 6, 7, 11, 12*	Chemistry of Materials
	Matter	MS-PS1-4	Chemistry of Materials 7, 9, 10*	
		MS-PS1-7	Chemistry of Materials ⁷	
		MS-PS1-8	Chemistry of Materials ⁷	
2	Changing	MS-PS1-2	Chemical Reactions 1, 2, 3, 4, 5*	Chemical Reactions
	Properties of Matter	MS-PS1-5	Chemical Reactions 1, 2, 3, 4, 5, 6, 7*	
		MS-PS1-3	Chemistry of Materials 1, 2, 3, 4, 5, 11, 12, 13*	
		MS-LS1-6	From Cells to Organisms 12, 13*	
		MS-LS1-7	From Cells to Organisms 5, 11*	
			Body Systems 5	
3	Structures of	MS-LS1-1	From Cells to Organisms 1, 2, 3, 4,	From Cells to
	Life		5, 6, 7, 8, 9*	Organisms
		MS-LS1-2	From Cells to Organisms 4, 6, 7, 8*	
		MS-LS1-3	From Cells to Organisms 10, 14, 15	Body Systems
			Body Systems 1, 2, 3, 4, 9, 10, 11, 12*	
		MS-LS1-8	Body Systems 6, 7, 8*	
4	Geology	MS-ESS1-4	Earth's Resources 9, 10, 11, 12*	Earth's Resources
		MS-ESS2-1	Geological Processes 2, 5, 8, 9, 10, 11, 13, 14, 15*	
		MS-ESS2-2	Geological Processes 2, 3, 4, 6, 7, 9, 10, 11, 12, 13*	
		MS-ESS2-3	Geological Processes 10, 11, 12, 13, 14*	
5	Minimizing	MS-ESS3-1	Earth's Resources 1, 2, 3, 5, 7*, 14*	Geological
	Human	MS-ESS3-4	Earth's Resources 4, 6, 13*	Processes
	Impact Through	MS-ESS3-2	Geological Processes 1, 3, 4, 6, 7, 8, 11, 18*	
	Engineering	MS-ESS3-3 [‡]	Land, Water, and Human	
	Design		Interactions 2, 3, 4, 5, 6, 9, 13, 14, 15, 16*	

⁶ ‡ Indicates standard covered in the Grade 6 SEPUP Scope and Sequence ⁷ This New York standard is covered in the *Chemistry of Materials* unit.

Grade 8

NYC		Performance		Suggested SEPUP
Unit	Unit Title	Expectations	Where found in SEPUP 3e	Units
• • •	Energy, Forces,	MS-PS2-1	Force and Motion TBA	Force and Motion
	and Motion	MS-PS2-2	Force and Motion TBA	
		MS-PS3-1	Force and Motion TBA	
		MS-PS2-4 [‡]	Fields and Interactions TBA	
		MS-PS3-2	Fields and Interactions TBA	
		MS-PS3-5 [‡]	Energy 2, 3, 4, 5, 6	
2	Earth's Place in	MS-PS2-4 [‡]	Fields and Interactions TBA	Solar System and
the Universe	the Universe	MS-ESS1-1	Solar System and Beyond 2, 3, 4, 5*, 6, 7, 8, 9*	Beyond
		MS-ESS1-2	Solar System and Beyond 10, 11, 12, 14, 15, 16*	
	MS-ESS1-3	Solar System and Beyond 1, 10, 11, 12, 13*		
3	Growth,	MS-LS1-4	Reproduction 9, 10*, 11*	Reproduction
Development, and Reproduction of Organisms	•	MS-LS1-5	Reproduction 1, 7*	
		MS-LS3-1	Reproduction 1, 3, 7, 8, 12, 13*	
	MS-LS3-2	Reproduction 1, 2, 3, 4, 5, 6, 7, 8, 9*		
4	Evolution,	MS-LS4-1	Evolution 7, 8, 9, 10, 11*	Evolution
	Natural Selection, and	MS-LS4-2	Evolution 7, 8, 9, 10, 11, 12*	
		MS-LS4-3	Evolution 12, 13*	
	Adaptations	MS-LS4-4	Evolution 1, 2, 3, 4*	
		MS-LS4-6	Evolution 1, 2, 3, 4, 5, 6*	
	Evolution of Technology in	MS-PS4-1	Waves 1, 2, 3, 4, 7*	Waves
		MS-PS4-2	Waves 3, 8, 9, 10, 11, 12, 13*	
	Science	MS-PS4-3	Waves 5, 6*]
		MS-LS4-5	Evolution 14, 15, 16*	