

NSES Elements / Key Climate Concepts		THIN ATMOSPHERE SUSTAINS LIFE					SUN'S ENERGY DRIVES PROCESSES					ATMOSPHERIC CIRCULATION					WEATHER AND CLIMATE				SYSTEM INTERACTIONS					NATURE OF SCIENCE					INTERCONNECTED				
		1.1	1.2	1.3	1.4	1.5	2.1	2.2	2.3	2.4	2.5	3.1	3.2	3.3	3.4	3.5	4.1	4.2	4.3	4.4	5.1	5.2	5.3	5.4	6.1	6.2	6.3	6.4	6.5	7.1	7.2	7.3	7.4	7.5	
UNIFYING CONCEPTS AND PROCESSES	1. Systems, Order and Organization																																		
	2. Evidence, Models, and Explanation																																		
	3. Change, Constancy, and Measurement																																		
	4. Evolution and Equilibrium																																		
	5. Form and Function																																		
EARTH AND SPACE	6. Properties of Earth Materials																																		
	7. Objects in the Sky																																		
	8. Changes in Earth and Sky																																		
	9. Structure of the Earth System																																		
	10. Earth's History																																		
	11. Earth in the Solar System																																		
	12. Energy in the Earth System																																		
	13. Origin and Evolution of the Earth System																																		
	14. Origin and Evolution of the Universe																																		
	15. Geochemical Cycles																																		
LIFE SCIENCE	16. Characteristics of Organisms																																		
	17. Life Cycles of Organisms																																		
	18. Organisms and Environments																																		
	19. Structure and Function in Living Systems																																		
	20. Reproduction and Heredity																																		
	21. Regulation and Behavior																																		
	22. Populations and Ecosystems																																		
	23. Diversity and Adaptations of Organisms																																		
	24. Interdependence of Organisms																																		
	25. Behavior of Organisms																																		
	26. Matter, Energy and Organization in Living Systems																																		
	27. Biological Evolution																																		
	28. Molecular Basis of Heredity																																		
	29. The Cell																																		
PHYSICAL SCIENCE	30. Properties of Objects and Materials																																		
	31. Position and Motion of Objects																																		
	32. Light, Heat, Electricity and Magnetism																																		
	33. Properties and Changes of Properties in Matter																																		
	34. Motions and Forces																																		
	35. Transfer of Energy																																		
	36. Structure of Atoms																																		
	37. Structure and Properties of Matter																																		
	38. Chemical Reactions																																		
	39. Motions and Forces																																		
	40. Conservation in Energy and Increase in Disorder																																		
	41. Interactions of Energy and Matter																																		
HISTORY AND NATURE OF SCIENCE	42. Science as Human Endeavor K-12																																		
	43. Nature of Scientific Knowledge 5-12																																		
	44. History of Science																																		
	45. Historical Perspectives																																		
	46. Personal Health K-8																																		
PERSONAL AND SOCIAL PERSPECTIVES	47. Characteristics and Changes in Populations																																		
	48. Types of Resources																																		
	49. Changes in Environments																																		
	50. Science and Technology in Local Challenges																																		
	51. Populations, Resources and Environments																																		
	52. Natural Hazards																																		
	53. Risks and Benefits																																		
	54. Science and Technology in Society																																		
	55. Personal and Community Health																																		
	56. Population Growth																																		
	57. Natural Resources																																		
	58. Environmental Quality																																		
	59. Natural and Human-Induced Hazards																																		
	60. Science and Technology in Local, National & Global Challenges																																		
SCIENCE AND TECHNOLOGY	61. Abilities to Dist Between Natural Objects & Objects																																		
	62. Abilities of Technological Design K-12																																		
	63. Understanding About Science & Technology K-12																																		
	64. Abilities of Technological Design K-12																																		
	65. Understanding About Science & Technology K-12																																		
	66. Abilities of Technological Design K-12																																		
SCIENCE AS INQUIRY	67. Understanding About Science & Technology K-12																																		
	68. Abilities Necessary to Do Scientific Inquiry K-12																																		
	69. Understanding About Scientific Inquiry K-12																																		
Alignment with NSES with AAAS Project 2061 Benchmarks can be done at Resources for science literacy: Professional development http://www.project2061.org/publications/rsi/online/COMPARE/NRC/BSL2NRC/B2NTOC.HTM																																			

Grades K-4  
Grades 5 - 8  
Grades 9-12