

NEXT GENERATION SCIENCE STANDARDS*

Grades K-2	Activity	Activity		
		1	2	3
K-LS1-1 From Molecules to Organisms: Structures and Processes	Use observations to describe patterns of what plants and animals (including humans) need to survive.	X		
K-ESS2-1 Earth's Systems	Use and share observations of local weather conditions to describe patterns over time.	X		
K-ESS3-1 Earth & Human Activity	Use a model to represent the relationship between the needs of different plants and animals and the places they live.	X		
2-PS1-1 Matter & Its Interactions	Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties.	X		
2-LS4-1 Biological Evolution: Unity & Diversity	Make observations of plants and animals to compare the diversity of life in different habitats.	X		

Grades 3-5	Activity	Activity		
		1	2	3
3-LS3-2 Heredity: Inheritance & Variation of Traits	Use evidence to support the explanation that traits can be influenced by the environment.	X		
3-LS4-3 Biological Evolution: Unity & Diversity	Construct an argument with evidence that in a particular habitat some organisms can survive well, some survive less well, and some cannot survive at all.	X		
3-ESS2-1 Earth's Systems	Represent data in tables and graphical displays to describe typical weather conditions expected during a particular season.		X	
3-ESS2-2 Earth's Systems	Obtain and combine information to describe climates in different regions of the world.	X	X	
4-ESS2-2 Earth's Systems	Analyze and interpret data from maps to describe patterns of Earth's features.		X	
5-ESS3-1 Earth & Human Activity	Obtain and combine information about ways individual communities use science ideas to protect the Earth's resources and environment.	X		

Grades 6-8	Activity	Activity			
		1	2	3	4
MS-ESS3-3 Earth & Human Activity	Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment.				X
MS-ESS3-5 Earth & Human Activity	Ask questions to clarify evidence of the factors that have caused the rise in global temperatures over the past century.				X
MS-LS2-4 Ecosystems: Interactions, Energy & Dynamics	Construct an argument supported by empirical evidence that changes to physical or biological components of an ecosystem affect populations.	X			
MS-LS2-5 Ecosystems: Interactions, Energy & Dynamics	Evaluate competing design solutions for maintaining biodiversity and ecosystem services.				X
MS-ESS2-4 Earth's Systems	Develop a model to describe the cycling of water through Earth's systems driven by energy from the sun and the force of gravity.	X	X		
MS-ESS2-5 Weather & Climate	Collect data to provide evidence for how the motions and complex interactions of air masses result in changes in weather conditions.	X	X		
MS-ESS2-6 Weather & Climate	Develop and use a model to describe how unequal heating and rotation of the Earth cause patterns of atmospheric and oceanic circulation that determine regional climates.	X			

COMMON CORE STATE STANDARDS – MATH**

Grades K-2	Activity	Activity		
		1	2	3
Grade K, Geometry CCSS.MATH.CONTENT.K.G.B.4	Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g., number of sides and vertices/"corners") and other attributes (e.g., having sides of equal length).	X		
Grade 1, Geometry CCSS.MATH.CONTENT.1.G.A.1	Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); build and draw shapes to possess defining attributes.	X		
Grade 2, Geometry CCSS.MATH.CONTENT.2.G.A.1	Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	X		

Grades 6-8	Activity	Activity			
		1	2	3	4
Grade 6, Statistics & Probability CCSS.MATH.CONTENT.6.SP.B.5.C	Giving quantitative measures of center (median and/or mean) and variability (interquartile range and/or mean absolute deviation), as well as describing any overall pattern and any striking deviations from the overall pattern with reference to the context in which the data were gathered.			X	

COMMON CORE STATE STANDARDS – ENGLISH LANGUAGE ARTS**

Grades K-2	Activity	Activity		
		1	2	3
Grade K, Reading: Informational Text CCSS.ELA-LITERACY.RI.K.3	With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.	X	X	
Grade K, Reading: Informational Text CCSS.ELA-LITERACY.RI.K.7	With prompting and support, describe the relationship between illustrations and the text in which they appear (e.g., what person, place, thing, or idea in the text an illustration depicts).		X	
Grade 1, Reading: Informational Text CCSS.ELA-LITERACY.RI.1.1	Ask and answer questions about key details in a text.	X	X	
Grade 1, Reading: Informational Text CCSS.ELA-LITERACY.RI.1.4	Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.	X	X	
Grade 2, Reading: Foundational Skills CCSS.ELA-LITERACY.RF.2.4	Read with sufficient accuracy and fluency to support comprehension.	X	X	
Grade 2, Reading: Informational Text CCSS.ELA-LITERACY.RI.2.5	Know and use various text features (e.g., captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts or information in a text efficiently.		X	

Grades 3-5	Activity	Activity		
		1	2	3
Grade 3, Reading: Informational Text CCSS.ELA-LITERACY.RI.3.5	Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic efficiently.		X	
Grade 3, Reading: Foundational Skills CCSS.ELA-LITERACY.RF.3.4.C	Use context to confirm or self-correct word recognition and understanding, rereading as necessary.		X	
Grade 4, Reading: Informational Text CCSS.ELA-LITERACY.RI.4.7	Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.	X		X
Grade 5, Reading: Foundational Skills CCSS.ELA-LITERACY.RF.5.4	Read with sufficient accuracy and fluency to support comprehension.		X	
Grade 5, Reading: Informational Text CCSS.ELA-LITERACY.RI.5.3	Explain the relationships or interactions between two or more individuals, events, ideas, or concepts in a historical, scientific, or technical text based on specific information in the text.		X	

Grades 6-8	Activity	Activity			
		1	2	3	4
Grade 6-8, History/ Social Studies, Science & Technical Subjects CCSS.ELA-LITERACY.WHST.6-8.2	Write informative/explanatory texts, including the narration of historical events, scientific procedures/experiments, or technical processes.				X
Grade 6-8, Science & Technical Subjects CCSS.ELA-LITERACY.RST.6-8.7	Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table).	X	X	X	
Grade 6, Writing CCSS.ELA-LITERACY.W.6.1	Write arguments to support claims with clear reasons and relevant evidence.				X
Grade 7 Reading: Informational Text CCSS.ELA-LITERACY.RI.7.4	Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the impact of a specific word choice on meaning and tone.		X		
Grade 7, Writing CCSS.ELA-LITERACY.W.7.1	Write arguments to support claims with clear reasons and relevant evidence.				X
Grade 8, Writing CCSS.ELA-LITERACY.W.8.7	Conduct short research projects to answer a question (including a self-generated question), drawing on several sources and generating additional related, focused questions that allow for multiple avenues of exploration.				X
Grade 8, Writing CCSS.ELA-LITERACY.W.8.9	Draw evidence from literary or informational texts to support analysis, reflection, and research.				X

* NGSS Lead States. 2013. Next Generation Science Standards: For States, By States. Washington, DC: The National Academies Press.

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