

Next Generation Science Standards Grade 1 Correlation

The Digital Resources listed in the correlation include Key Ideas Presentations, Key Ideas Videos, and the SEPs and CCCs Preview Presentation.

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation 1-PS4-1 Plan and conduct investigations to provide evidence that vibrating materials can make sound and that sound can make materials vibrate. Clarification Statement: Examples of vibrating materials that make sound could include tuning forks and plucking a stretched string. Examples of how sound can make matter vibrate could include holding a piece of paper near a speaker making sound and holding an object near a vibrating tuning fork.	Topic 1 Experience 1 Student Activity Companion, Volume 1: 7, 9, 23, 25 Teacher Guide, 20, 21, 23 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas PS4.A Wave Properties Sound can make matter vibrate, and vibrating matter can make sound.	Topic 1 Experience 1 Student Activity Companion, Volume 1: 3, 9, 11, 13–16, 17, 22, 23, 25 Teacher Guide, 21, 22, 23 Corresponding Digital Resources and Assessment
Science and Engineering Practices SEP-3 Planning and Carrying Out Investigations Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions. • Plan and conduct investigations collaboratively to produce evidence to answer a question.	Topic 1 Experience 1 Student Activity Companion, Volume 1: 7, 9, 23, 25 Teacher Guide, 19, 20 Corresponding Digital Resources and Assessment
NOS-1 Scientific Investigations Use a Variety of Methods • Science investigations begin with a question. • Scientists use different ways to study the world.	Topic 1 Experience 1 Student Activity Companion, Volume 1: 7, 9, 11, 17 Teacher Guide, 20, 21 Corresponding Digital Resources and Assessment
Crosscutting Concepts CCC-2 Cause and Effect Simple tests can be designed to gather evidence to support or refute student ideas about causes.	Topic 1 Experience 1 Student Activity Companion, Volume 1: 3, 9, 19, 22 Teacher Guide, 20 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation 1-PS4-2 Make observations to construct an evidence-based account that objects can be seen only when illuminated. Clarification Statement: Examples of observations could include those made in a completely dark room, a pinhole box, a video of a cave explorer with a flashlight. Illumination could be from an external light sources or by an object giving off its own light.	Topic 1 Experience 2 Student Activity Companion, Volume 1: 29, 33, 45 Teacher Guide, 28, 29 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas PS4.B Electromagnetic Radiation • Objects can be seen if light is available to illuminate them or if they give off their own light.	Topic 1 Experience 2 Student Activity Companion, Volume 1: 27, 33, 35, 37–40, 41, 45 Teacher Guide, 26, 27, 29 Corresponding Digital Resources and Assessment
Science and Engineering Practices SEP-6 Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions. • Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.	Topic 1 Experience 2 Student Activity Companion, Volume 1: 33 Teacher Guide, 26, 28, 29 Corresponding Digital Resources and Assessment
Crosscutting Concepts CCC-2 Cause and Effect Simple tests can be designed to gather evidence to support or refute student ideas about causes.	Topic 1 Experience 2 Student Activity Companion, Volume 1: 27, 29, 45 Teacher Guide, 28 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation 1-PS4-3 Plan and conduct investigations to determine the effect of placing objects made with different materials in the path of a beam of light. Clarification Statement: Examples of materials could include those that are transparent (such as clear plastic), translucent (such as wax paper), opaque (such as cardboard), and reflective (such as a mirror). Assessment Boundary: Assessment does not include the speed of light.	Topic 1 Experience 3 Student Activity Companion, Volume 1: 55, 57, 71, 73 Teacher Guide, 36 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas PS4.B Electromagnetic Radiation Some materials allow light to pass through them, others allow only some light through and others block all the light and create a dark shadow on any surface beyond them, where the light cannot reach. Mirrors can be used to redirect a light beam.	Topic 1 Experience 3 Student Activity Companion, Volume 1: 51, 55, 57, 61–64, 65, 69, 71, 73 Teacher Guide, 36, 37, 39 Corresponding Digital Resources and Assessment
Science and Engineering Practices SEP-3 Planning and Carrying Out Investigations Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions. Plan and conduct investigations collaboratively to produce evidence to answer a question.	Topic 1 Experience 3 Student Activity Companion, Volume 1: 55, 57, 71, 73 Teacher Guide, 36 Corresponding Digital Resources and Assessment
Crosscutting Concepts CCC-2 Cause and Effect Simple tests can be designed to gather evidence to support or refute student ideas about causes.	Topic 1 Experience 3 Student Activity Companion, Volume 1: 51, 69 Teacher Guide, 36, 37 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation 1-PS4-4 Use tools and materials to design and build a device that uses light or sound to solve the problem of communicating over a distance. Clarification Statement: Examples of devices could include a light source to send signals, paper cup and string “telephones,” and a pattern of drum beats. Assessment Boundary: Assessment does not include technological details for how communication devices work.	Topic 1 Experiences 1, 2 Student Activity Companion, Volume 1: 47, 49 Teacher Guide, 22, 30 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas	
PS4.C Information Technologies and Instrumentation • People also use a variety of devices to communicate (send and receive information) over long distances.	Topic 1 Experiences 1, 2 Student Activity Companion, Volume 1: 16, 39, 40 Teacher Guide, 21, 40 Corresponding Digital Resources and Assessment
Science and Engineering Practices	
SEP-6 Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions. • Use tools and materials provided to design a device that solves a specific problem.	Topic 1 Experiences 1, 2, 3 Student Activity Companion, Volume 1: 47, 49 Teacher Guide, 30, 38 Corresponding Digital Resources and Assessment
Crosscutting Concepts	
STSE-1 Connections to Engineering, Technology, and Applications of Science Influence of Engineering, Technology, and Science, on Society and the Natural World • People depend on various technologies in their lives; human life would be very different without technology.	Topic 1 Experiences 1, 2 Student Activity Companion, Volume 1: 39, 40, 47, 49 Teacher Guide, 21, 26, 40 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation 1-ESS1-1 Use observations of the sun, moon, and stars to describe patterns that can be predicted. Clarification Statement: Examples of patterns could include that the sun and moon appear to rise in one part of the sky, move across the sky, and set; and stars other than our sun are visible at night but not during the day. Assessment Boundary: Assessment of star patterns is limited to stars being seen at night and not during the day.	Topic 2 Experiences 1, 2 Student Activity Companion, Volume 1: 79, 83, 85, 87, 93, 101, 105, 107, 119, 121, 123 Teacher Guide, 48, 54, 57, 59 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas	Topic 2 Experiences 1, 2
ESS1.A The Universe and its Stars Patterns of the motion of the sun, moon, and stars in the sky can be observed, described, and predicted.	Student Activity Companion, Volume 1: 87, 89–92, 93, 97, 99, 105, 107, 109, 111–114, 115, 119, 121, 125 Teacher Guide, 48, 58, 59 Corresponding Digital Resources and Assessment
Science and Engineering Practices	Topic 2 Experiences 1, 2
SEP-4 Analyzing and Interpreting Data Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations. Use observations (firsthand or from media) to describe patterns in the natural world in order to answer scientific questions.	Student Activity Companion, Volume 1: 87, 93, 97, 99, 105, 107, 109, 115, 119 Teacher Guide, 56, 57, 59 Corresponding Digital Resources and Assessment
Crosscutting Concepts	Topic 2 Experiences 1, 2
CCC-1 Patterns Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.	Student Activity Companion, Volume 1: 89–92, 99, 105, 107, 109–111, 119, 121, 123 Teacher Guide, 54, 56, 57, 58 Corresponding Digital Resources and Assessment
NOS-6 Scientific Knowledge Assumes an Order and Consistency in Natural Systems - Science assumes natural events happen today as they happened in the past. - Many events are repeated.	Topic 2 Experience 1 Student Activity Companion, Volume 1: 89–92 Teacher Guide, 120 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation 1-ESS1-2 Make observations at different times of the year to relate the amount of daylight to the time of year. Clarification Statement: Emphasis is on relative comparisons of the amount of daylight in winter to the amount in spring or fall. Assessment Boundary: Assessment is limited to relative amounts of daylight, not quantifying the hours or time of daylight.	Topic 2 Experience 3 Student Activity Companion, Volume 1: 101, 105, 107, 121, 123 Teacher Guide, 70, 71, 72 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas	
ESS1.B Earth and the Solar System Seasonal patterns of sunrise and sunset can be observed, described, and predicted.	Topic 2 Experience 3 Student Activity Companion, Volume 1: 101, 105, 107, 109, 111–114, 115, 121, 123 Teacher Guide, 72, 73, 74, 75, 76 Corresponding Digital Resources and Assessment
Science and Engineering Practices	
SEP-3 Planning and Carrying Out Investigations Planning and carrying out investigations to answer questions or test solutions to problems in K–2 builds on prior experiences and progresses to simple investigations, based on fair tests, which provide data to support explanations or design solutions. Make observations (firsthand or from media) to collect data that can be used to make comparisons.	Topic 2 Experience 3 Student Activity Companion, Volume 1: 105, 107, 109, 115, 121, 123 Teacher Guide, 71, 72, 74 Corresponding Digital Resources and Assessment
Crosscutting Concepts	
CCC-1 Patterns Patterns in the natural world can be observed, used to describe phenomena, and used as evidence.	Topic 2 Experience 3 Student Activity Companion, Volume 1: 111–114, 115 Teacher Guide, 71, 72, 73, 74, 75, 76 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation 1-LS1-1 Use materials to design a solution to a human problem by mimicking how plants and/or animals use their external parts to help them survive, grow, and meet their needs. Clarification Statement: Examples of human problems that can be solved by mimicking plant or animal solutions could include designing clothing or equipment to protect bicyclists by mimicking turtle shells, acorn shells, and animal scales; stabilizing structure by mimicking animal tails and roots on plants; keeping out intruders by mimicking thorns on branches and animal quills; and detecting intruders by mimicking eyes and ears.	Topic 3 Experience 1 Student Activity Companion, Volume 2: 7, 9, 25, 27 Teacher Guide, 92 Topic 4 Experience 1 Student Activity Companion, Volume 2: 65, 79, 81 Teacher Guide, 122 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas	
LS1.A Structure and Function All organisms have external parts. Different animals use their body parts in different ways to see, hear, grasp objects, protect themselves, move from place to place, and seek, find, and take in food, water and air. Plants also have different parts (roots, stems, leaves, flowers, fruits) that help them survive and grow.	Topic 3 Experience 1 Student Activity Companion, Volume 2: 3, 9, 13–16, 17, 23, 25 Teacher Guide, 90, 93 Topic 4 Experience 1 Student Activity Companion, Volume 2: 57, 63, 65, 69–72, 73, 77 Teacher Guide, 118, 119, 120, 121, 122, 123 Corresponding Digital Resources and Assessment
LS1.D Information Processing Animals have body parts that capture and convey different kinds of information needed for growth and survival. Animals respond to these inputs with behaviors that help them survive. Plants also respond to some external inputs.	Topic 4 Experience 1 Student Activity Companion, Volume 2: 57, 63, 65, 67, 69–72, 73, 77 Teacher Guide, 115, 121, 123 Corresponding Digital Resources and Assessment
Science and Engineering Practices	
SEP-6 Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions. Use materials to design a device that solves a specific problem or a solution to a specific problem.	Topic 3 Experience 1 Student Activity Companion, Volume 2: 7, 9, 25, 27 Teacher Guide, 91, 92, 94 Topic 4 Experience 1 Student Activity Companion, Volume 2: 65, 73, 79, 81 Teacher Guide, 92, 94, 95, 120, 122 Corresponding Digital Resources and Assessment
Crosscutting Concepts	
CCC-6 Structure and Function The shape and stability of structures of natural and designed objects are related to their function(s).	Topic 3 Experience 1 Student Activity Companion, Volume 2: 3, 25, 27 Teacher Guide, 90, 92 Topic 4 Experience 1 Student Activity Companion, Volume 2: 63, 65, 69–72, 77, 79, 81 Teacher Guide, 120 Corresponding Digital Resources and Assessment
STSE-1 Influence of Science, Engineering and Technology on Society and the Natural World Every human-made product is designed by applying some knowledge of the natural world and is built using materials derived from the natural world.	Topic 3 Experience 1 Student Activity Companion, Volume 2: 7, 9, 23, 25, 27 Teacher Guide, 92 Topic 4 Experience 1 Student Activity Companion, Volume 2: 72, 73, 79, 81 Teacher Guide, 121, 122 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation 1-LS1-2 Read texts and use media to determine patterns of behavior of parents and offspring that help offspring survive. Clarification Statement: Examples of patterns of behavior could include the signals that offspring make (such as crying, cheeping, and other vocalizations) and the responses of the parents (such as feeding, comforting, and protecting the offspring).	Topic 4 Experience 2 Student Activity Companion, Volume 2: 83, 89, 93, 103 Teacher Guide, 129 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas LS1.B Growth and Development of Organisms • Adult plants and animals can have young. In many kinds of animals, parents and the offspring themselves engage in behaviors that help the offspring to survive.	Topic 4 Experience 2 Student Activity Companion, Volume 2: 83, 89, 95–98, 103, 105, 107 Teacher Guide, 126, 128, 129, 130 Corresponding Digital Resources and Assessment
Science and Engineering Practices SEP-8 Obtaining, Evaluating, and Communicating Information Obtaining, evaluating, and communicating information in K–2 builds on prior experiences and uses observations and texts to communicate new information. • Read grade-appropriate texts and use media to obtain scientific information to determine patterns in the natural world.	Topic 4 Experience 2 Student Activity Companion, Volume 2: 93, 95–98, 103 Teacher Guide, 126 Corresponding Digital Resources and Assessment
NOS-2 Scientific Knowledge is Based on Empirical Evidence • Scientists look for patterns and order when making observations about the world.	Topic 4 Experience 2 Student Activity Companion, Volume 2: 87, 89, 93, 95–98 Teacher Guide, 131 Corresponding Digital Resources and Assessment
Crosscutting Concepts CCC-1 Patterns • Patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence.	Topic 4 Experience 2 Student Activity Companion, Volume 2: 87, 89, 93, 99, 103, 105, 109 Teacher Guide, 128, 131 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation 1-LS3-1 Make observations to construct an evidence-based account that young plants and animals are like, but not exactly like, their parents. Clarification Statement: Examples of patterns could include features plants or animals share. Examples of observations could include leaves from the same kind of plant are the same shape but can differ in size; and a particular breed of dog looks like its parents but is not exactly the same. Assessment Boundary: Assessment does not include inheritance or animals that undergo metamorphosis or hybrids.	Topic 3 Experience 2 Student Activity Companion, Volume 2: 29, 37, 43, 47, 49, 51 Teacher Guide, 98, 101, 102 Topic 4 Experience 3 Student Activity Companion, Volume 2: 109, 113, 115, 117, 119–122, 123, 127 Teacher Guide, 134, 136, 137, 139 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas	
LS3.A Inheritance of Traits Young animals are very much, but not exactly like, their parents. Plants also are very much, but not exactly, like their parents.	Topic 3 Experiences 2 Student Activity Companion, Volume 2: 29, 37, 39–42, 43, 47, 49, 51 Teacher Guide, 99, 101 Topic 4 Experience 3 Student Activity Companion, Volume 2: 109, 113, 115, 119–122, 129, 131 Teacher Guide, 134, 136, 137, 139 Corresponding Digital Resources and Assessment
LS3.B Variation of Traits Individuals of the same kind of plant or animal are recognizable as similar but can also vary in many ways.	Topic 3 Experience 2 Student Activity Companion, Volume 2: 35, 39–42, 43, 47, 49, 51 Teacher Guide, 99, 100, 102, 103 Topic 4 Experience 3 Student Activity Companion, Volume 2: 117, 119–122, 123, 127 Teacher Guide, 137, 138 Corresponding Digital Resources and Assessment
Science and Engineering Practices	
SEP-6 Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in K–2 builds on prior experiences and progresses to the use of evidence and ideas in constructing evidence-based accounts of natural phenomena and designing solutions. Make observations (firsthand or from media) to construct an evidence-based account for natural phenomena.	Topic 3 Experience 2 Student Activity Companion, Volume 2: 29, 35, 37, 43, 47 Teacher Guide, 99, 100, 101, 102, 103 Topic 4 Experience 3 Student Activity Companion, Volume 2: 109, 113, 115, 117, 119–122, 123, 127, 129, 131 Teacher Guide, 136, 137 Corresponding Digital Resources and Assessment
Crosscutting Concepts	
CCC-1 Patterns Patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence.	Topic 3 Experience 2 Student Activity Companion, Volume 2: 33, 35, 37, 39–42, 43 Teacher Guide, 100 Topic 4 Experience 3 Student Activity Companion, Volume 2: 109, 113, 115, 117, 119–122, 123, 127 Teacher Guide, 136, 137, 139 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation K-2-ETS1-1 Ask questions, make observations, and gather information about a situation people want to change to define a simple problem that can be solved through the development of a new or improved object or tool.	Topic 1 Experience 3 Student Activity Companion, Volume 1: 71, 73 Teacher Guide, 38 Topic 3 Experience 1 Student Activity Companion, Volume 2: 7, 9 Teacher Guide, 92 Topic 4 Experience 1 Student Activity Companion, Volume 2: 79, 81 Teacher Guide, 122 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas	
ETS1.A: Defining and Delimiting Engineering Problems • A situation that people want to change or create can be approached as a problem to be solved through engineering. • Asking questions, making observations, and gathering information are helpful in thinking about problems. • Before beginning to design a solution, it is important to clearly understand the problem.	Topic 1 Experience 3 Student Activity Companion, Volume 1: 71, 73 Teacher Guide, 38 Topic 3 Experience 1 Student Activity Companion, Volume 2: 7, 9 Teacher Guide, 92 Topic 4 Experience 1 Student Activity Companion, Volume 2: 79, 81 Teacher Guide, 122 Corresponding Digital Resources and Assessment
Science and Engineering Practices	
SEP-1 Asking Questions and Defining Problems Asking questions and defining problems in K–2 builds on prior experiences and progresses to simple descriptive questions. • Ask questions based on observations to find more information about the natural and/or designed world(s). • Define a simple problem that can be solved through the development of a new or improved object or tool.	Topic 1 Experience 3 Student Activity Companion, Volume 1: 71, 73 Teacher Guide, 38 Topic 3 Experience 1 Student Activity Companion, Volume 2: 7, 9 Teacher Guide, 92 Topic 4 Experience 1 Student Activity Companion, Volume 2: 79, 81 Teacher Guide, 122 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Science and Engineering Practices SEP-2 Developing and Using Models Modeling in K–2 builds on prior experiences and progresses to include using and developing models (i.e., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions. • Develop a simple model based on evidence to represent a proposed object or tool.	Topic 1 Experience 1 Student Activity Companion, Volume 1: 23, 25 Teacher Guide, 22 Topic 1 Experience 2 Student Activity Companion, Volume 1: 47, 49 Teacher Guide, 30 Topic 3 Experience 1 Student Activity Companion, Volume 2: 7 9 Teacher Guide, 91, 92 Topic 4 Experience 1 Student Activity Companion, Volume 2: 63, 65 Teacher Guide, 119, 120 Corresponding Digital Resources and Assessment
Crosscutting Concepts CCC-6 Structure and Function • The shape and stability of structures of natural and designed objects are related to their function(s).	Topic 3 Experience 1 Student Activity Companion, Volume 2: 7, 9 Teacher Guide, 91, 92 Topic 4 Experience 1 Student Activity Companion, Volume 2: 63, 65 Teacher Guide, 119, 120 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation K-2-ETS1-2 Develop a simple sketch, drawing, or physical model to illustrate how the shape of an object helps it function as needed to solve a given problem.	Topic 1 Experience 1 Student Activity Companion, Volume 1: 23, 25 Teacher Guide, 22 Topic 1 Experience 2 Student Activity Companion, Volume 1: 47, 49 Teacher Guide, 30 Topic 3 Experience 1 Student Activity Companion, Volume 2: 7, 9 Teacher Guide, 91, 92 Topic 4 Experience 1 Student Activity Companion, Volume 2: 63, 65, 79, 81 Teacher Guide, 119, 120, 122 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas	
ETS1.B: Developing Possible Solutions • Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem’s solutions to other people.	Topic 1 Experience 1 Student Activity Companion, Volume 1: 23, 25 Teacher Guide, 22 Topic 1 Experience 2 Student Activity Companion, Volume 1: 47, 49 Teacher Guide, 30 Topic 3 Experience 1 Student Activity Companion, Volume 2: 7, 9 Teacher Guide, 91, 92 Topic 4 Experience 1 Student Activity Companion, Volume 2: 63, 65, 79, 81 Teacher Guide, 119, 120, 122 Corresponding Digital Resources and Assessment

Next Generation Science Standards	WHERE YOU WILL FIND IT
Performance Expectation K-2-ETS1-3 Analyze data from tests of two objects designed to solve the same problem to compare the strengths and weaknesses of how each performs.	Topic 1 Experience 2 Student Activity Companion, Volume 1: 25, 27 Teacher Guide, 25, 26 Corresponding Digital Resources and Assessment
Disciplinary Core Ideas	Topic 1 Experience 2 Student Activity Companion, Volume 1: 31, 33 Teacher Guide, 27, 28 Topic 1 Experience 3 Student Activity Companion, Volume 1: 55, 57, 69 Teacher Guide, 36, 38 Corresponding Digital Resources and Assessment
ETS1.C: Optimizing the Design Solution Because there is always more than one possible solution to a problem, it is useful to compare and test designs.	
Science and Engineering Practices	Topic 1 Experience 2 Student Activity Companion, Volume 1: 31, 33 Teacher Guide, 27, 28 Topic 1 Experience 3 Student Activity Companion, Volume 1: 55, 57, 69 Teacher Guide, 36, 38 Corresponding Digital Resources and Assessment
SEP-4 Analyzing and Interpreting Data Analyzing data in K–2 builds on prior experiences and progresses to collecting, recording, and sharing observations. Analyze data from tests of an object or tool to determine if it works as intended.	

Notes:

ELA/Literacy Standards

Grade 1 Correlation

The Digital Resources listed in the correlation include Key Ideas Presentations, Key Ideas Videos, and the SEPs and CCCs Preview Presentation and Activities.

ELA/Literacy: Reading Standards for Informational Text		WHERE YOU WILL FIND IT
Key Ideas and Details Read closely to determine what the text says explicitly and to make logical inferences from it; cite specific textual evidence when writing or speaking to support conclusions drawn from the text.		
RI.1.1 Ask and answer questions about key details in a text. (1-LS1-2) (1-LS3-1)	Student Activity Companion: Volume 1: 17, 23, 41, 115, 119, 125, 139; Volume 2: 17, 37, 43, 77, 93, 99, 117, 123 Teacher Guide, 37, 76, 92, 93, 120, 121, 129, 136 Corresponding Digital Resources and Assessment	
RI.2.1 Ask and answer such questions as who, what, where, when, why, and how to demonstrate understanding of key details in a text. (K-2-ETS1-1)	Student Activity Companion, Volume 1: 17, 27, 45, 87, 97, 115, 119, 125, 143; Volume 2: 17, 43, 47, 67, 73, 81, 83, 93, 99, 103, 117, 123, 127 Teacher Guide, 21, 29, 37, 65, 67, 76, 93, 101, 120, 121, 129 Corresponding Digital Resources and Assessment	
Key Ideas and Details Determine central ideas or themes of a text and analyze their development; summarize the key supporting details and ideas.		
RI.1.2 Identify the main topic and retell key details of a text. (1-LS1-2)	Teacher Guide, 21, 57, 73, 75, 93, 101 Corresponding Digital Resources and Assessment	
Craft and Structure Interpret words and phrases as they are used in a text, including determining technical, connotative, and figurative meanings, and analyze how specific word choices shape meaning or tone.		
RI.1.4 Ask and answer questions to help determine or clarify the meaning of words and phrases in a text.	Student Activity Companion, Volume 1: 17, 23, 115 Teacher Guide, 21, 29, 37, 57, 73, 93, 101, 121, 138 Corresponding Digital Resources and Assessment	
Range of Reading and Level of Text Complexity Read and comprehend complex literary and informational texts independently and proficiently.		
RI.1.10 With prompting and support, read informational texts appropriately complex for grade. (1-LS1-2)	Student Activity Companion, Volume 1: 13–16, 17, 35, 37–40, 41, 59, 61–64, 67, 89–92, 109, 111–114, 115, 133, 135–138; Volume 2: 11, 13–16, 17, 37, 39–42, 43, 67, 69–72, 73, 93, 95–98, 99, 117, 119–122, 123 Teacher Guide, 21, 29, 37, 57, 65, 93, 101, 121, 129, 137 Corresponding Digital Resources and Assessment	

ELA/Literacy: Writing Standards		WHERE YOU WILL FIND IT
Text Types and Purposes Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.		
W.1.1 Write opinion pieces in which they introduce the topic or name the book they are writing about, state an opinion, supply a reason for the opinion, and provide some sense of closure.	Student Activity Companion, Volume 1: 7, 9, 21, 27, 31, 119; Volume 2: 29, 47, 109, 131 Teacher Guide, 23, 31, 39, 59, 67, 95, 103, 104, 123, 131, 139, 140 Corresponding Digital Resources and Assessment	
Text Types and Purposes Write informative/explanatory texts to examine and convey complex ideas and information clearly and accurately through the effective selection, organization, and analysis of content.		
W.1.2 Write informative/explanatory texts in which they name a topic, supply some facts about the topic, and provide some sense of closure. (1-PS4-2)	Student Activity Companion, Volume 1: 99; Volume 2: 53, 110 Teacher Guide, 23, 31, 39, 40, 59, 67, 75, 76, 95, 103, 104, 123, 131, 139, 140 Corresponding Digital Resources and Assessment	
Research to Build and Present Knowledge Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation.		
W.1.7 Participate in shared research and writing projects (e.g., explore a number of “how-to” books on a given topic and use them to write a sequence of instructions). (1-PS4-1) (1-PS4-2) (1-PS4-3) (1-PS4-4) (1-ESS1-1) (1-ESS1-2) (1-LS1-1) (1-LS3-1)	Student Activity Companion, Volume 1: 99, 121, 123, 145, 147; Volume 2: 25, 27, 49, 51, 53, 73 Corresponding Digital Resources and Assessment	
Research to Build and Present Knowledge Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.		
W.1.8 With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.	Student Activity Companion, Volume 1: 3, 17, 27, 33, 57, 69, 79, 85, 93, 101, 107, 115, 139; Volume 2: 25, 27, 29, 35, 43, 49, 57, 73, 83, 109, 117, 123 Teacher Guide, 23, 31, 39, 40, 51, 54, 57, 59, 67, 71, 75, 90, 91, 93, 95, 98, 100, 101, 102, 104, 123, 129, 130, 134, 137 Corresponding Digital Resources and Assessment	
ELA/Literacy: Speaking and Listening Standards		WHERE YOU WILL FIND IT
Comprehension and Collaboration Prepare for and participate effectively in a range of conversations and collaborations with diverse partners, building on others’ ideas and expressing their own clearly and persuasively.		
SL.1.1 Participate in collaborative conversations with diverse partners about grade 1 topics and texts with peers and adults in small and larger groups. (1-PS4-1) (1-PS4-2) (1-PS4-3)	Student Activity Companion, Volume 1: 3, 23, 25, 27, 33, 41, 47, 49, 51, 57, 65, 67, 69, 71, 73, 79, 85, 87, 93, 99, 101, 107, 119, 121, 123, 125, 131, 139, 143; Volume 2: 3, 17, 23, 25, 27, 29, 35, 43, 47, 53, 57, 65, 67, 73, 77, 83, 87, 89, 109, 113, 115, 117, 123, 127 Teacher Guide, 18, 19, 21, 23, 26, 27, 28, 31, 34, 35, 36, 38, 51, 54, 55, 64, 70, 71, 90, 91, 93, 94, 95, 98, 99, 100, 101, 115, 118, 119, 120, 129, 130, 134, 137 Corresponding Digital Resources and Assessment	
Presentation of Knowledge and Ideas Present information, findings, and supporting evidence such that listeners can follow the line of reasoning and the organization, development, and style are appropriate to task, purpose, and audience.		
SL.1.4 Describe people, places, things, and events with relevant details, expressing ideas and feelings clearly.	Student Activity Companion, Volume 1: 3, 25, 27, 33, 49, 51, 79, 85, 93, 99, 101, 115, 119, 125, 130, 139; Volume 2: 3, 23, 27, 29, 35, 43, 47, 51, 57, 73, 81, 83, 99, 103, 109, 113, 115, 117, 123, 127, 131 Teacher Guide, 26, 51, 54, 57, 59, 62, 63, 64, 67, 71, 75, 77, 94, 98, 100, 115, 119, 121, 123, 130, 138 Corresponding Digital Resources and Assessment	

Mathematics Standards

Grade 1 Correlation

The Digital Resources listed in the correlation include Key Ideas Presentations, Key Ideas Videos, and the SEP and CCC Preview Presentation and Activities.

Mathematics Standards	WHERE YOU WILL FIND IT
Operations and Algebraic Thinking Represent and solve problems involving addition and subtraction; Understand and apply properties of operations and the relationship between addition and subtraction; Add and subtract within 20; Work with addition and subtraction equations.	
1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using objects, drawings, and equations to represent the problem. (1-ESS1-2)	Student Activity Companion: Volume 1: 7, 9, 23, 25, 31, 33, 35, 41, 47, 69, 79, 85, 87, 93, 97, 99, 101, 107, 109, 111–115, 119, 121, 123, 129, 131, 133, 135–138, 139, 143, 147; Volume 2: 9, 33, 35, 43, 47, 49, 51, 53, 57, 63, 65, 67, 73, 79, 81, 89, 91, 93, 99, 105, 107, 109, 113, 115, 117, 119–122, 123, 127, 129, 131 Teacher Guide: 18–20, 26–31, 36–39, 48, 51, 54–59, 62, 66–67, 71–76, 84, 87, 90–95, 98–104, 112, 114, 118–123, 126, 128, 130, 134–140 Corresponding Digital Resources and Assessment
Number and Operations in Base Ten Extend the counting sequence; Understand place value; Use place value understanding and properties of operations to add and subtract.	
1.NBT.B.3 Compare two two-digit numbers based on the meanings of the tens and one digits, recording the results of comparisons with the symbols $>$, $=$, and $<$. (1-LS1-2)	Student Activity Companion: Volume 1: n/a; Volume 2: 43, 105, 127 Teacher Guide: 87, 93, 101, 130, 138 Corresponding Digital Resources and Assessment
1.NBT.C.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. (1-LS1-2)	Student Activity Companion: Volume 1: n/a; Volume 2: 65, 103, 109, 123 Teacher Guide: 111, 120, 126, 130, 134, 137 Corresponding Digital Resources and Assessment
1.NBT.C.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. (1-LS1-2)	Student Activity Companion: Volume 1: n/a; Volume 2: 1, 21, 23, 29 Teacher Guide: 90, 94, 100, 111, 118 Corresponding Digital Resources and Assessment
1.NBT.C.6 Subtract multiples of 10 in the range 10–90 from multiples of 10 in the range 10–90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. (1-LS1-2)	Student Activity Companion: Volume 1: n/a; Volume 2: 17, 23 Teacher Guide: 93, 94, 111, 121, 137 Corresponding Digital Resources and Assessment

Mathematics Standards	WHERE YOU WILL FIND IT
Measurement and Data Measure lengths indirectly and by iterating length units; Tell and write time; Represent and interpret data.	
1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object. (1-PS4-4, 1-LS3-1)	Student Activity Companion: Volume 1: 7, 9, 23, 25, 71, 73, 111–114, 115; Volume 2: 35, 37, 43, 45, 47, 49, 51, 53, 63, 65, 109, 113, 115, 117, 119–122, 123, 127, 129, 131 Teacher Guide: 20, 38, 62–63, 65–67, 74–76, 83, 84, 87, 93, 95, 98–104, 119, 134–139 Corresponding Digital Resources and Assessment
1.MD.A.2 Express the length of an object as a whole number of length units, by layering multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps. (1-PS4-4)	Student Activity Companion: Volume 1: 7, 9, 23, 25, 71, 73 Volume 2: n/a Teacher Guide: 20, 38 Corresponding Digital Resources and Assessment
1.MD.C.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. (1-ESS1-2)	Student Activity Companion: Volume 1: 33, 55, 57, 69, 71, 73, 85, 87, 89–93, 97, 99, 105, 107, 109, 111–115, 119, 121, 123, 129, 131, 133, 139, 143, 145, 147; Volume 2: 9, 23, 25, 33, 35, 39–42, 43, 47, 49, 51, 53, 63, 65, 67, 69–72, 73, 77, 79, 81, 89, 91, 93, 99, 103, 105, 107, 109, 113, 115, 117, 123, 127, 129, 131 Teacher Guide: 36–38, 47–48, 51, 55–59, 62, 64–67, 70–75, 84, 87, 90, 92–95, 98–104, 112, 123, 126, 128–25, 134–140 Corresponding Digital Resources and Assessment
2.MD.D.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph. (K-2-ETS1-1, K-2-ETS1-3)	Student Activity Companion: Volume 1: 23, 49, 57, 65, 85, 93, 99, 105, 107, 115, 119, 121, 123, 135, 147; Volume 2: 9, 28, 35, 51, 53, 65, 81, 107, 129 Teacher Guide: 34, 38, 51, 54–56, 58, 62, 64, 66, 73, 75, 84, 92–93, 102, 120, 122–123, 128, 138 Corresponding Digital Resources and Assessment
The Standards for Mathematical Practice These standards describe varieties of important processes and proficiencies. Processes include: problem solving, reasoning and proof, communication, representation, and connections. Proficiencies include: adaptive reasoning, strategic competence, conceptual understanding, procedural fluency, and productive disposition.	
MP.1 Make sense of problems and persevere in solving them.	Student Activity Companion: Volume 1: 17, 31, 33, 39, 45, 47, 49, 71, 73, 145, 147; Volume 2: 7, 9, 11, 15–17, 23, 25, 27, 29, 33, 63, 65, 67, 72, 73, 79, 81, 87, 89, 91, 95–98, 99, 103, 105, 107 Teacher Guide: 13, 15, 21–23, 27–31, 38–40, 66, 74, 84, 92–95, 102, 118–123, 126–131, 136, 139–140 Corresponding Digital Resources and Assessment
MP.2 Reason abstractly and quantitatively. (1-ESS1-2, 1-LS3-1, K-2-ETS1-1, K-2-ETS1-3)	Student Activity Companion: Volume 1: 7, 9, 23, 25, 31, 33, 41, 45, 47, 49–50, 55, 57, 65, 69, 71, 73, 79, 85, 87, 89, 91, 93, 97, 99, 101, 105, 107, 109, 111–114, 115, 119, 121, 123, 125, 129, 131, 133, 135–139, 143, 145, 147; Volume 2: 7, 9, 11, 15, 17, 23, 25, 27, 29, 33, 35, 37, 39–42, 43, 47, 51, 53, 57, 63, 65, 67, 73, 77, 79, 81, 83, 87, 89, 93, 95–98, 99, 103, 105, 107, 109, 113, 115, 117, 123, 127, 129, 131 Teacher Guide: 15, 19–23, 26–31, 34–40, 47–48, 51, 54–56, 58–59, 62–67, 70–75, 83–84, 87, 90–95, 98–104, 112, 115, 118–123, 126–131, 134–140 Corresponding Digital Resources and Assessment

Mathematics Standards	WHERE YOU WILL FIND IT
MP.4 Model with mathematics. (1-ESS1-2, K-2-ETS1-1, K-2-ETS1-3)	Student Activity Companion: Volume 1: 9, 23, 27, 31, 33, 45, 71, 73, 105, 107, 111–114, 115, 119, 121, 123, 129, 135–138, 147; Volume 2: 7, 9, 17, 27, 35, 43, 49, 51, 53, 63, 65, 75, 77, 81, 83, 89, 91, 93, 99, 103, 115, 129 Teacher Guide: 12, 20, 22, 23, 27–28, 30–31, 34, 36, 38–39, 48, 51, 55, 62, 64, 66–67, 72–75, 84, 91–94, 102, 112, 120, 122–123, 126, 128, 136, 138 Corresponding Digital Resources and Assessment
MP.5 Use appropriate tools strategically. (1-PS4-4, 1-ESS1-2, 1-LS3-1, K-2-ETS1-1, K-2-ETS1-3)	Student Activity Companion: Volume 1: 7, 9, 23, 25, 31, 33, 47, 49, 55, 57, 71, 73, 97, 99, 121, 123; Volume 2: 7, 9, 25, 27, 33, 35, 49, 53, 63, 65, 73, 79, 81, 87, 89, 91, 107, 113, 115 Teacher Guide: 11–13, 18–20, 22, 23, 27–28, 30–31, 34–36, 38–39, 49, 56, 58, 64, 66, 84–85, 91–92, 94, 99, 102, 113, 119, 120, 122, 127–130, 135–136 Corresponding Digital Resources and Assessment
MP.7 Look for and make use of structure.	Student Activity Companion: Volume 1: 7, 9, 23, 25, 31, 33, 41, 47, 49, 55, 57, 65, 69, 71, 73, 79, 85, 87, 89–93, 97, 99, 105, 107, 109, 111–114, 115, 119, 121, 123, 129, 131, 133, 135–139, 143, 145, 147; Volume 2: 7, 9, 11, 13–17, 23, 25, 27, 29, 33, 35, 37, 39–42, 43, 47, 49, 51, 53, 57, 63, 65, 67, 69–72, 73, 77, 79, 81, 83, 87, 89, 91, 93, 95–98, 99, 103, 105, 107, 109, 113, 115, 117, 119–122, 123, 127, 129, 131 Teacher Guide: 18, 20, 22–23, 27–28, 30–31, 34–40, 51, 54–59, 62–67, 70, 74–75, 84, 87, 90–95, 98–104, 112–113, 115, 118–123, 126–131, 134–140 Corresponding Digital Resources and Assessment

Notes:

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....