

Kindergarten

Reading Standards for Literature

The following standards offer a focus for instruction each year and help ensure that students gain adequate exposure to a range of texts and tasks. Rigor is also infused through the requirement that students read increasingly complex texts through the grades. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Key Ideas and Details

- 1. With prompting and support, ask and answer questions about key details in a text.
- 2. With prompting and support, retell familiar stories, including key details.
- 3. With prompting and support, identify characters, settings, and major events in a story.

Craft and Structure

- 4. Ask and answer questions about unknown words in a text.
- 5. Recognize common types of texts (e.g., storybooks, poems).
- 6. With prompting and support, define the role of the author and the illustrator of a story in telling the story.

Integration of Knowledge and Ideas

- 7. With prompting and support, make connections between the illustrations in the story and the text.
- 8. (Not applicable to literature)
- 9. With prompting and support, compare and contrast the adventures and experiences of characters in familiar stories.

Range of Reading and Level of Text Complexity

Actively engage in group reading activities with purpose and understanding.

Reading Standards for Informational Text

Key Ideas and Details

- 1. With prompting and support, ask and answer questions about key details in a text.
- With prompting and support, identify the main topic and retell key details of a text.
- 3. With prompting and support, describe the connection between two individuals, events, ideas, or pieces of information in a text.

Craft and Structure

- 4. With prompting and support, ask and answer questions about unknown words in a text.
- 5. Identify the front cover, back cover, and title page of a book.
- 6. With prompting and support, define the role of the author and the illustrator of a text and present the ideas or information in a text.

Integration of Knowledge and Ideas

- 7. With prompting and support, make connections between the illustrations and the text.
- 8. With prompting and support, identify the reason(s) an author gives to support point(s) in a text.
- 9. With prompting and support, identify similarities and differences between two texts on the same topic.

Range of Reading and Level of Text Complexity

10. Actively engage in group reading activities with purpose and understanding.





Kindergarten

Reading Standards for Foundational Skills

These standards are directed toward fostering students' understanding and working knowledge of concepts of print, the alphabetic principle, and other basic conventions of the English writing system. These foundational skills are not an end in and of themselves; rather, they are necessary and important components of an effective, comprehensive reading program designed to develop proficient readers with the capacity to comprehend texts across a range of types and disciplines. Instruction should be differentiated: good readers will need much less practice with these concepts than struggling readers will. The point is to teach students what they need to learn and not what they already know— to discern when particular children or activities warrant more or less attention. *Note: In kindergarten, children are expected to demonstrate increasing awareness and competence in the areas that follow.*

Print Concepts

- 1. Demonstrate understanding of the organization and basic features of print.
 - a. Follow words from left to right, top to bottom, and page by page.
 - b. Recognize that spoken words are represented in written language by specific sequences of letters.
 - c. Understand that words are separated by spaces in print.
 - d. Recognize and name all upper- and lowercase letters of the alphabet.

Phonological Awareness

- 2. Demonstrate understanding of spoken words, syllables, and sounds (phonemes).
 - a. Recognize and produce rhyming words.
 - b. Count, pronounce, blend, and segment syllables in spoken words.
 - c. Blend and segment onsets and rimes of single-syllable spoken words.
 - d. Isolate and pronounce the initial, medial vowel, and final sounds (phonemes) in three-phoneme (consonant-vowel-consonant, or CVC) words. (This does not include CVCs ending with /l/, /r/, or /x/.)
 - e. Add or substitute individual sounds (phonemes) in simple, one-syllable words to make new words.

Phonics and Word Recognition

- 3. Know and apply grade-level phonics and word analysis skills in decoding words.
 - a. Demonstrate basic knowledge of one-to-one letter-sound correspondences by producing the primary or many of the most frequent sounds for each consonant.
 - b. Associate the long and short sounds with common spellings (graphemes) for the five major vowels.
 - c. Read common high-frequency words by sight (e.g., the, of, to, you, she, my, is, are, do, does).
 - d. Distinguish between similarly spelled words by identifying the sounds of the letters that differ.

Fluency

Read emergent-reader texts with purpose and understanding.



¹ Words, syllables, or phonemes written in /slashes/refer to their pronunciation or phonology. Thus, /CVC/ is a word with three phonemes regardless of the number of letters in the spelling of the word.



Kindergarten

Writing Standards

The following standards for writing offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Each year in their writing, students should demonstrate increasing sophistication in all aspects of language use, from vocabulary and syntax to the development and organization of ideas, and they should address increasingly demanding content and sources. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Text Types and Purposes

- 1. Use a combination of drawing, dictating, and writing to compose opinion pieces in which they tell a reader the topic or the name of the book they are writing about and state an opinion or preference about the topic or book (e.g., My favorite book is . . .).
- 2. Use a combination of drawing, dictating, and writing to compose informative/explanatory texts in which they name what they are writing about and supply some information about the topic.
- 3. Use a combination of drawing, dictating, and writing to narrate a single event or several loosely linked events, tell about the events in the order in which they occurred, and provide a reaction to what happened.

Production and Distribution of Writing

- 4. Begins in grade 3.
- 5. With guidance and support, orally respond to questions and suggestions from adults and peers and add details to strengthen writing as needed.
- 6. With guidance and support from adults and peers, explore a variety of digital tools in participating in a production of a published writing.

Research to Build and Present Knowledge

- 7. With guidance and support from adults, participate in shared research and writing projects (e.g., explore a number of books by a favorite author and express opinions about them).
- 8. With guidance and support from adults, recall information from experiences or gather information from provided sources to answer a question.
- 9. Begins in grade 4.

Range of Writing

10. Begins in grade 3.

Speaking and Listening Standards

The following standards offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Comprehension and Collaboration

- 1. Participate in collaborative conversations with diverse partners about kindergarten topics and texts with peers and adults in small and larger groups.
 - a. Follow agreed-upon rules for discussions (e.g., listening to others and taking turns speaking about the topics and texts under discussion).
 - b. Continue a conversation through multiple exchanges.
- 2. Confirm understanding of a text read aloud or information presented orally or through other media by asking and answering questions about key details and requesting clarification if something is not understood.
- 3. Ask and answer questions in order to seek help, get information, or clarify something that is not understood.





Kindergarten

Presentation of Knowledge and Ideas

- 4. Describe familiar people, places, things, and events and, with prompting and support, provide additional detail.
- 5. Add drawings or other visual displays to descriptions as desired to provide additional detail.
- 6. Speak audibly and express thoughts, feelings, and ideas clearly.

Language Standards

The following standards for grades offer a focus for instruction each year to help ensure that students gain adequate mastery of a range of skills and applications. Students advancing through the grades are expected to meet each year's grade-specific standards and retain or further develop skills and understandings mastered in preceding grades.

Conventions of Standard English

- 1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.
 - a. Print many upper- and lowercase letters.
 - b. Use frequently occurring nouns and verbs.
 - c. Form regular plural nouns orally by adding /s/ or /es/ (e.g., dog, dogs; wish, wishes).
 - d. Understand and use question words (interrogatives) (e.g., who, what, where, when, why, how).
 - e. Use the most frequently occurring prepositions (e.g., to, from, in, out, on, off, for, of, by, with).
 - f. Produce and expand complete sentences in shared language activities.
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
 - a. Capitalize the first word in a sentence and the pronoun I.
 - b. Recognize and name end punctuation.
 - c. Write a letter or letters for most consonant and short-vowel sounds (phonemes).
 - d. Spell simple words phonetically, drawing on knowledge of sound-letter relationships.

Knowledge of Language

Begins in grade 2.

Vocabulary Acquisition and Use

- 4. Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on kindergarten reading and content.
 - a. With guidance and support, identify new meanings for familiar words and apply them accurately (e.g., knowing duck is a bird and learning the verb to duck).
 - b. With guidance and support, use the most frequently occurring inflections and affixes (e.g., -ed, -s, re-, un-, pre-, -ful, -less) as a clue to the meaning of an unknown word.
- 5. With guidance and support from adults, explore word relationships and nuances in word meanings.
 - a. Sort common objects into categories (e.g., shapes, foods) to gain a sense of the concepts the categories represent.
 - b. Demonstrate understanding of frequently occurring verbs and adjectives by relating them to their opposites (antonyms).
 - c. Identify real-life connections between words and their use (e.g., note places at school that are colorful).
 - d. Distinguish shades of meaning among verbs describing the same general action (e.g., walk, march, strut, prance) by acting out the meanings.
- Use words and phrases acquired through conversations, reading and being read to, and responding to texts.





K-12 Louisiana Student Standards for Mathematics:

Kindergarten

Mathematics | Kindergarten

Teachers Companion Documents.zip

Grade Level Overview

(1) Students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as 5 + 2 = 7 and 7 - 2 = 5. (Kindergarten students should see addition and subtraction equations, and student writing of equations in Kindergarten is encouraged, but it is not required.) Students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.

(2) Students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary. They identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres. They use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.

Counting and Cardinality

K.CC

A. Know number names and the count sequence.

- 1. Count to 100 by ones and by tens.
- 2. Count forward beginning from a given number within the known sequence (instead of having to begin at 1).
- 3. Write numbers from 0 to 20. Represent a number of objects with a written numeral 0–20 (with 0 representing a count of no objects).

B. Count to tell the number of objects.

- 4. Understand the relationship between numbers and quantities; connect counting to cardinality.
 - a. When counting objects in standard order, say the number names as they relate to each object in the group, demonstrating one-to-one correspondence.
 - b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.
 - c. Understand that each successive number name refers to a quantity that is one larger.
- 5. Count to answer "How many?" questions.
 - a. Count objects up to 20, arranged in a line, a rectangular array, or a circle.
 - b. Count objects up to 10 in a scattered configuration.
 - c. When given a number from 1-20, count out that many objects.

C. Compare numbers.

- 6. Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.¹
- 7. Compare two numbers between 1 and 10 presented as written numerals.

 $^{^{\}mbox{\tiny 1}}$ Include groups with up to ten objects.





K-12 Louisiana Student Standards for Mathematics:

Kindergarten

Operations and Algebraic Thinking

K.OA

A. Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.

- 1. Represent addition and subtraction with objects, fingers, mental images, drawings², sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.
- 2. Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.
- 3. Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition by a drawing or equation (e.g., 5 = 2 + 3 and 5 = 4 + 1).
- 4. For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.
- 5. Fluently add and subtract within 5.

Number and Operations in Base Ten

K.NBT

A. Work with numbers 11-19 to gain foundations for place value.

- 1. Gain understanding of place value.
 - a. Understand that the numbers 11–19 are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.
 - b. Compose and decompose numbers 11 to 19 using place value (e.g., by using objects or drawings).
 - c. Record each composition or decomposition using a drawing or equation (e.g., 18 is one ten and eight ones, 18 = 1 ten + 8 ones, 18 = 10 + 8).

Measurement and Data

K.MD

A. Describe and compare measurable attributes.

- 1. Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.
- 2. Directly compare two objects with a measurable attribute in common, to see which object has "more of"/"less of" the attribute, and describe the difference. For example, directly compare the heights of two children and describe one child as taller/shorter.

B. Classify objects and count the number of objects in each category.

3. Classify objects into given categories based on their attributes; count the numbers of objects in each category and sort the categories by count.³

C. Work with money.

4. Recognize pennies, nickels, dimes, and quarters by name and value (e.g., This is a nickel and it is worth 5 cents.)

³ Limit category counts to be less than or equal to 10.



² Drawings need not show details, but should show the mathematics in the problem. (This applies wherever drawings are mentioned in the Standards.)



K-12 Louisiana Student Standards for Mathematics:

Kindergarten

Geometry K.G

- A. Identify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).
 - 1. Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as *above*, *below*, *beside*, *in front of*, *behind*, and *next to*.
 - 2. Correctly name shapes regardless of their orientations or overall size.
 - 3. Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").
- B. Analyze, compare, create, and compose shapes.
 - 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).
 - 5. Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.
 - 6. Compose simple shapes to form larger shapes. For example, "Can you join these two triangles with full sides touching to make a rectangle?





K-12 Louisiana Student Standards for Social Studies

Kindergarten

K-2

- **K-2.SP1.** Describe differences between primary and secondary sources.
- **K-2.SP2.** Select and use appropriate evidence from primary and secondary sources to support claims.
- **K-2.SP3.** Construct and express claims that are supported with relevant evidence from primary and/or secondary sources, content knowledge, and clear reasoning.

KINDERGARTEN Life in My Home, School, and Local Community

Kindergarten students are introduced to the world beyond their family and home. Students will build upon experiences with their families, schools, communities, and parishes as they begin their study of the most fundamental principles and ideas of each of social studies' core disciplines: history, civics, economics, and geography.

HISTORY

- K.1 Order events in a chronological sequence using schedules, calendars, and timelines. For example:
 - a. Daily classroom activities
 - b. Significant events in students' lives
- K.2 Differentiate between primary and secondary sources. For example:
 - a. Primary sources: letters, diaries, autobiographies, speeches, interviews
 - b. Secondary sources: magazine articles, textbooks, encyclopedia entries, biographies
- K.3 Select and use appropriate evidence from primary and secondary sources to support claims.
- K.4 Identify symbols, customs, famous individuals, and celebrations representative of our state and nation, including:
 - a. Symbols: United States flag, bald eagle, Louisiana State flag, brown pelican
 - b. Customs: pledging allegiance to the United States flag, singing "The Star-Spangled Banner"
 - c. Individuals: George Washington, Abraham Lincoln, Dr. Martin Luther King Jr.
 - d. State and nationally designated holidays: New Year's Day, the birthday of Martin Luther King, Jr., Inauguration Day, Washington's Birthday, Mardi Gras, Memorial Day, Juneteenth, Independence Day, Labor Day, Columbus Day, Veterans Day, Thanksgiving Day, and Christmas Day
- K.5 Identify examples of different cultures and traditions in Louisiana, including:
 - a. Music: Cajun, jazz, zydeco
 - b. Traditions: king cake, red beans and rice on Mondays
 - c. Cuisine: jambalaya, gumbo, etouffee, bread pudding, meat pies, tamales
- K.6 Identify a cause and effect for a significant event in a school, neighborhood, or parish.





K-12 Louisiana Student Standards for Social Studies

Kindergarten

CIVICS

- K.7 Explain the purpose of local government.
- K.8 Describe the importance of fairness, responsibility, respect, and hard work. For example:
 - a. Taking care of personal belongings and respecting the property of others.
 - b. Following rules and recognizing consequences of breaking rules.
 - c. Taking responsibility for assigned duties.
- K.9 Describe organizations and individuals within a school or parish that help solve issues, including the school principal, school custodian, volunteers, police officers, and fire and rescue workers.
- K.10 Describe the importance of rules and how they help protect our liberties.
- K.11 Explain how people can work together to make decisions.
- K.12 Identify local business and government leaders and describe their roles.

ECONOMICS

- K.13 Identify examples of goods and services. For example:
 - a. Goods: food, toys, clothing
 - b. Services: medical care, fire protection, law enforcement, library resources
- K.14 Describe and compare reasons to save and spend money.
- K.15 Differentiate between wants and needs.
- K.16 Identify jobs and industries within a school and community.
- K.17 Describe the concept of scarcity using examples.

GEOGRAPHY

- K.18 Use maps and models to describe relative location. For example: locating objects and places to the right or left, up or down, in or out, above or below.
- K.19 Identify basic landforms and bodies of water in a variety of visual representations, including mountains, hills, coasts, islands, lakes, and rivers.
- K.20 Identify ways people interact with their environment, including:
 - a. Using natural resources
 - b. Modifying their environment to create shelter
- K.21 Identify rural, suburban, and urban areas.
- K.22 Explain how weather impacts daily life and choices.
- K.23 Explain why people may move from place to place.







Performance Expectation	Analyze data to determine if a design solution works as intended to change the speed or direction of an object with a push or a pull. Examples of problems requiring a solution could include having a marble or other object move a certain distance, follow a particular path, or knock down other objects. Examples of solutions could include tools such as a ramp to increase the speed of the object, a structure that would cause an object such as a marble or ball to turn or using a rope or string to pull an object. Content does not include friction as a mechanism for change in speed.	
Clarification Statement		
Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
 Asking questions and defining problems Developing and using models Planning and carrying out investigations 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. Using mathematics and computational thinking Constructing explanations and designing solutions Engaging in argument from evidence Obtaining, evaluating, and communicating information 	FORCES AND MOTION Pushes and pulls can have different strengths and directions. (LE.PS2A.a) Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it. (LE.PS2A.b) ENGINEERING DESIGN A situation that people want to change or create can be approached as a problem to be solved through engineering. Such problems may have many acceptable solutions. (LE.ETS1A.a)	CAUSE AND EFFECT Simple tests can be designed to gather evidence to support or refute student ideas about causes.







ENERGY	,	
Performance Expectation	Make observations to determine the effect of sunlight on Earth's surface. Sunlight heats Earth's natural surfaces including sand, soil, rocks, or water and the unnatural surfaces including man-made objects like plastics, asphalt, or concrete. Examples of observations could be relative changes in temperature of surfaces exposed to sunlight.	
Clarification Statement		
		I
Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
 Asking questions and defining problems Developing and using models 	CONSERVATION OF ENERGY AND ENERGY TRANSFER Sunlight warms Earth's surface. (LE.PS3B.a)	CAUSE AND EFFECT Events have causes that generate observable patterns.
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) and/ or measurements of a proposed object or tool or solution to determine if it solves a problem or meets a goal. 		
4. Analyzing and interpreting data		
5. Using mathematics and computational thinking		
6. Constructing explanations and designing solutions		
7. Engaging in argument from evidence		
8. Obtaining, evaluating, and communicating information		





ENERGY

Performance Expectation	Use tools and materials to design and build a structure that will reduce the warming effect of sunlight on an area.
Clarification Statement	Examples of structures could include umbrellas, canopies, or tents that minimize the warming effect of the sun.

	Disciplinary Core Ideas	Crosscutting Concepts
sking questions and defining problems	CONSERVATION OF ENERGY AND ENERGY TRANSFER	CAUSE AND EFFECT
eveloping and using models	Sunlight warms Earth's surface. (LE.PS3B.a)	Simple tests can be designed to gather evidence to support or refute student ideas about causes.
Planning and carrying out investigations		
nalyzing and interpreting data		
Ising mathematics and computational thinking		
xperiences and progresses to the use of evidence nd ideas in constructing evidence-based accounts f natural phenomena and designing solutions. Ise tools and/or materials to design and/or build a		
evice that solves a specific problem or a solution to specific problem.		
evice that solves a specific problem or a solution to specific problem. ingaging in argument from evidence		







FROM MOLECULES TO ORGANISMS: STRUCTURES AND PROCESSE

Performance Expectation	Use observations to describe patterns of what plants and animals (including humans) need to survive.	
Clarification Statement	Examples of patterns could include that plants make their food needed by different types of animals, the requirement	
Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
 Asking questions and defining problems Developing and using models Planning and carrying out Investigations Analyzing and interpreting data: Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations. Use observations to describe patterns and/or relationships in the natural and designed world(s) in order to answer scientific questions and solve problems. Using mathematics and computational thinking 	ORGANIZATION FOR MATTER AND ENERGY FLOW IN ORGANISMS All animals need food in order to live and grow. Animals obtain their food from plants or from other animals. Plants need water and light to live and grow. (LE.LS1C.a)	PATTERNS Patterns in the natural and human designed world can be observed, used to describe phenomena, and used as evidence.
6. Constructing explanations and designing solutions7. Engaging in argument from evidence8. Obtaining, evaluating, and communicating information		







EARTH'S SYSTEMS

Performance Expectation	Use and share observations of local weather conditions to describe patterns over time. Examples of qualitative observations could include descriptions of the weather (such as sunny, cloudy, rainy, or warm); examples of quantitative observations could include numbers of sunny, windy, or rainy days in a month. Examples of patterns could include that it is cooler in the morning than in the afternoon or the number of sunny days versus cloudy days in different months.	
Clarification Statement		
Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
 Asking questions and defining problems Developing and using models Planning and carrying out investigations Analyzing and interpreting data: Analyzing data in K-2 builds on prior experiences and progresses to collecting, recording, and sharing observations. Use observations to describe patterns and/or relationships in the natural and designed world(s) in order to answer scientific questions and solve problems. Using mathematics and computational thinking Constructing explanations and designing solutions Engaging in argument from evidence Obtaining, evaluating, and communicating information 	WEATHER AND CLIMATE Weather is the combination of sunlight, wind, snow or rain, and temperature in a particular region at a particular time. People measure these conditions to describe and record the weather and to notice patterns over time. (LE.ESS2D.a)	PATTERNS Patterns in the natural and human designed world can be observed, used to describe phemonena, and used as evidence.







EARTH'S SYSTEMS

Performance Expectation	Construct an argument supported by evidence for how plants and animals (including humans) can change the environment to meet their needs. Examples of plants and animals changing their environment could include a squirrel digging in the ground to hide its food, tree roots breaking concrete, or a dandelion spreading seeds to generate more dandelions.	
Clarification Statement		
Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
 Asking questions and defining problems Developing and using models Planning and carrying out Investigations Analyzing and interpreting data Using mathematics and computational thinking Constructing explanations and designing solutions Engaging in argument from evidence: Engaging in argument from evidence in K-2 builds on prior experiences and progresses to comparing ideas and representations about the natural and designed world(s). Construct an argument with evidence to support a claim. Obtaining, evaluating, and communicating information 	BIOGEOLOGY Plants and animals can change their environment. (LE.ESS2E.a) HUMAN IMPACTS ON EARTH SYSTEMS Things that people do to live comfortably can affect the world around them; but they can make choices that reduce their impacts on the land, water, air, and other living things. (LE.ESS3C.a)	Systems in the natural and designed world have parts that work together.







EARTH AND HUMAN ACTIVITY

Performance Expectation	Use a model to represent the relationship between the needs of different plants or animals (including humans) and the places they live.
Clarification Statement	Examples of relationships could include that deer eat buds and leaves and therefore usually live in forested areas; grasses need sunlight so they often grow in meadows. Plants, animals, and their surroundings make up a system.

Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
 Asking questions and defining problems Developing and using models: Modeling in K-2 builds on prior experiences and progresses to include using and developing models (e.g., diagram, drawing, physical replica, diorama, dramatization, or storyboard) that represent concrete events or design solutions. 	NATURAL RESOURCES Living things need water, air, and resources from the land, and they live in places that have the things they need. Humans use natural resources for everything they do. (LE.ESS3A.a)	SYSTEMS AND SYSTEM MODELS Systems in the natural and designed world have parts that work together.
 Develop and/or use a model to represent amounts, relationships, relative scales (bigger, smaller), and/or patterns in the natural and designed world(s). 		
3. Planning and carrying out investigations		
4. Analyzing and interpreting data		
5. Using mathematics and computational thinking		
6. Constructing explanations and designing solutions		
7. Engaging in argument from evidence		
8. Obtaining, evaluating, and communicating information		







EARTH AND HUMAN ACTIVITY

Performance Expectation	Ask questions to obtain information about the purpose of weather forecasting to prepare for and respond to severe weather.
Clarification Statement	Emphasis is on local forms of severe weather and safety precautions associated with that severe weather.

Emphasis is on local forms of severe weather and safety precautions associated with that severe weather.

Science & Engineering Practices Crosscutting Concepts Disciplinary Core Ideas 1. Asking questions and defining problems: Asking NATURAL HAZARDS CAUSE AND EFFECT questions (science) and defining problems Some kinds of severe weather are more likely than Events have causes that generate observable patterns. (engineering) in K-2 builds on prior experiences and others in a given region. Weather scientists forecast progresses to simple descriptive questions that can severe weather so that the communities can prepare for and respond to these events. (LE.ESS3B.a) be tested. · Ask questions based on observations to find more information about the natural and/or designed world(s). 2. Developing and using models 3. Planning and carrying out investigations 4. Analyzing and interpreting data 5. Using mathematics and computational thinking 6. Constructing explanations and designing solutions 7. Engaging in argument from evidence 8. Obtaining, evaluating, and communicating information







EARTH AND HUMAN ACTIVITY		
Performance Expectation	Communicate solutions that will reduce the impact of humans on the land, water, air, and/or other living things in the local environment.	
Clarification Statement	Examples of human impact on the land could include cutting trees to produce paper and using resources to produce bottles. Examples of solutions could include reusing paper and recycling cans and bottles.	
Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
 Asking questions and defining problems Developing and using models Planning and carrying out investigations Analyzing and interpreting data Using mathematics and computational thinking Constructing explanations and designing solutions Engaging in argument from evidence 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. Communicate information or design ideas and/or solutions with others in oral and/or written forms using models, drawings, writing, or numbers that provide detail about scientific ideas, practices, and/or 	HUMAN IMPACTS ON EARTH SYSTEMS Things that people do to live comfortably can affect the world around them. But they can make choices that reduce their impacts on the land, water, air, and other living things. (LE.ESS3C.a) DEVELOPING POSSIBLE SOLUTIONS Designs can be conveyed through sketches, drawings, or physical models. These representations are useful in communicating ideas for a problem's solution(s) to other people. (LE.ETS1B.a)	CAUSE AND EFFECT Events have causes that generate observable patterns.



design ideas.





Performance Expectation	Plan and conduct an investigation to compare the effects of different strengths or different directions of pushes and pulls on the motion of an object. Examples of pushes or pulls could include a string attached to an object being pulled, a person pushing an object, a person stopping a rolling ball, or two objects colliding and pushing on each other. Content includes contact forces with different relative strengths or different directions, but not both at the same time.	
Clarification Statement		
Science & Engineering Practices	Disciplinary Core Ideas	Crosscutting Concepts
 Asking questions and defining problems Developing and using models Planning and carrying out investigations: Planning and carrying out investigations to answer questions (science) or test solutions (engineering) 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. With guidance, plan and conduct an investigation in collaboration with peers. Analyzing and interpreting data Using mathematics and computational thinking Constructing explanations and designing solutions Engaging in argument from evidence Obtaining, evaluating, and communicating information 	FORCES AND MOTION Pushes and pulls can have different strengths and directions. (LE.PS2A.a) Pushing or pulling on an object can change the speed or direction of its motion and can start or stop it. (LE.PS2A.b) TYPES OF INTERACTIONS When objects touch or collide, they push on one another and can change motion. (LE.PS2B.a) RELATIONSHIP BETWEEN ENERGY AND FORCES A bigger push or pull makes things speed up or slow down more quickly. (LE.PS3C.a)	CAUSE AND EFFECT Simple tests can be designed to gather evidence to support or refute student ideas about causes.

