

PRAIRIE-HILLS ELEMENTARY SCHOOL DISTRICT 144
STEAM CURRICULUM MAP 2ND GRADE
QUARTER 1

GRADE 2 STEAM

ADOPTED AUGUST 2022

PROJECT: ZOO VETERINARIAN

There are many zoos around the country that feature animals from all over the world. Zookeepers, veterinarians, and other scientists get to study these animals that live at the zoo. They can see how an animal behaves, how it gets along with other animals, and what it looks like as it's born, grows up, and becomes an adult. These people work hard to make sure animals are getting the right food, that they don't get sick, and that their zoo habitat looks and feels similar to their natural habitat in the wild. Zoos also give people of all ages the chance to observe different animals and learn about their lifestyle outside the wild

PRODUCTS – ILLUSTRATION, NEWSPAPER ARTICLE, ANIMAL HEALTH MANUAL, ZOO HABITAT DRAWING, CLASS CHART, JOURNAL PROMPT

STANDARDS				INSTRUCTIONAL RESOURCES	EXTENSIONS
READING	MATH	SCIENCE	SOCIAL SCIENCE		
<p>Common Core Standards: Reading Literature Skills 2.RL.1: Ask and answer such questions as who, what, where, when, why and how to demonstrate understanding of key details in text. *(Introduce and Support) 2. RL.2: Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. *(Introduce and Support) 2.RL.7: Use information gained from the illustrations and words in print or digital text to demonstrate understanding of its characters, setting, or plot. *(Introduce and Support)</p> <p>Informational Skills 2.RI.1: Ask and answer such questions as who, what, where, when, why and how to demonstrate understanding of key details in text. *(Introduce and Support) 2.RI.6: Identify the main purpose of a text, including what the author wants to answer, explain, or describe. *(Introduce and Support)</p> <p>Foundational Skills 2.RF.3: Know and apply grade-level</p>	<p>Common Core Standards for Mathematics Add and subtract within 20 Operations and Algebraic Thinking Represent and solve problems involving addition and subtraction. 2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (Product- Class Chart) 2.OA.B.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory</p>	<p>Next Gen. Science Standards Next Gen. Science Standards -- Science LIFE SCIENCE Biological Evolution: Unity and Diversity (2-LS4-1.) Make observations of plants and animals to compare the diversity of life in different habitats[Clarification Statement: Emphasis is on the diversity of living things in each of a variety of different habitats.] Product-Newspaper Article, Animal Health Manual, Zoo Habitat Design, Class Chart, Journal Prompt)</p> <p>Disciplinary Core Ideas Biodiversity and Humans (LS4.D:1.) There are many different kinds of living things in any area, and they exist in different places on land and</p>	<p>Illinois Learning Standards -- Social Studies Geographic Civic and Political Institutions SS.CV.1.2: Explain what governments are and some of their functions (e.g. making and enforcing laws, protecting citizens, and collecting taxes)</p> <p>Geographic Representations: Spatial Views of the World SS.G.1.2: Construct and interpret maps and other graphic representations of both familiar and unfamiliar places.</p> <p>Processes, Rules, and Laws SS.CV.2.2: Describe how communities work to accomplish common tasks, establish responsibilities, and fulfill roles of authority.</p>	<p>Reading MyOn Books: A Day in the Life of a Veterinarian Veterinarians Savaas My View Unit 1 & 2 Savaas Leveled Reading Books: <u>An Eye on Ecosystems</u> <u>Exploring Ecosystems</u> <u>Helping Your Community</u> <u>How Do Baby Animals Grow</u> <u>Animal Behavior</u> <u>Chimp School</u> <u>Staying Alive</u> <u>The Elephant's Trunk</u> <u>The Life of a Frog</u></p> <p>Math I-Ready Math:</p>	<p>Create Zoo Habitat Models Students will create physical models of a zoo habitat for a specific animal.</p> <p>Zoo Habitat Fair Students will present their zoo habitats, drawings or models to parents. (Similar to science fair)</p> <p>Field Trip Ideas: Lincoln Park Zoo Brookfield Zoo</p>

<p>phonics and word analysis skills in decoding words. **(Introduce and Support)</p> <p>a. Distinguish long and short vowels when reading regularly spelled one syllable words.</p> <p>b. Know spelling---sound correspondences for additional common vowel teams.</p> <p>c. Decode regularly spelled two syllable words with long vowels.</p> <p>e. Identify words within consistent but common spelling sound correspondences.</p> <p>f. Recognize and read grade appropriate irregularly spelled words.</p> <p>2.RF.4: Read with sufficient accuracy and fluency to support comprehension. **(Introduce and Support)</p> <p>a. Read on-level text orally with accuracy, appropriate rate, and expression on successive readings.</p> <p>(Product – Animal Health Manual)</p> <p>Writing -Argumentative</p> <p>2.W.1: Write opinion pieces, in which they introduce the topic or name the book they are writing about, state an opinion, supply reasons that support the opinion, use linking words to connect opinion and reasons, and provide a concluding statement or section.</p> <p>*(Mastered)</p> <p>2.W.5: With guidance and support from adults and peers, focus on a topic and strengthen writing as needed by revising and editing.(Product-Newspaper Article, Journal Prompt)</p> <p>2.W.6: With guidance and support from adults, use a variety of digital tools to produce and publish writing, including in collaboration with peers.</p> <p>Research to Build and Present Knowledge (CCSS.ELA-Literacy.W.2.8) Recall information from experiences or gather information from provided sources to answer a question. Product-Newspaper Article)</p>	<p>all sums of two one-digit numbers.</p> <p>Reason with shapes and their attributes.</p> <p>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.</p> <p>Understand place value.</p> <p>2.NBT.A.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases.</p> <p>2.NBT.A.1.A 100 can be thought of as a bundle of ten tens — called a "hundred."</p> <p>Use place value understanding and properties of operations to add and subtract.</p> <p>Number and Operations in Base Ten</p> <p>Understand place value.</p> <p>2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons. (Product-Class Chart)</p> <p>2.NBT.B.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the</p>	<p>in water. (2-LS4-1)</p> <p>(Product-Animal Health Manual, Zoo Habitat Design, Journal Prompt)</p> <p>Ecosystems: Interactions, Energy, and Dynamics</p> <p>Crosscutting Concepts</p> <p>Structure and Function (2-LS2.CC.2.1.) The shape and stability of structures of natural and designed objects are related to their function(s). (2-LS2-2)</p> <p>(Product-Zoo Habitat Design)</p>	<p>Change, Continuity and Context SS.H.1.2:</p> <p>Summarize changes that have occurred in the local community over time.</p> <p>Historical Sources and Evidence SS.H.3.2: Explain how different kinds of historical sources (such as written documents, objects, artistic works, and oral accounts) can be used to study the past.</p>	<p>Lessons: 1-9,12-14, 19, 23, 28</p> <p>Science</p> <p>Studies Weekly Science:</p> <p>Grade 2</p> <p>Weeks: 19, 20, 21, & 22</p> <p>Social Science</p> <p>Studies Weekly Social Studies:</p> <p>Grade 2</p> <p>Weeks: 1-6</p>	
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<p>2.W.8: Recall information from experiences or gather information from provided sources to answer a question. **(Introduce and Support) (Product-Illustration, Newspaper Article, Animal Health Manual, Class Chart, Journal Prompt)</p> <p>Speaking and Listening</p> <p>2.SL.1: Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. **(Introduce and Support)</p> <p>a. Follow agreed upon rules for discussions(e.g. gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion.)</p> <p>2.SL.4: Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences. **(Introduce and Support)</p> <p>Language</p> <p>2.L.1: Demonstrate command of the convention of standard English grammar and usage when writing or speaking.</p> <p>f. Produce, expand, and rearrange complete simple and compound sentences (e.g. The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy.) *(Mastered)</p> <p>2.L.2: Demonstrate command of the conventions of standard English capitalization, punctuation and spelling when writing.</p> <p>c. Use an apostrophe to form contractions and frequently occurring possessives. **(Introduce and Support)</p>	<p>relationship between addition and subtraction.</p> <p>2.NBT.B.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.</p> <p>Measurement and Data</p> <p>Work with time and money.</p> <p>Measure and estimate lengths in standard units.</p> <p>2.MD.A.3 Estimate lengths using units of inches, feet, centimeters, and meters. (Product – Zoo Habitat Design)</p> <p>2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p> <p>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. (Product – Animal Health Manual)</p>				
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PRAIRIE-HILLS ELEMENTARY SCHOOL DISTRICT 144

STEAM CURRICULUM MAP 2ND GRADE

QUARTER 2

PROJECT: REPTILE LAND CURATOR

A curator at a zoo is responsible for managing a zoo's animals. An animal curator oversees one specific group of animals in a zoo's animal collection such as reptiles or mammals. In this task you will be a Curator at Reptile Land where you are responsible for taking care of the reptiles and amphibians.

PRODUCTS – ILLUSTRATION, FEEDING SCHEDULE, CREATING A HABITAT, NEW EXHIBIT DESIGN, VISITOR BAR GRAPH, JOURNAL PROMPT

STANDARDS				INSTRUCTIONAL RESOURCES	EXTENSIONS
READING	MATH	SCIENCE	SOCIAL SCIENCE		
<p>Common Core Standards: Reading Literature</p> <p>2.RL.1: Ask and answer questions such as who, what where, when, why, and how to demonstrate understanding of key details in text. **(Introduce & Support)</p> <p>2.RL.2: Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. **(Introduce & Support)</p> <p>2.RL.4: Describe how words and phrases (e.g. regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song. **(Introduce and Support)</p> <p>2.RL.5: Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action. **(Introduce and Support)</p> <p>2.RL.7: Use information gained from the illustrations and words in print or digital text to demonstrate understanding of its characters, setting, or plot. **(Introduce & Support)</p> <p>2.RL.9: Compare and contrast two or more versions of the same story (e.g. Cinderella stories) by different authors or from</p>	<p>Common Core Standards for Mathematics Operations and Algebraic Thinking Represent and solve problems involving addition and subtraction.</p> <p>2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. (Product-Visitor Bar Graph)</p> <p>Number and Operations in Base Ten Understand place value.</p> <p>2.NBT.A.4 Compare two three-digit numbers based on meanings of the</p>	<p>Next Gen. Science Standards LIFE SCIENCE Ecosystems: Interactions, Energy, and Dynamics Crosscutting Concepts Structure and Function</p> <p>2-LS2-2. Develop a simple model that mimics the function of an animal in dispersing seeds or pollinating plants. (Product-Creating a Habitat)</p> <p>Crosscutting Concepts Structure and Function (2-LS2.CC.2.1.) The shape and stability of structures of natural and designed objects are related to their function(s). (2-LS2-2)</p> <p>Biological Evolution: Unity and Diversity n: (2-LS4-1.) Make observations of plants and animals to compare the diversity of life in different</p>	<p>Perspectives SS.H.2.2: Compare individuals and groups who have shaped a significant historical change.</p> <p>Change, Continuity and Context SS.H.1.2: Summarize changes that have occurred in the local community over time.</p> <p>Historical Sources and Evidence SS.H.3.2: Explain how different kinds of historical sources (such as written documents, objects, artistic works, and oral accounts) can be used to study the past.</p> <p>Geographic Representations: Spatial Views of the World SS.G.1.2: Construct and interpret maps and other graphic representations of both familiar and unfamiliar places.</p>	<p>Reading</p> <p>MyOn Books: Reptiles: A Question and Answer Book</p> <p>Totally Amazing Facts About Reptiles</p> <p>Reading: Savvas Unit 2 & 3 Savvas Leveled Reading Books: <u>Animals in the Rain</u> <u>Animal Heroes</u> <u>Animals of the Everglades</u> <u>Animals on the Move</u> <u>Hibernation</u> <u>Tropical Rain Forest</u></p> <p>Book Connections <u>Miles and Miles of Reptiles:</u> <u>All About Reptiles (Cat in the Hat's Learning Library) (8601416173009):</u> <u>Rabe, Tish, Ruiz, Aristides: Books.</u> <u>Read Aloud version:</u> <u>https://youtu.be/cvr8CVgsQ7Q?t=25</u></p> <p><u>The Mixed-Up Chameleon by Eric Carle</u> <u>ISBN 10: 0690006055 ISBN 13: 9780690006056</u> <u>Publisher: Crowell, 1975</u> <u>The Enormous Crocodile</u></p>	<p>Get a Class Pet – Turtle Allow students to create the perfect habitat for the class turtle.</p> <p>Add a Reptile Section to the Zoo Habitat</p> <p>A Night at the Zoo Parents will tour the newly expanded class zoo.</p> <p>Field Trip Idea: Field Museum Shedd Aquarium Lincoln Park Zoo Brookfield Zoo</p>

<p>different cultures. **(Introduce and Support)</p> <p>Informational Text</p> <p>2.RI.3: Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures of a text. **(Introduce and Support)</p> <p>2.RI.4: Determine the meaning of words and phrases in a text relevant to a grade 2---topic subject area. **(Introduce and Support)</p> <p>2.RI.5: Know and use various text features (e.g. captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts in a text efficiently. **(Introduce and Support)</p> <p>2.RI.6: Identify the main purpose of a text, including what the author wants to answer, explain, or describe. **(Introduce & Support)</p> <p>2.RI.7: Explain how specific images (e.g. a diagram showing how a machine works) contribute to and clarify a text. **(Introduce and Support)</p> <p>Foundational Skills</p> <p>2.RF.3: Know and apply grade level phonics and word analysis skills in decoding words. **(Introduce and Support)</p> <p>a. Distinguish long and short vowels when reading regularly spelled one syllable words.</p> <p>e. Identify words within consistent but common spelling sound correspondences.</p> <p>f. Recognize and read grade appropriate irregularly spelled words.</p> <p>2.RF.4: Read with sufficient accuracy and fluency to support comprehension. **(Introduce and Support)</p> <p>a. Read on level text with purpose and understanding.</p> <p>b. Read on level text orally with accuracy, appropriate rate, and expression on successive readings.</p>	<p>hundreds, tens, and ones digits, using >, =, and < symbols to record the results of comparisons. (Product-Visitor Bar Graph)</p> <p>Use place value understanding and properties of operations to add and subtract.</p> <p>2.NBT.B.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction. (Product-Visitor Bar Graph)</p> <p>2.NBT.B.6 Add up to four two-digit numbers using strategies based on place value and properties of operations. (Product-Visitor Bar Graph)</p> <p>2.NBT.B.7 Add and subtract within 1000, 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. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or</p>	<p>habitats[Clarification Statement: Emphasis is on the diversity of living things in each of a variety of different habitats.] (Product-Creating a Habitat)</p> <p>Disciplinary Core Ideas Biodiversity and Humans (LS4.D:1.) There are many different kinds of living things in any area, and they exist in different places on land and in water. (2-LS4-1)</p>		<p><u>Roald Dahl; Quentin Blake [Illustrator]</u> <u>Published by Scholastic (1998)</u> <u>ISBN 10: 0590018698ISBN 13: 9780590018692</u></p> <p>Math</p> <p>I-Ready Math: Review Lessons 3-9,11,14,19,28 Lessons: 10,15,16,17,18,29</p> <p>Science</p> <p>Studies Weekly Science: Grade 2 Weeks: 1, 2, 3, 25-27</p> <p>Social Science</p> <p>Studies Weekly Social Studies: Grade 2 Weeks: 7-12</p>
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<p>c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p> <p>Writing -Explanatory 2.W.2: Write informative/explanatory texts in which they name a topic, use facts and definitions to develop points, and provide a concluding statement or section. *(Mastered) 2.W.5: With guidance and support from adults and peers, focus on a topic, and strengthen writing as needed by revising and editing. **(Introduce and Support)</p> <p>2.W.8: Recall information from experiences or gather information from provided sources to answer a question. **(Introduce and Support) (Product-Illustration, Journal Prompt)</p> <p>Speaking and Listening 2.SL.1: Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. **(Introduce and Support)</p> <p>a. Follow agreed---upon rules for discussions(e.g. gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion.)</p> <p>b. Ask for clarification and further explanation as needed about the topics and texts under discussion.</p> <p>2.SL.2: Ask and answer questions about key details in a text read aloud or information presented orally or through other media. ** (Introduce and Support)</p> <p>2.SL.3: Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue. ** (Introduce and Support)</p> <p>2.SL.4: Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences. ** (Introduce and Support)</p>	<p>decompose tens or hundreds. (Product-Visitor Bar Graph)</p> <p>2.NBT.B.8 Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.</p> <p>2.NBT.B.9 Explain why addition and subtraction strategies work, using place value and the properties of operations. (Product-Visitor Bar Graph)</p> <p>Geometry Reason with shapes and their attributes. 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. (Product-New Exhibit Design)</p> <p>2.G.A.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape. (Product-New Exhibit Design)</p>				
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2.SL.6: Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. ** (Introduce and Support)

Language

2.L.1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. ** (Introduce and Support) a. Form and use frequently occurring irregular plural nouns(elf. feet, children, teeth, mice, fish) c. Produce, expand, and rearrange complete simple and compound sentences (e.g. The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy.)

2.L.2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. ** (Introduce and Support) a. Capitalize holidays, product names, and geographic names. b. Use an apostrophe to form contractions and frequently occurring possessives. c. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.

2.L.4: Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. ** (Introduce and Support)

Work with time and money.

2.MD.C.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.

(Product-Feeding Schedule)

2.MD.C.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have.

Measurement and Data Represent and interpret data.

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.

(Product-Visitor Bar Graph)

PRAIRIE-HILLS ELEMENTARY SCHOOL DISTRICT 144
STEAM CURRICULUM MAP 1ST GRADE
QUARTER 3

PROJECT: BUILDINGS

A building is a structure that is made by putting pieces together. Buildings come in all shapes and sizes and are made from different materials. A building can be many things. For example, a building can be a house, a store or an office. In this task, you are an architect who is building a new house for a family. Before you start construction you will need to think carefully about what materials you will use.

PRODUCTS – ILLUSTRATION, MATERIALS CHART, MEASUREMENT INVESTIGATION, MODEL, LITERARY CONNECTION, JOURNAL PROMPT

STANDARDS				INSTRUCTIONAL RESOURCES	EXTENSIONS
READING	MATH	SCIENCE	SOCIAL SCIENCE		
<p>Common Core Standards: Reading Literature</p> <p>2.RL.1: Ask and answer questions such as who, what where, when, why, and how to demonstrate understanding of key details in text. **(Introduce and Support) (Product-Literary Connection)</p> <p>2.RL.2: Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. **(Introduce and Support) (Product-Literary Connection)</p> <p>2.RL.3: Describe how characters in a story respond to major events and challenges. **(Introduce and Support) (Product-Literary Connection)</p> <p>2.RL.4: Describe how words and phrases (e.g. regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song. **(Introduce and Support)</p> <p>2.RL.5: Describe the overall structure of a story, including describing how the beginning introduces the story and the ending concludes the action. *(Mastered)</p> <p>2.RL.6: Acknowledge differences in the points of view of characters, including by speaking in a different voice for each character when reading dialogue. **(Introduce and Support)</p> <p>2.RL.7: Use information gained from the illustrations and words in print or digital text to demonstrate understanding of its characters,</p>	<p>Common Core Standards for Mathematics Represent and solve problems involving addition and subtraction</p> <p>2.OA.A.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>Understand place value.</p> <p>2.NBT.A.2 Count within 1000; skip-count by 5s, 10s, and 100s.</p> <p>2.NBT.A.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.</p>	<p>Next Gen. Science Standards PHYSICAL SCIENCE Matter and its Interactions</p> <p>(2-PS1-1.) Plan and conduct an investigation to describe and classify different kinds of materials by their observable properties. (Product-Materials Chart)</p> <p>(2-PS1-2.) Analyze data obtained from testing different materials to determine which materials have the properties that are best suited for an intended purpose. (Product-Literary Connection)</p> <p>Engineering Design (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</p>	<p>Geographic Representations: Spatial Views of the World</p> <p>SS.G.1.2: Construct and interpret maps and other graphic representations of both familiar and unfamiliar places.</p> <p>Perspectives SS.H.2.2: Compare individuals and groups who have shaped a significant historical change.</p> <p>Human-Environment Interaction: Place, Regions and Culture</p> <p>SS.G.2.2: Identify some cultural and environmental characteristics of your community and compare to other places.</p> <p>Civic and Political Institutions SS.CV.1.2: Explain what governments are and some of their functions (e.g. making and enforcing laws, protecting citizens, and collecting taxes).</p>	<p>Reading</p> <p>MyOn Books: (Add Resources)</p> <p>Savaas-My View Unit 2 – Grade 2 Leveled Readers Big Changes</p> <p>Math</p> <p>I-Ready Math: Review Lessons 3,5,9,13-15, 23, 28 Lessons: 20,21,22</p> <p>Science</p> <p>Grade 2 Studies Weekly Science: Weeks: 7, 8, 9, & 10</p> <p>Social Science</p> <p>Grade 2 Studies Weekly</p>	<p>Family STEM Night: Battle of the Buildings (Students and their families can build and test houses made from different materials.)</p> <p>Architecture Tour (Students can present the model houses they have created.)</p> <p>Field Trip: Chicago Architecture Center</p> <p>Glessner House</p>

<p>setting, or plot. **(Introduce and Support) (Product- Literary Connection)</p> <p>2.RL.9: Compare and contrast two or more versions of the same story (e.g. Cinderella stories) by different authors or from different cultures. **(Introduce and Support) (Product- Literary Connection)</p> <p>Informational Text</p> <p>2.RI.1: Ask and answer such questions as who, what, where, when, why and how to demonstrate understanding of key details in text. **(Introduce and Support)</p> <p>2.RI.3: Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures of a text. **(Introduce and Support)</p> <p>2.RI.4: Determine the meaning of words and phrases in a text relevant to a grade 2---topic subject area. **(Introduce and Support)</p> <p>2.RI.5: Know and use various text features (e.g. captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts in a text efficiently. **(Introduce and Support)</p> <p>2.RI.6: Identify the main purpose of a text, including what the author wants to answer, explain, or describe. **(Introduce and Support)</p> <p>2.RI.7: Explain how specific images (e.g. a diagram showing how a machine works) contribute to and clarify a text. **(Introduce and Support)</p> <p>2.RI.8: Describe how reasons support specific points the author makes in a text. **(Introduce and Support)</p> <p>2.RI.9: Compare and contrast the most important points presented by two texts on the same topic. **(Introduce and Support)</p> <p>Foundational Skills</p> <p>2.RF.3: Know and apply grade level phonics and word analysis skills in decoding words. **(Introduce and Support)</p> <p>a. Distinguish long and short vowels when reading regularly spelled one syllable words.</p> <p>b. Know spelling sound correspondences for additional common vowel teams.</p>	<p>2.NBT.A.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$, $=$, and $<$ symbols to record the results of comparisons.</p> <p>Measure and estimate lengths in standard units.</p> <p>2.MD.A.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes. (Product- Measurement Investigation)</p> <p>2.MD.A.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p> <p>2.MD.A.3 Estimate lengths using units of inches, feet, centimeters, and meters. (Product- Measurement Investigation)</p> <p>Reason with shapes and their attributes.</p> <p>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. (Product- Measurement Investigation)</p>	<p>through the development of a new or improved object or tool. (Product- Literary Connection)</p> <p>(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. (Product-Model, Measurement Investigation)</p> <p>(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.</p> <p>Disciplinary Core Ideas Structure and Properties of Matter (PS1.A:1.) Different kinds of matter exist and many of them can be either solid or liquid, depending on temperature. Matter can be described and classified by its observable properties. (2-PS1-1) (PS1.A:2.) Different properties are suited to different purposes. (2-PS1-2), (2-PS1-3) (PS1.A:3.) A great variety of objects can be built up from a small set of pieces. (2-PS1-3) Defining and Delimiting Engineering Problems (ETS1.A:2.) Asking questions, making observations, and gathering information are</p>		<p>Social Studies: Weeks: 13-18</p>	
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<p>c. Decode words with common prefixes and suffixes.</p> <p>e. Identify words within consistent but common spelling sound correspondences.</p> <p>f. Recognize and read grade appropriate irregularly spelled words.</p> <p>2.RF.4: Read with sufficient accuracy and fluency to support comprehension. ** (Introduce and Support)</p> <p>a. Read on---level text with purpose and understanding.</p> <p>b. Read on level text orally with accuracy, appropriate rate, and expression on successive readings.</p> <p>c. Use context to confirm or self-correct word recognition and understanding, rereading as necessary.</p> <p>Writing (Narrative)</p> <p>2.W.1: Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. (Product-Journal Prompt)</p> <p>2.W.2: Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section. (Product-Journal Prompt)</p> <p>2.W.3: Write narratives in which they recount well---elaborated event or short sequence of events, including details to describe actions, thoughts, and feelings, use temporal words to signal order, and provide a sense of closure. ** (Introduce and Support)</p> <p>2.W.5: With guidance and support from adults and peers, focus on a topic, and strengthen writing as needed by revising and editing. ** (Introduce and Support) (Product-Journal Prompt)</p> <p>2.W.7: Participate in shared research and writing projects (e.g., read a number of books on a single topic to produce a report; record science observations). (Product-Literary Connection)</p>		<p>helpful in thinking about problems. (K-2-ETS1-1) (ETS1.A:3.) Before beginning to design a solution, it is important to clearly understand the problem. (K-2-ETS1-1) Optimizing the Design Solution (ETS1.C:1.) Because there is always more than one possible solution to a problem, it is useful to compare and test designs. (K-2-ETS1-3)</p>			
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2.W.8: Recall information from experiences or gather information from provided sources to answer a question. **(Introduce and Support)

(Product- Literary Connection)

Speaking and Listening

2.SL.1: Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. **(Introduce and Support)

a. Follow agreed upon rules for discussions (e.g. gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion.) **(Product-Literary Connection)**

b. Build on others' talk in conversations by linking their comments and remarks to others.

(Product- Literary Connection)

c. Ask for clarification and further explanation as needed about the topics and texts under discussion. **(Product- Literary Connection)**

2.SL.2: Ask and answer questions about key details in a text read aloud or information presented orally or through other media. **
(Introduce and Support)

2.SL.3: Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue.
** (Introduce and Support)

2.SL.4: Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences. **(Introduce and Support)

2.SL.6: Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. **
(Introduce and Support) **(Product-Journal Prompt)**

Language

2.L.1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. ** (Introduce and Support)

a. Use collective nouns (e.g. group)

<p>b. Form and use frequently occurring irregular plural nouns (i.e. feet, children, teeth, mice, fish)</p> <p>d. Form and use the past tense of frequently occurring irregular verbs (e.g. sat, hid, told)</p> <p>e. Use adjectives and adverbs, and choose between them depending on what is being modified.</p> <p>f. Produce, expand, and rearrange complete simple and compound sentences (e.g. The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy.)</p> <p>2.L.2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. ** (Introduce and Support)</p> <p>a. Capitalize holidays, product names, and geographic names.</p> <p>b. Use commas in the greetings and closings of letters.</p> <p>c. Use an apostrophe to form contractions and frequently occurring possessives.</p> <p>d. Generalize learned spelling patterns when writing words(e.g. cage~badge; boy~boil)</p> <p>e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.</p> <p>2.L.4: Determine or clarify the meaning of unknown and multiple---meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. ** (Introduce and Support)</p> <p>a. Use sentence---level context as a clue to the meaning of a word or phrase.</p> <p>b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g.happy/unhappy,tell/retell)</p> <p>c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g. birdhouse, lighthouse, housefly, bookshelf, notebook, bookmark).</p> <p>2.L.5: Demonstrate understanding of word relationships and nuances in word meanings. ** (Introduce and Support)</p> <p>a. Identify real---life connections between words and their use (e.g. describe foods that are spicy or juicy).</p>					
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b. Distinguish shades of meaning among closely related verbs (e.g. toss, throw, hurl) and closely related adjectives(e.g. thin, skinny, slender).					
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PRAIRIE-HILLS ELEMENTARY SCHOOL DISTRICT 144

STEAM CURRICULUM MAP 2ND GRADE

QUARTER 4

PROJECT: EROSION

Forces from air, wind, water, and ice can change the land on our Earth. When these changes happen, it is called erosion. An example of erosion is when rocks and soil are broken down or moved. Erosion has caused the Earth to change very slowly over periods of time. Erosion can sometimes cause damage to land by taking away soil from healthy farmland or changing the shorelines near oceans, but other times it helps to create beautiful landforms. In fact, many of the most beautiful places on our Earth were formed by erosion. A few examples of these places are mountains, lakes, valleys and scenic coasts.

PRODUCTS – ILLUSTRATION, MODEL, BROCHURE, ORAL PRESENTATION, DIGITAL SLIDE SHOW, LOCAL EROSION PROJECT, JOURNAL PROMPT

STANDARDS				INSTRUCTIONAL RESOURCES	EXTENSIONS
READING	MATH	SCIENCE	SOCIAL SCIENCE		
Common Core Standards: Reading Literature 2.RL.1: Ask and answer questions such as who, what where, when, why, and how to demonstrate understanding of key details in text. (Mastered) 2.RL.2: Recount stories, including fables and folktales from diverse cultures, and determine their central message, lesson, or moral. (Mastered) 2.RL.3: Describe how characters in a story respond to major events and challenges. *(Mastered) 2.RL.4: Describe how words and phrases (e.g. regular beats, alliteration, rhymes, repeated lines) supply rhythm and meaning in a story, poem, or song. *(Mastered) 2.RL.6: Acknowledge differences in the points of view of characters,	Common Core Standards for Mathematics Measure and estimate lengths in standard units. 2.MD.A.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit. (Product-Model) Relate addition and subtraction to length. 2.MD.B.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to	Next Gen. Science Standards EARTH AND SPACE SCIENCE Earth's Place in the Universe (2-ESS1-1.) Make observations from media to construct an evidence-based account that Earth events can occur quickly or slowly. Disciplinary Core Ideas The History of Planet Earth (ESS1.C:1.) Some events happen very quickly; others occur very slowly, over a time period much longer than one can observe. (2-ESS1-1) (Product- Model, Brochure, Oral Presentation, Digital Slide	Processes, Rules, and Laws SS.CV.2.2: Describe how communities work to accomplish common tasks, establish responsibilities, and fulfill roles of authority. Perspectives SS.H.2.2: Compare individuals and groups who have shaped a significant historical change. Financial Literacy SS.EC.FL. 4.2.: Explain that money can be saved or spent on goods and services. Economic Decision Making SS.EC.1.2: Demonstrate how our choices can affect ourselves and others in positive and negative ways.	Reading MyOn Books: Living Beside the Ocean Erosion: Changing Earth's Surface Savaas Unit - 5 Math I-Ready Math: Review Lessons: 4, 12 Lessons 24, 25, 26, 27, 30-32 Science	Tour of the Grand Canyon (Showcase) Students can showcase their projects while teaching the community all about the Grand Canyon. Field Trip Idea: Lizzardo Rock Museum, Oakbrook, IL Chicago River Field Trip Multiple Sites

<p>including by speaking in a different voice for each character when reading dialogue. (Mastered)</p> <p>2.RL.7: Use information gained from the illustrations and words in print or digital text to demonstrate understanding of its characters, setting, or plot. (Mastered)</p> <p>2.RL.9: Compare and contrast two or more versions of the same story (e.g. Cinderella stories) by different authors or from different cultures. *(Mastered)</p> <p>Informational Text</p> <p>2.RI.1: Ask and answer such questions as who, what, where, when, why and how to demonstrate understanding of key details in text. *(Mastered) (Product-Brochure, Oral Presentation)</p> <p>2.RI.2: Identify the main topic of a multiparagraph text as well as the focus of specific paragraphs within the text. *(Mastered)</p> <p>2.RI.3: Describe the connection between a series of historical events, scientific ideas or concepts, or steps in technical procedures of a text. *(Mastered) (Product-Brochure, Oral Presentation)</p> <p>2.RI.4: Determine the meaning of words and phrases in a text relevant to a grade 2---topic subject area. *(Mastered)</p> <p>2.RI.5: Know and use various text features (e.g. captions, bold print, subheadings, glossaries, indexes, electronic menus, icons) to locate key facts in a text efficiently. *(Mastered) (Product-Journal Prompt)</p>	<p>represent the problem. (Product-Model)</p> <p>2.MD.B.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram. (Product-Model)</p> <p>Represent and interpret data.</p> <p>2.MD.D.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units. (Product-Model)</p> <p>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 problems1 using information presented in a bar graph.</p> <p>Reason with shapes and their attributes.</p> <p>2.G.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. (Product-Model)</p> <p>Work with equal groups of objects to gain foundations for multiplication.</p>	<p>Show, Local Erosion Project, Journal Prompt)</p> <p>Earth's Systems (2-ESS2-1.) Compare multiple solutions designed to slow or prevent wind or water from changing the shape of the land.</p> <p>Disciplinary Core Ideas Earth Materials and Systems (ESS2.A:1.) Wind and water can change the shape of the land. (2-ESS2-1) (Product-Model, Brochure, Oral Presentation, Digital Slide Show, Local Erosion Project, Journal Prompt)</p> <p>Earth's Systems (2-ESS2-2.) Develop a model to represent the shapes and kinds of land and bodies of water in an area. (Product- Model, Brochure)</p> <p>Disciplinary Core Ideas Plate Tectonics and Large-Scale System Interactions (ESS2.B:1.) Maps show where things are located. One can map the shapes and kinds of land and water in any area. (2-ESS2-2) (Product- Oral Presentation, Digital Slide Show, Local Erosion Project)</p> <p>Earth's Systems (2-ESS2-3.) Obtain information to identify where water is found on Earth and that it can be solid or liquid.</p>	<p>Exchange and Markets SS.EC.3.2: Compare the goods and services that people in the local community produce and those that are produced in other communities.</p>	<p>Studies Weekly Science: Grade 2 Weeks: 23, 24, 29, & 30</p> <p>Social Science</p> <p>Studies Weekly Social Studies: Grade 2 Weeks:19-24, & 30</p>	
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<p>2.RI.6: Identify the main purpose of a text, including what the author wants to answer, explain, or describe. (Mastered)</p> <p>2.RI.7: Explain how specific images (e.g. a diagram showing how a machine works) contribute to and clarify a text. *(Mastered)</p> <p>2.RI.8: Describe how reasons support specific points the author makes in a text. *(Mastered)</p> <p>2.RI.9: Compare and contrast the most important points presented by two texts on the same topic. *(Mastered)</p> <p>Foundational Skills</p> <p>2.RF.3: Know and apply grade level phonics and word analysis skills in decoding words. (Mastered)</p> <p>2.RF.4: Read with sufficient accuracy and fluency to support comprehension. *(Mastered)</p> <p>Writing- (Argumentative, Explanatory, Narrative) Text Types and Purposes</p> <p>2.W.1 Write opinion pieces in which they introduce the topic or book they are writing about, state an opinion, supply reasons that support the opinion, use linking words (e.g., because, and, also) to connect opinion and reasons, and provide a concluding statement or section. (Product- Oral Presentation)</p> <p>2.W.2 Write informative/explanatory texts in which they introduce a topic, use facts and definitions to develop points, and provide a concluding statement or section. (Product- Oral Presentation, Journal Prompt)</p> <p>2.W.3: Write narratives in which they recount well---elaborated event or short sequence of events, including details to</p>	<p>2.OA.C.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends. (Product-Model)</p> <p>2.OA.C.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends. (Product-Model)</p> <p>Understand place value.</p> <p>2.NBT.A.1.B The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones)</p>	<p>(Product-Digital Slide Show)</p>			
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describe actions, thoughts, and feelings, use temporal words to signal order, and provide a sense of closure.

*(Mastered) (Product-Journal Prompt)

2.W.5: With guidance and support from adults and peers, focus on a topic, and strengthen writing as needed by revising and Editing.

*(Mastered) (Product- Oral Presentation, Journal Prompt)

2.W.6: With guidance and support from adults, use a variety of digital tools to produce and publish writing, including

collaboration with peers. *(Mastered) (Product-Digital Slide Show)

2.W.7: Participate in shared research and writing projects (e.g. read a number of books on a single topic to produce a

report, record science observations). *(Mastered) (Product- Brochure, Oral Presentation Local Erosion Project)

2.W.8: Recall information from experiences or gather information from provided sources to answer a question.

*(Mastered) (Product- Illustration, Brochure, Local Erosion Project, Journal Prompt)

Speaking and Listening

2.SL.1: Participate in collaborative conversations with diverse partners about grade 2 topics and texts with peers and adults in small and larger groups. (Mastered)

a. Follow agreed upon rules for discussions (e.g. gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion.)

b. Build on others' talk in conversations by linking their comments and remarks to others.

<p>c. Ask for clarification and further explanation as needed about the topics and texts under discussion.</p> <p>2.SL.2: Ask and answer questions about key details in a text read aloud or information presented orally or through other media. (Mastered)</p> <p>2.SL.3: Ask and answer questions about what a speaker says in order to clarify comprehension, gather additional information, or deepen understanding of a topic or issue. *(Bold)</p> <p>2.SL.4: Tell a story or recount an experience with appropriate facts and relevant, descriptive details, speaking audibly in coherent sentences. *(Mastered)</p> <p>(Product- Oral Presentation)</p> <p>2.SL.5: Create audio recordings of stories or poems; add drawings or other visual displays to stories or recounts of experiences when appropriate to clarify ideas, thoughts, and feelings. *(Mastered)</p> <p>2.SL.6: Produce complete sentences when appropriate to task and situation in order to provide requested detail or clarification. *(Mastered) (Product- Oral Presentation)</p> <p>Language</p> <p>2.L.1: Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. (Mastered)</p> <p>a. Use collective nouns (e.g. group)</p> <p>b. Form and use frequently occurring irregular plural nouns (e.g. feet, children, teeth, mice, fish)</p> <p>c. Use reflexive nouns (e.g. myself, ourselves)</p> <p>d. Form and use the past tense of frequently occurring irregular verbs (e.g. sat, hid, told)</p>					
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<p>e. Use adjectives and adverbs, and choose between them depending on what is being modified.</p> <p>f. Produce, expand, and rearrange complete simple and compound sentences (e.g. The boy watched the movie; The little boy watched the movie; The action movie was watched by the little boy.)</p> <p>(Product- Oral Presentation)</p> <p>2.L.2: Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.</p> <p>(Mastered)</p> <p>a. Capitalize holidays, product names, and geographic names.</p> <p>b. Use commas in the greetings and closings of letters.</p> <p>c. Use an apostrophe to form contractions and frequently occurring possessives.</p> <p>d. Generalize learned spelling patterns when writing words (e.g. cage~badge; boy~boil)</p> <p>e. Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.</p> <p>2.L.3: Use knowledge of language and its conventions when writing, speaking, reading, or listening.</p> <p>a. Compare formal and informal uses of English. *(Mastered)</p> <p>2.L.4: Determine or clarify the meaning of unknown and multiple---meaning words and phrases based on grade 2 reading and content, choosing flexibly from an array of strategies. *(Mastered)</p> <p>a. Use sentence level context as a clue to the meaning of a word or phrase.</p> <p>b. Determine the meaning of the new word formed when a known prefix is added to a known word (e.g. happy/unhappy, tell/retell)</p>					
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c. Use a known root word as a clue to the meaning of an unknown word with the same root (e.g. birdhouse, lighthouse, housefly, bookshelf, notebook, bookmark).

Additional Standards

2.L.5: Demonstrate understanding of word relationships and nuances in word meanings. * (Mastered)

a. Identify real---life connections between words and their use (e.g. describe foods that are spicy or juicy)

b. Distinguish shades of meaning among closely related verbs (e.g. toss, throw, hurl) and closely related adjectives

(e.g. thin, skinny, slender)

2.L.6: Use words and phrases acquired through conversations, reading and being read to, and responding to texts, including using adjectives and adverbs to describe (e.g. When other kids are happy that makes me happy).

*(Mastered)

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