

Unit 4: Communicating with Sound and Light WEEK 7 At a Glance

Weekly Question: How do inventors and innovators make a difference?			
<p>Texts</p> 	<p>Vocabulary and Language</p> <p>Day 1: Introduce Weekly Words: engineer, invent, improve</p> <p>Day 2: Introduce Weekly Words: innovate, creativity, persevere</p> <p>Day 3: Root Words</p> <p>Day 4: Root Words</p> <p>Day 5: Carousel Brainstorm</p>		
 	<p>Text Talk</p> <p>Day 1: <i>Marvelous Mattie: How Margaret E. Knight Became an Inventor</i>, Read 1</p> <p>Day 2: <i>Marvelous Mattie</i>, Read 2</p> <p>Day 3: <i>Marvelous Mattie</i>, Read 3</p> <p>Day 4: “Lewis Latimer and the Long-Lasting Light Bulb” slides (End of Unit Assessment)</p> <p>Day 5: <i>The Lizard and the Sun</i>, Read 1</p>		
	<p>Stations On Day 4, the End of Unit Assessment is administered.</p> <p>Shared Reading: “Garrett Morgan”</p> <p>Independent and Partner Reading</p> <p>Listening & Speaking: Talk, Draw, Talk; Listen & Respond (<i>Marvelous Mattie</i>)</p> <p>Science Literacy: How can I use the engineering design process to improve my project?</p> <p>Vocabulary: Draw for Meaning</p> <p>Word Work: align with phonics program</p>		
<p>Mentor Texts</p> 	<table border="1"> <tr> <td data-bbox="410 1346 800 1520"> <p>Science and Engineering</p> <p>Lessons 1 & 2: Using the Engineering Design Process</p> </td> <td data-bbox="808 1346 1424 1520"> <p>Studios</p> <p>Children continue working on communication tools and begin other ideas for the Look and Listen! Project.</p> </td> </tr> </table>	<p>Science and Engineering</p> <p>Lessons 1 & 2: Using the Engineering Design Process</p>	<p>Studios</p> <p>Children continue working on communication tools and begin other ideas for the Look and Listen! Project.</p>
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	<p>Writing: Explanation</p> <p>Days 1-3: Individual Construction, Deconstruction, and Revision</p> <p>Day 4: Individual Construction: Phenomenon Statement</p> <p>Day 5: Peer-to-Peer Feedback</p>		

At a Glance U4 W7

Unit 4: Communicating with Sound and Light

WEEK 7 Days 1 & 2

Vocabulary & Language
Weekly Words

Weekly Question	How do inventors and innovators make a difference?				
Language Objectives	I can talk with my classmates about words. (SL.1.1) I can connect words to my own real-life experiences. (L.5.1.c)				
Vocabulary	<table border="1" style="width: 100%;"> <tr> <td style="background-color: #cccccc;">Day 1</td> </tr> <tr> <td> <p>engineer: someone who designs and builds engines, machines, or structures</p> <p>invent: to create or design something that did not exist before</p> <p>improve: to make better</p> </td> </tr> <tr> <td style="background-color: #cccccc;">Day 2</td> </tr> <tr> <td> <p>innovate: to make changes in something that already exists</p> <p>creativity: the use of imagination, such as to design inventions, produce art, and solve problems in new ways</p> <p>persevere: to keep trying in the face of difficulty</p> </td> </tr> </table>	Day 1	<p>engineer: someone who designs and builds engines, machines, or structures</p> <p>invent: to create or design something that did not exist before</p> <p>improve: to make better</p>	Day 2	<p>innovate: to make changes in something that already exists</p> <p>creativity: the use of imagination, such as to design inventions, produce art, and solve problems in new ways</p> <p>persevere: to keep trying in the face of difficulty</p>
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Materials and Preparation	<ul style="list-style-type: none"> ● Week 7 Weekly Words cards ● chart paper <p>Create the week’s Weekly Words chart by writing out the Weekly Words and their definitions. Add icons, sketches, or images as needed.</p>				
Opening Day 1	<p><i>Today we’ll start a new list of Weekly Words. These words come from the books that we read and the big ideas from our study, Communicating with Sound and Light. Today’s words are engineer, invent, and improve.</i></p>				

Day 2	<i>Let's continue learning our words for this week. Today's words are innovate, creativity, and persevere.</i>
<p>Discussion Day 1</p>	<p>Follow the steps of the Weekly Words routine. Refer to the chart and explain each step as needed. Hold up the appropriate word card as each word is taught.</p> <hr/> <p>engineer Elaboration: <i>There are many different types of engineers. Civil engineers design buildings, roads, and bridges; computer engineers design the circuits in smartphones, tablets, and computers; and sound engineers make sure that the sound in a concert is of top quality.</i></p> <p>Think, Pair, Share prompt: <i>What type of engineer would you like to be? Why?</i></p> <hr/> <p>invent Elaboration: <i>When people invent something, they come up with a plan, build the invention, and make sure that it works as they intended it. The girls in the image are building and testing the motion sensing light-switch they invented.</i></p> <p>Think, Pair, Share prompt: <i>Have you invented something? Do you know anybody who invented something? You might think of a character from a text or someone in real life. Tell your partner about it.</i></p> <hr/> <p>improve Elaboration: <i>Over time, engineers continue to improve the light bulbs we use. Most of the light bulbs we use now are LED, they use less energy and last much longer than regular light bulbs. That is an improvement that benefits the environment and our budgets.</i></p> <p>Think, Pair, Share prompt: <i>What is one technology you use now that you think needs to be improved? Why?</i></p>
Day 2	<p>innovate Elaboration: <i>Many people who are hard of hearing or deaf use a tool to help them hear. In the past, hearing aids were very big and people carried them in their hands. Doctors and engineers worked together to innovate. These days, hearing aids are very small, and people can wear them inside their ears.</i></p>

	<p>Think, Pair, Share prompt: <i>What is something you would like to innovate to make life easier?</i></p> <hr/> <p>creativity Elaboration: <i>When you work in Studios, I observe a lot of creativity in the way you approach the materials. You come up with ideas about how to use materials in ways we have not used them before, just as inventors, innovators, and artists do.</i></p> <p>Think, Pair, Share prompt: <i>What is an act of creativity that you observed a friend or family member doing?</i></p> <hr/> <p>persevere Elaboration: <i>When something is hard we can stay at it and work for a long time until we figure it out. Moving through the monkey bars is very challenging for some children. But if you persevere, you can master them!</i></p> <p>Think, Pair, Share prompt: <i>When did you persevere at something until you mastered it?</i></p>
Closing	<i>This week, we're talking about how inventors and innovators make a difference. The words we're studying will help us to talk about what is involved when people invent and innovate.</i>
Standards	<p>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.</p> <p>L.5.1.c Identify real-life connections between words and their use (e.g., note places at home that are cozy).</p>
Ongoing assessment	<p>How do children interact with new and familiar words? How do children respond when they discover an error in their understanding or use of a word? How flexible are they when confronted with new definitions? How do children talk with peers about new words—do they use gestures, substitute familiar words, dig for descriptions, tell stories?</p> <p>Make notes about children’s familiarity with various kinds of words and the connections they make to specific words. Use this information to plan for embedded opportunities for teaching and reinforcing words.</p>

	<p>Use of a strategy such as pulling equity (name) sticks supports the participation of all children. Even with this kind of strategy, some children will benefit from extra turns for verbal participation.</p> <p>Maintaining a class vocabulary list will help track children’s vocabulary growth over time.</p>
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Notes

Large empty rectangular box for taking notes.



engineer

<https://www.pinterest.co.uk/pin/477381629243445290/>



invent

https://www.washingtonpost.com/lifestyle/kidspost/museum-helps-kids-learn-skills-to-invent-the-future/2018/10/29/5c64e4d0-d6e6-11e8-83a2-d1c3da28d6b6_story.html

Weekly Words U4 W7

Focus on First/ 1st Grade for ME | Boston Public Schools Department of Early Childhood P-2/
Maine Department of Education



improve

<https://articles.bplans.com/10-tips-to-improve-business-efficiency/>



innovate

eniorplanet.org/not-your-grandpas-a-hearing-aid-history/
<https://www.retirementliving.com/hearing-aid-technology>

Weekly Words U4 W7

Focus on First/ 1st Grade for ME | Boston Public Schools Department of Early Childhood P-2/
Maine Department of Education



creativity

<https://www.naeyc.org/resources/blog/making-tinkering-and-toy-store-project>



persevere

<https://mystudentvoices.com/how-to-persevere-like-a-4-year-old-adb1e418bde3>

Weekly Words U4 W7

Focus on First/ 1st Grade for ME | Boston Public Schools Department of Early Childhood P-2/
Maine Department of Education

Weekly Words U4 W7

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Maine Department of Education

WEEK 7 Day 3

Vocabulary & Language
Root Words

Weekly Question	How do inventors and innovators make a difference?
Language Objective	I can use what I know about root words to determine the meaning of new words. (L.4.1.c)
Vocabulary	noun: a word that names a person, place, thing, or idea verb: a word that expresses a physical action, mental action, or state of being
Materials and Preparation	<ul style="list-style-type: none"> • Root Words slides
Opening	<i>When we read, we can use what we know about words to understand the meanings of new words. Today we are going to practice determining the meaning of new words by looking closely at their root words.</i>
Discussion slide 2	<i>Take a look at this word. Let's read it together. "Engineering" might be a new word to you. But, the root word, "engineer," is one of our Weekly Words from this week. Let's review the meaning of the word "engineer."</i>
slide 3	Review the meaning of "engineer."
slide 4	<i>We know what the root word "engineer" means, so let's figure out what "engineering" means. What do you think it means?</i> Facilitate a discussion of the meaning of the word, based on the meaning of the root word. Introduce that the word "engineering" is a noun.
slide 5	<i>Take a look at this word. Let's read it together. "Innovation" might be a new word to you. But, the root word, "innovate," is one of our Weekly Words from this week. Let's review the meaning of the word "innovate."</i>

slide 6	Review the meaning of “innovate.”
slide 7	<i>We know what the root word “innovate” means, so let’s figure out what “innovation” means. What do you think it means?</i> Facilitate a discussion of the meaning of the word, based on the meaning of the root word. Introduce that the word “innovation” is a noun.
slide 8	<i>Take a look at this word. Let’s read it together. “Invention” might be a new word to you. But, the root word, “invent,” is one of our Weekly Words from this week. Let’s review the meaning of the word “invent.”</i>
slide 9	Review the meaning of “invent.”
slide 10	<i>We know what the root word “invent” means, so let’s figure out what “invention” means. What do you think it means?</i> Facilitate a discussion of the meaning of the word, based on the meaning of the root word. Introduce that the word “invention” is a noun.
Closing	<i>Today we used known root words to determine the meaning of unknown new words.</i>
Standard	L.4.1.c Identify frequently occurring root words (e.g., look) and their inflectional forms (e.g., looks, looked, looking).
Ongoing assessment	Reflect on the lesson. Do children accurately identify the meaning of new words? To what extent do they apply their knowledge of the meaning of the root word to determine the meaning of the new word? (Children might not exactly define the new word, but to what extent are they able to make educated guesses about the meaning based on their knowledge of the root word?)

Notes

WEEK 7 Day 4

Vocabulary & Language
Root Words

Weekly Question	How do inventors and innovators make a difference?
Language Objective	I can use sentence context and what I know about root words to determine the meaning of new words. (L.4.1.c, L.4.1.b)
Vocabulary	noun: a word that names a person, place, thing, or idea verb: a word that expresses a physical action, mental action, or state of being
Materials and Preparation	<ul style="list-style-type: none"> • Root Words slides, from Day 3
Opening	<i>Yesterday we learned that we can use root words we know to determine the meaning of new words. Today we are going to continue that work as we look closely at new words in sentences.</i>
Discussion Slide 11	<p><i>Let's read this sentence together.</i> <i>The new word here is "improvement." If you already know what it means, don't say it yet!</i> <i>Let's look at the word "improvement" in this sentence. What part of speech is it? Is it a noun that names something or a verb that shows action?</i></p> <p><i>It's a noun!</i> <i>Now let's think more about the word. What root word sounds like "improvement," that could help us figure out what "improvement" means?</i></p> <p><i>One of our Weekly Words this week is "improve." Let's review the definition of "improve" before we come back to the sentence to determine the meaning of "improve."</i></p>
slide 12	Review the definition of "improve."

slide 13	<p><i>The root word “improve” is a verb. Now that we’ve reviewed the definition of “improve,” let’s think about the meaning of the noun “improvement.” What could it mean?</i></p> <p>Facilitate a discussion of the meaning of the word, based on the meaning of the root word and the sentence context.</p>
slide 14	<p><i>Let’s read another sentence together. The new word here is “perseverance.” If you already know what it means, don’t say it yet! Let’s look at the word “perseverance” in this sentence. What part of speech is it? Is it a noun that names something or a verb that shows action?</i></p> <p><i>It’s a noun! Now let’s think more about the word. What root word sounds like “perseverance,” that could help us figure out what “perseverance” means?</i></p> <p><i>One of our Weekly Words is “persevere.”</i></p>
slide 15	Review the definition of “persevere.”
slide 16	<p><i>The root word “persevere” is a verb. Now that we’ve reviewed the definition of “persevere,” let’s think about the meaning of the noun “perseverance.” What could it mean?</i></p> <p>Facilitate a discussion of the meaning of the word, based on the meaning of the root word and the sentence context.</p>
Closing	<i>Today we used sentence context and root words to determine the meaning of new words.</i>
Standards	<p>L.4.1.c Identify frequently occurring root words (e.g., look) and their inflectional forms (e.g., looks, looked, looking).</p> <p>L.4.1.b Use frequently occurring affixes as a clue to the meaning of a word.</p>
Ongoing assessment	<p>Reflect on the lesson.</p> <p>Do children accurately identify the part of speech of the word in the sentence context?</p> <p>Do children accurately identify the meaning of new words?</p> <p>To what extent do they apply their knowledge of the meaning of the root word to determine the meaning of the new word? (Children might not exactly define the new word, but to what extent are they able to make educated guesses about the meaning based on their knowledge of the root word?)</p>

Unit 4: Communicating with Sound and Light

WEEK 7 Day 5

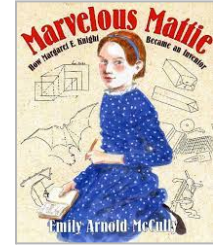
Vocabulary & Language
Carousel Brainstorm

Weekly Question	How do inventors and innovators make a difference?
Language Objective	I can talk with my classmates about important vocabulary from our unit texts and big ideas. (SL.1.1)
Vocabulary	engineer: someone who designs and builds engines, machines, or structures invent: to create or design something that did not exist before improve: to make better innovate: to make changes in something that already exists creativity: the use of imagination, such as to design inventions, produce art, and solve problems in new ways persevere: to keep trying in the face of difficulty
Materials and Preparation	<ul style="list-style-type: none">● chart paper, 4 pieces, with one of the Weekly Words in the center of each, set out around the classroom● markers, one for each child● timer or stopwatch
Opening	<i>This week as we move through the Carousel Brainstorm, we'll think about our Weekly Words and about some of the ways people invent and innovate.</i>
Key Activity	Show the vocabulary cards and review definitions for all of the Weekly Words, highlighting those selected for the Carousel Brainstorm. Talk briefly about some possibilities for recording understanding about one of the words. Direct each group to a particular paper and then begin the timer.

	Circulate as children work, noting their use and representation of each word.
Closing	In the whole group, share the work from the papers, highlighting different ways of demonstrating word knowledge.
Standards	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.
Ongoing assessment	<p>As children work, circulate and take notes on the Carousel Brainstorm Assessment Tool to record children’s understanding, misconception, and use of vocabulary words. Use these to plan for reteaching and reinforcement.</p> <p>Listen to children’s conversations as they circulate. How do children participate?</p> <p>Review each sheet of chart paper. Do children’s drawings and writing reflect an understanding of the vocabulary words?</p>

Notes

WEEK 7 Day 1



Text Talk
Marvelous Mattie: How Margaret E. Knight Became an Inventor
 Read 1 of 3, Pages 1-16

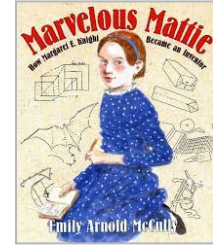
Big Ideas	<p>People innovate and invent to solve problems.</p> <p>Humans and other animals communicate with light and sound.</p>
Weekly Question	How do inventors and innovators make a difference?
Content Objective	I can ask and answer questions about key details in the story in order to understand the characters and setting in a historical time-period. (R.4.1.a, R.6.1.a)
Language Objectives	<p>I can use context to determine the meaning of unfamiliar vocabulary in the text. (L.4.1.a)</p> <p>I can build on my classmate’s ideas in group and partner discussion. (SL.1.1.b)</p>
Vocabulary	<p>brainstorm: thinking through various solutions and ideas</p> <p>discouraged: disheartened; having lost confidence</p> <p>invent: to create or design something that did not exist before</p> <p>improve: to make better</p> <p>lawyer: a person who practices or studies the law</p> <p>locomotive: a powered train car that pulls the rest of the train</p> <p>originality: thinking independently and creatively</p> <p>production: that act of making or manufacturing a product</p> <p>prove: to demonstrate the truth with evidence</p>

	<p>mill: a building with machinery; a factory</p>
<p>Materials and Preparation</p>	<ul style="list-style-type: none"> ● <i>Marvelous Mattie: How Margaret E. Knight Became an Inventor</i>, Emily Arnold McCully Pre-mark page numbers in the book so that page 1 begins with “Mattie Knight lived...” ● Sentence Frames for Discussion Chart (I agree/disagree with ____ because ____.) <p>On the whiteboard write: What do we know about Mattie so far?</p>
<p>Opening 3 minutes</p>	<p>Introduce the text and set a purpose. <i>Last week we began learning about inventors using light and sound to creatively solve problems. This week we’ll read a biography of an inventor and think about how inventors and innovators make a difference in our world.</i></p> <p><i>This inventor is Margaret E. Knight, and the text is titled <i>Marvelous Mattie: How Margaret E. Knight Became an Inventor</i>. Emily Arnold McCully wrote this biography in the form of a story. So although it has true historical information, we’ll read and analyze it the way we read stories—we’ll begin by getting to know the characters and the setting.</i></p> <p><i>Margaret E. Knight lived during the same time period as Lewis Latimer; she was born in 1838 and he was born in 1848. What are some things we learned about the 1800s by reading the biography of Lewis Latimer?</i></p> <p>Harvest a few ideas, then provide some context. <i>A lot of things we use today, such as light bulbs, were invented during a time known as the Industrial Revolution in the United States. People began to use more machines in factories to produce things people needed in everyday life. These machines made it possible to make many of each item quickly that would have taken much longer for people to make by hand.</i></p> <p><i>Are you making any connections to what we have learned about where resources come from? [for example, machines can assemble many sneakers quickly]</i></p> <p><i>People were very interested in this idea of making great numbers of things quickly. With many factories opening, it was a great time to be an inventor! We can use the key details in this story to uncover</i></p>

	<p><i>what life was like in the 1850s for Mattie. We'll also read to find out how Mattie responded to the challenges she faced.</i></p> <p><i>Today we'll read the first half of the story and consider the question, What do we know about Mattie so far?</i></p>
<p>Text and Discussion 13 minutes page 1</p>	<p><i>A widow is someone whose spouse (husband) has died.</i></p> <p><i>What does it mean, "They were poor, but Maddie didn't feel poor?" What does this tell us about what life was like for her?</i></p> <p>Harvest several ideas.</p> <p><i>Why do you think her brothers called her sketches "brainstorms"? Turn and tell a partner.</i></p> <p><i>A brainstorm is when people come up with ideas or solutions to a problem. We brainstorm together to create a list, for example. Who else, both real and fictional, have we learned about who sketched his or her brainstorm? [Rosie Revere, Lewis Latimer]</i></p> <p>Give children a moment to look closely at the sketch of the foot warmer and connect it with the words of the text.</p>
<p>page 3</p>	<p>Read the last two sentences a second time, beginning with "Their mother shook her head."</p> <p><i>Why do you think their mother shakes her head and describes Mattie as "a strange girl"? What does this tell us about this time period?</i></p> <p>Harvest several ideas and reactions.</p>
<p>page 4</p>	<p><i>Why would someone say, "A girl couldn't make that"? How does this help us understand more about the time period?</i></p> <p>Harvest several ideas and reactions.</p> <p><i>It is unfair to think that a girl couldn't invent a kite. The belief that girls are not as smart or as capable as boys is called sexism. As we keep reading, we'll see how Mattie responded to sexism she faced.</i></p>
<p>page 6</p>	<p><i>A mill is a type of factory with machinery in it. Some mills grind wheat into flour. A textile mill is where fabrics are produced.</i></p>
<p>page 8</p>	<p><i>What do you think is the job of an overseer?</i></p> <p>Collaboratively define the word "overseer" using sentence level context and word parts.</p>
<p>pages 9- 10</p>	<p><i>What do we learn about Mattie here?</i></p> <p>Harvest a few ideas and prompt children to reference details in the text.</p>

page 14	Pause to explain how threads could snap and the meaning of “making missiles of the shuttles.”
page 16	<p>Read to the end of the page.</p> <p style="text-align: center;"><i>We learned something about patents last week when we read about Lewis Latimer.</i></p> <p>Reread the last paragraph of page 16, and explain the meaning of “patent.”</p> <p>Stop reading at the end of this page.</p>
Key Discussion and Activity 8 minutes	<p>Refer to the Sentence Frames for Discussion.</p> <p style="text-align: center;"><i>Why do you think Mr. Baldwin says, “But I guess they wouldn’t give a patent to a little girl?” What does this tell us about what the 1850s were like for girls and women?</i></p> <p style="text-align: center;"><i>Do you think Mr. Baldwin believes in Mattie? Why or why not?</i></p> <p>Facilitate a discussion, prompting children to refer back to key details in the story and to build on each other’s ideas.</p> <p>Think, Pair, Share.</p> <p>Prompt 1: <i>What do we know about Mattie so far?</i></p> <p>Prompt 2: <i>Based on what we are learning about the time period and about Mattie, what do you predict will happen? Will she get a patent for her inventions? Why or why not?</i></p>
Closing 1 minute	<i>Tomorrow we’ll read the rest of this true story about Margaret Knight, and you’ll see if your predictions are on track!</i>
Standards	<p>R.4.1.a Ask and answer questions about who, what, when, where, and how.</p> <p>R.6.1.a Describe characters, settings, and major events in a story, including details about who, what, when, where, and how.</p> <p>L.4.1.a Use sentence-level context as a clue to the meaning of a word or phrase.</p> <p>SL.1.1.b Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</p>
Ongoing assessment	<p>Listen to children’s responses during whole group conversations and Think, Pair, Share.</p> <p>What do children communicate about the historical time period?</p> <p>What do children communicate about the setting and characters?</p> <p>How do children use context to make meaning of unfamiliar words?</p> <p>Do children use key details to answer questions and make predictions?</p>

WEEK 7 Day 2



Text Talk
Marvelous Mattie: How Margaret E. Knight Became an Inventor
 Read 2 of 3, Pages 16-28

Big Ideas	People innovate and invent to solve problems.
Weekly Question	How do inventors and innovators make a difference?
Content Objective	I can retell key details to describe a central message about a character orally and in writing. (R.5.1.a, R.6.1.a, W.1.1.b)
Language Objectives	<p>I can use context to determine the meaning of unfamiliar vocabulary in the text. (L.4.1.a)</p> <p>I can add drawings to my response in order to elaborate on my ideas. (SL.3.1.b)</p>
Vocabulary	<p>brainstorm: thinking through various solutions and ideas</p> <p>discouraged: disheartened; having lost confidence</p> <p>invent: to create or design something that did not exist before</p> <p>improve: to make better</p> <p>lawyer: a person who practices or studies the law</p> <p>locomotive: a powered train car that pulls the rest of the train</p> <p>originality: thinking independently and creatively</p> <p>production: that act of making or manufacturing a product</p> <p>prove: to demonstrate the truth with evidence</p> <p>mill: a building with machinery; a factory</p>
Materials and Preparation	<ul style="list-style-type: none"> <i>Marvelous Mattie: How Margaret E. Knight Became an Inventor</i>, Emily Arnold McCully

	<ul style="list-style-type: none"> ● a typical paper grocery bag ● writing response sheet, copy for each child ● writing tools <p>On the whiteboard write: How did Mattie demonstrate perseverance?</p>
<p>Opening 2 minutes</p>	<p>Introduce the text and set a purpose. <i>Yesterday we began reading the biography, Marvelous Mattie: How Margaret E. Knight Became an Inventor by Emily Arnold McCully. We learned a bit about what it was like to be a girl growing up in the 1850s.</i></p> <p><i>Today we'll continue reading the story to find out how Mattie grows and develops into adulthood. We'll think, draw, and write about this question: How did Mattie demonstrate perseverance?</i></p> <p><i>We've talked before about the word perseverance; it's one of our Weekly Words this week. What does it mean to have perseverance?</i></p> <p>Harvest a few responses. Highlight examples children cite of other characters and historical figures from unit texts.</p>
<p>Text and Discussion 10 minutes</p> <p>page 16</p>	<p>Show the page. Invite children to retell the key event. Reread the page if needed to reorient to the story.</p>
<p>page 17</p>	<p><i>Listen again to how the author describes the paper bags that were made at the factory where Mattie worked.</i></p> <p>Reread from "Its machines..." to the end of the page.</p> <p><i>How were these bags different from the paper bags we get today from the grocery store? Let's look at one to help us.</i></p> <p>Show children the paper bag, and invite children to make observations to compare it to the description in the text.</p>
<p>Pages 19-20</p>	<p><i>How is Mattie showing perseverance on these pages? Turn and talk with a partner.</i></p> <p>Encourage children to refer to key details as they talk.</p>
<p>page 21</p>	<p><i>Based on the details in the text, what do you think the expression "by trial and error" means?</i></p> <p>Harvest a few responses, and provide a definition and example.</p> <p>Reread the second paragraph.</p>

	<i>How does this paragraph help us understand how Mattie showed perseverance?</i>
page 23	<i>What do you notice about this illustration of the inventors' club? How would you describe the other inventors?</i> Children may notice and have reactions to the homogeneity of the group. Surface connections to learning about Lewis Latimer as the only Black inventor in the Edison Pioneers.
page 24	<i>What did the shop foreman, the person who manages other workers, assume about the invention? Why do you think he assumed this?</i> Harvest children's ideas. Highlight connections to the conversation about gender in the previous lesson.
page 25	<i>How do you think Mattie will prove the idea is hers?</i> Harvest several responses. Offer scaffolding questions such as, What specific evidence might Mattie have to show that she invented this machine?
page 26	<i>A lawyer helps people in a court of law. A lawyer can help people like Mattie make an argument with evidence and reasons.</i> Read to the end of the text.
Key Discussion and Activity 12 minutes	<i>Now we will have a chance to talk, draw, and write about how Mattie Knight showed perseverance throughout her life.</i> Refer to the question on the whiteboard. <i>Turn and talk: How did Mattie demonstrate perseverance? Remember to support your ideas with details from the story.</i> Distribute the response sheets, and send children to draw and write.
Closing 1 minute	As time permits, bring children back to the whole group, and invite a few children to share their work. <i>Tomorrow we'll think more about how Mattie was both an inventor and an innovator, and how she made a difference.</i>
Standards	R.5.1.a Retell texts, including details about who, what, when, where, and how; demonstrate an understanding of the theme. R.6.1.a Describe characters, settings, and major events in a story, including details about who, what, when, where, and how. L.4.1.a Use sentence-level context as a clue to the meaning of a word or phrase. SL.3.1.b Add drawings or other visual displays to descriptions when appropriate to clarify ideas, thoughts, and feelings. W.1.1.b Gather information from provided sources and/or recall information from experiences in order to answer questions with guidance and support from adults.

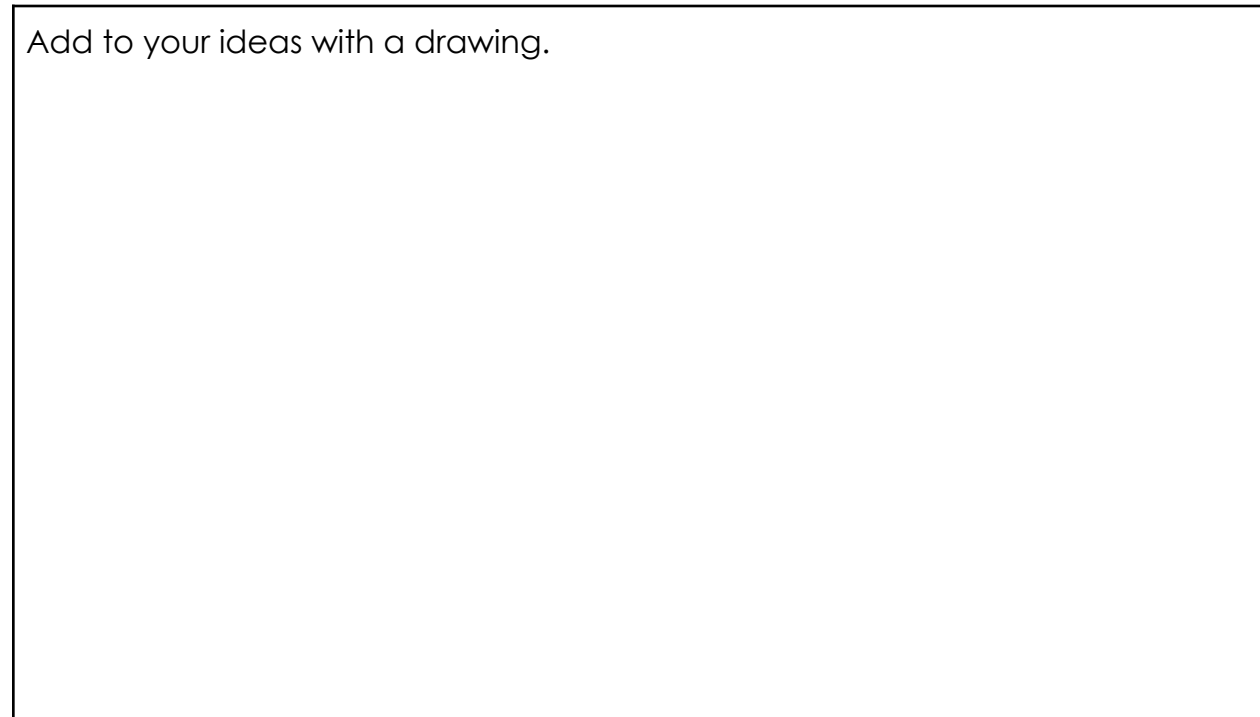
Ongoing assessment	Listen to children’s responses during whole group and partner conversations. Do children use key details to answer questions about the text? What examples from the story do children cite when describing Mattie’s perseverance? How do children use context to make meaning of unfamiliar words? Observe children’s writing. How do children’s written ideas align with their oral responses? Do children provide specific examples from the text to support their ideas? What do children communicate in their drawings?
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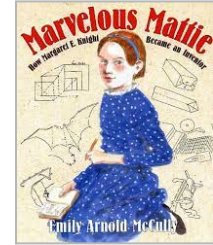
How did Mattie demonstrate perseverance?
Use at least two examples from the text to support your response.

Add to your ideas with a drawing.



Text Talk U4 W7 D2

WEEK 7 Day 3



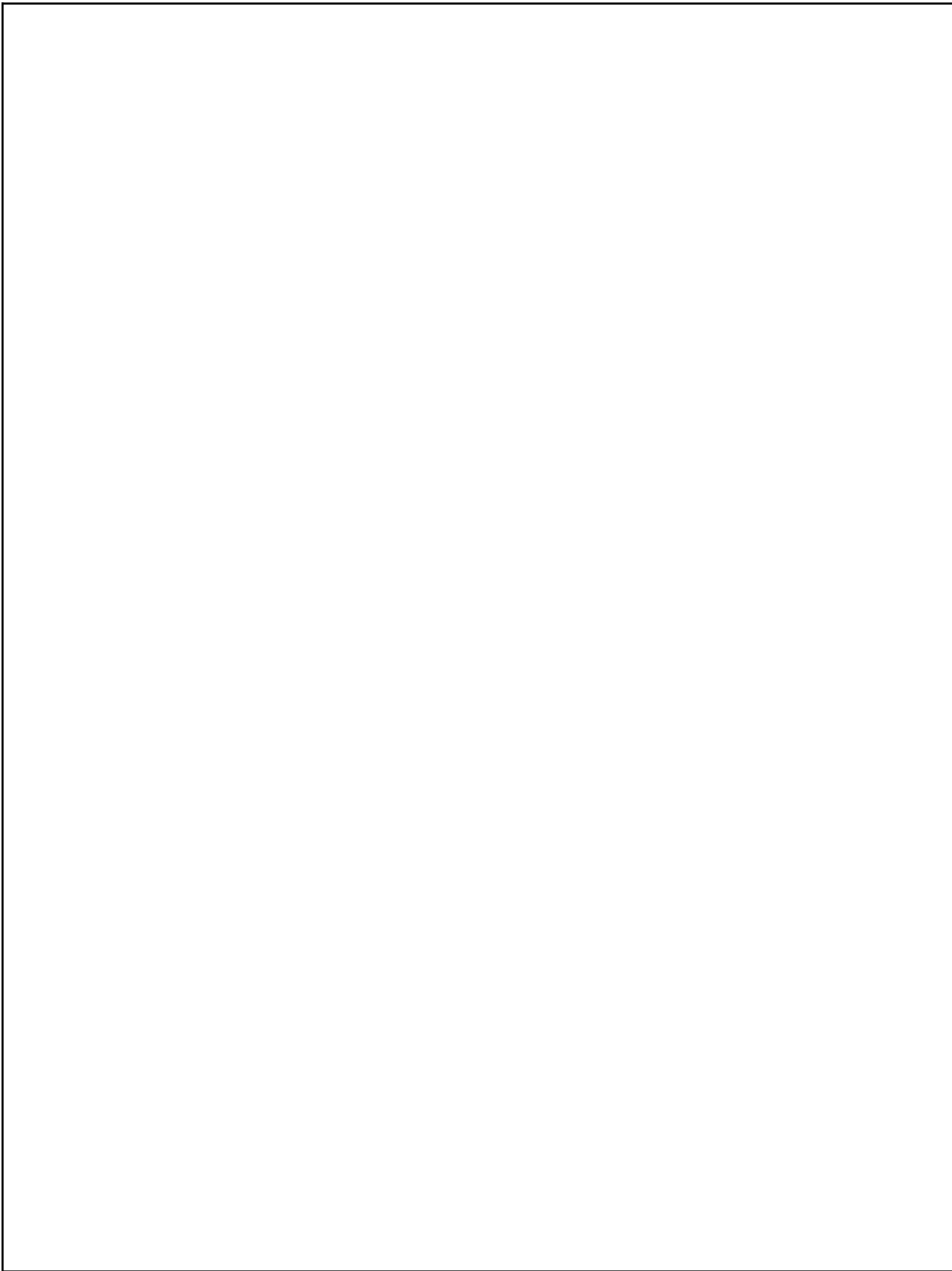
Text Talk
Marvelous Mattie: How Margaret E. Knight Became an Inventor
 Read 3 of 3

Big Ideas	People innovate and invent to solve problems.
Weekly Question	How do inventors and innovators make a difference?
Content Objective	I can connect ideas from a historical text in order to explain how Mattie Knight was an innovator and inventor who made a difference in her community. (R.1.b)
Language Objective	I can use vocabulary from the text and from the unit to engage in a discussion and build on my classmate’s ideas. (SL.1.1.b, L.6.1)
SEL Objective (BOSTON SEL Standards)	I can identify what inspires me and my aspirations. (SA 4.3)
Vocabulary	<p>innovate: to make changes in something that already exists</p> <p>brainstorm: thinking through various solutions and ideas</p> <p>discouraged: disheartened; having lost confidence</p> <p>invent: to create or design something that did not exist before</p> <p>improve: to make better</p> <p>lawyer: a person who practices or studies the law</p> <p>locomotive: a powered train car that pulls the rest of the train</p> <p>originality: thinking independently and creatively</p> <p>production: that act of making or manufacturing a product</p> <p>prove: to demonstrate the truth with evidence</p>

	<p>mill: a building with machinery; a factory</p>
<p>Materials and Preparation</p>	<ul style="list-style-type: none"> • <i>Marvelous Mattie: How Margaret E. Knight Became an Inventor</i>, Emily Arnold McCully • Sentence Frames for Discussion Chart (I agree/disagree with ____ because ____.) <p>On the whiteboard write: How did Mattie make a difference in her community?</p>
<p>Opening 2 minutes</p>	<p>Review the text and set a purpose. <i>We've been learning about Margaret E. Knight. Today, we'll reread this historical story to make connections among events in Mattie's life. Then we'll have a discussion about how Maddie was both an inventor and innovator.</i></p> <p><i>What did Mattie invent?</i> [a foot warmer for her mother, a safety guard for machines, a machine to make flat-bottomed paper bags]</p> <p><i>What is an innovator?</i> Harvest children's ideas, and refer to the Weekly Word "innovate." <i>An innovator makes changes to something people already use.</i> <i>What did Mattie change and improve?</i> [kites, fast sleds, paper bags with a flat bottom]</p> <p><i>Mattie also changed people's attitudes and ideas. As we reread today, think about how Mattie made a difference beyond her inventions and innovations.</i></p>
<p>Text and Discussion 13 minutes</p> <p>page 1</p>	<p><i>What inspired Mattie's inventions here?</i> Harvest ideas. [She wanted to solve problems that would help others.]</p>
<p>page 4</p>	<p>Reread the sentence, "A girl couldn't make that!" <i>Does this attitude stop Mattie from "having brainstorming"?</i> <i>She keeps inventing. How does this make a difference in her community?</i> Harvest children's ideas.</p>
<p>page 16</p>	<p><i>What inspired Mattie to invent the guard? How was this similar to the inventions she created at home for her family?</i> Harvest children's ideas.</p>

<p>page 23</p>	<p><i>We looked closely at this page yesterday and noticed that Mattie is the only woman inventor there. How do you think this might have made a difference in her community?</i></p> <p>Harvest children’s ideas.</p>
<p>page 28</p>	<p><i>How does Mattie change people’s ideas when she rejects the man’s offer to buy her patent?</i></p>
<p>Key Discussion and Activity 6 minutes</p>	<p>Referring to the Sentence Frames for Discussion, facilitate a whole group discussion.</p> <p><i>How did Mattie make a difference?</i></p> <p><i>How does Mattie inspire you?</i></p> <p>Invite children to share their aspirations.</p>
<p>Closing 4 minutes page 29</p>	<p><i>Writing this historically true story about Mattie required a lot of research. Let’s read what the author, Elizabeth Arnold McCully, says.</i></p> <p>Read the Author’s Note.</p>
<p>Standards</p>	<p>R.6.1.b Describe the connection between two individuals, events, ideas, or pieces of information in a text.</p> <p>SL.1.1.b Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</p> <p>L.6.1 Use words and phrases acquired through conversations, reading, and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., because).</p> <p>SA 4.3 (Boston) Identify interests, motivators and aspirations. Demonstrate self-efficacy and confidence.</p>
<p>Ongoing assessment</p>	<p>Listen to children’s responses during whole group and partner conversations.</p> <p>What connections do children make among various events in Mattie’s life?</p> <p>What understanding do children demonstrate of the concepts of inventors and innovators?</p> <p>How do children draw on unit vocabulary in a group discussion?</p> <p>How do children build on each other's ideas?</p> <p>What personal inspirations and aspirations do children share?</p>

Notes



Text Talk U4 W7 D3



WEEK 7 Day 4

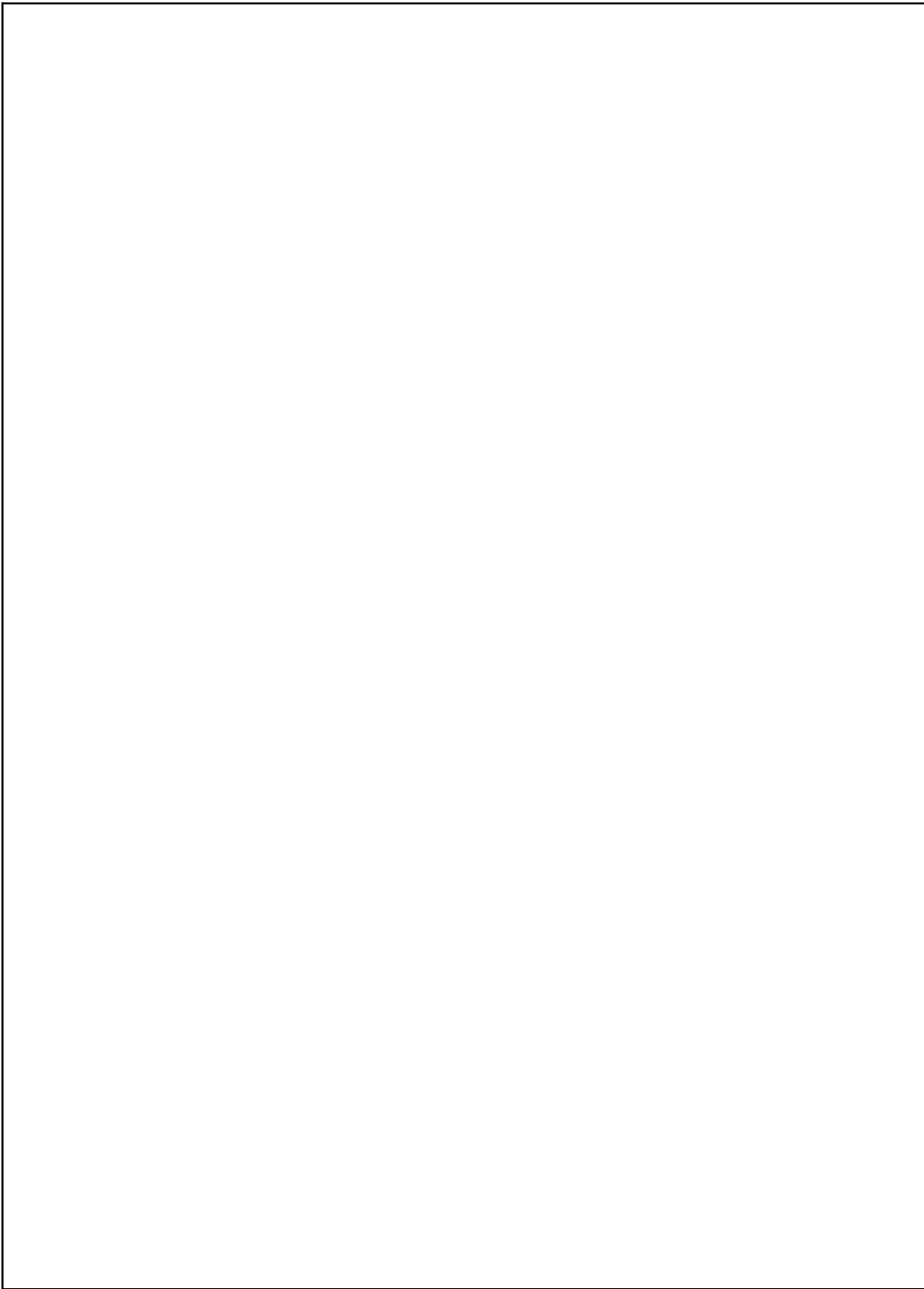
Text Talk
“Lewis Latimer and the Long-Lasting Light Bulb” slides

Big Ideas	People innovate and invent to solve problems.
Weekly Question	How do inventors and innovators make a difference?
Content Objective	I can connect ideas from a historical text in order to explain how Lewis Latimer was an innovator and inventor who made a difference in his community. (R.6.1.a)
Language Objective	I can use vocabulary from the text and from the unit to engage in a discussion and build on my classmate’s ideas. (SL.1.1.b, L.6.1)
SEL Objective (BOSTON SEL Standards)	I can identify what inspires me and my aspirations. (SA 4.3)
Vocabulary	<p>innovate: to make changes in something that already exists</p> <p>dim: (adj) not shining brightly; (v) to become or make less bright</p> <p>available: to be able to be used</p> <p>glow: to give out steady light without a flame</p> <p>reduce: to make less</p> <p>prevent: to keep something from happening</p> <p>activist: a person who works to bring about social or political change</p> <p>anti-racist: a person who actively works to end racist systems and policies</p>
Materials and Preparation	<ul style="list-style-type: none"> ● “Lewis Latimer and the Long-Lasting Light Bulb” slides ● <i>Marvelous Mattie: How Margaret E. Knight Became an Inventor</i>, Emily Arnold McCully, for reference Flag pages 3-4 and 23-24. <p>On the whiteboard write:</p>

	How did Lewis Latimer make a difference in his community?
Opening 1 minute	Review the text and set a purpose. <i>Yesterday we thought about how Mattie was both an inventor and an innovator, and how she made a difference in her community. Today, we'll reread the biography of Lewis Latimer to think about this same question as we read.</i> Refer to the question on the whiteboard, How did Lewis Latimer make a difference in his community?
Text and Discussion 15 minutes slide 5	Read through slides 1-4 with minimal to no stopping. <i>How is Lewis an innovator?</i> [He tried different filaments to improve the light bulb.]
slide 6	<i>How did Lewis Latimer make a difference with his light bulb?</i> Harvest responses, prompting children to refer to specific details from the text.
slide 8	<i>What connections can you make between this information and what we learned in Marvelous Mattie?</i> Highlight connections about patents and drawing ideas for inventions.
slide 9	Refer to the flagged pages of <i>Marvelous Mattie</i> . <i>In the 1850s, people doubted that Mattie made her inventions because she was a girl and woman. We have also noticed that Lewis Latimer was the only Black inventor in this special group, the Edison Pioneers.</i>
Key Discussion and Activity 8 minutes slide 11	Think, Pair, Share. <i>How does the information on this slide show us that Lewis Latimer made a difference in his community beyond being an inventor and innovator?</i> Continue a whole group discussion. <i>How does Lewis Latimer inspire you?</i> Invite children to share their aspirations.
Closing 1 minute	<i>Later today in Stations you'll think and write more about Lewis Latimer and his inventions for the End of Unit Assessment.</i>
Standards	R.6.1.a Describe characters, settings, and major events in a story, including details about who, what, when, where, and how. SL.1.1.b Build on others' talk in conversations by responding to the comments of others through multiple exchanges.

	<p>L.6.1 Use words and phrases acquired through conversations, reading, and being read to, and responding to texts, including using frequently occurring conjunctions to signal simple relationships (e.g., because).</p> <p>SA 4.3 (Boston) Identify interests, motivators and aspirations. Demonstrate self-efficacy and confidence.</p>
<p>Ongoing assessment</p>	<p>Listen to children’s responses during whole group conversations and Think, Pair, Share.</p> <ul style="list-style-type: none"> What connections do children make among various events in Lewis Latimer’s life? What understanding do children demonstrate of the concepts of inventors and innovators? How do children draw on unit vocabulary in a group discussion? How do children build on each other's ideas? What personal inspirations and aspirations do children share?

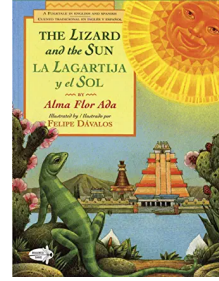
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Text Talk U4 W7 D4

Unit 4: Communicating with Sound and Light

WEEK 7 Day 5



Text Talk
The Lizard and the Sun
 Read 1 of 3

Big Ideas	<p>People innovate and invent to solve problems.</p> <p>People and other animals communicate with light and sound.</p>
Weekly Question	How do inventors and innovators make a difference?
Content Objective	I can identify and retell the major events of the folktale. (R.5.1.a, R.6.1.a)
Language Objective	I can discuss the major events of a folktale by referring to details from the text. (SL.2.1.a, SL.1.1.b)
Vocabulary	<p>anxiously: with worry</p> <p>barge: a flat-bottomed boat</p> <p>budge: to move</p> <p>discovery: the act of finding out or revealing</p> <p>scampering: to run with quick, light steps</p> <p>vendor: someone who sells goods or services</p>
Materials and Preparation	<ul style="list-style-type: none"> ● <i>The Lizard and the Sun</i>, Alma Flor Ada ● Pre-mark page numbers in the book so that page 1 begins, “The whole world knows...” ● <i>The Lizard and the Sun</i> slides <p>Assign children to small groups of three for discussion during all three lessons with this text.</p> <p>On the whiteboard write:</p>

	<p>How did the lizard respond to the problem differently than other animals?</p> <p>How did the community work together to respond to the problem?</p>
<p>Opening 1 minute</p>	<p>Introduce the text.</p> <p><i>Today we will read a folktale titled The Lizard and the Sun, written by Alma Flor Ada and illustrated by Felipe Davalos. The book is written in both English and Spanish. The author and illustrator were inspired by the Aztec people in ancient Mexico who told many stories about the power and value of the sun. The Aztec contributed many innovations to our world today, such as the sundial, an early tool for marking the time of day.</i></p> <p><i>As we near the end of our unit about sound and light, we will read this folktale as a reminder of the importance of the sun—our most important source of light.</i></p> <p>Set a purpose for the lesson.</p> <p><i>Today you will retell the most important events in the story with a partner. We'll also pay close attention to how the lizard character responds when the community faces a challenge. Finally, you'll work in groups of three to discuss these two questions. [Refer to the whiteboard.]</i></p>
<p>Text and Discussion 12 minutes</p> <p>page 3</p>	<p><i>How are the people and animals feeling, if they are waiting anxiously? Can you show this with your face or body?</i></p> <p>Reread the last sentence as children act out the meaning of the word.</p>
<p>page 7</p>	<p><i>What have we learned about the lizard?</i></p> <p>Harvest responses, rereading the second paragraph as needed.</p>
<p>page 9</p>	<p><i>What do you predict the glowing rock might be? What makes you think so? Turn and talk with a partner.</i></p>
<p>pages 11</p>	<p>Barges are boats like the one pictured here [point to page 12].</p> <p><i>Mexico City has canals, like streets made of water, where barges float and carry goods and people. The canals are one of many innovations built by the Aztec people, who built a city thousands of years ago with pyramids and canals.</i></p>
<p>page 21</p>	<p><i>Why did the Emperor thank the Lizard and the Woodpecker?</i></p> <p>Harvest a few responses. Highlight her perseverance and working with others.</p>

	Read to the end of the story with minimal stopping.
Key Discussion and Activity 6 minutes	<p><i>With your partner, take turns retelling the most important events in the story. Make sure to name the problem and tell how it is resolved.</i></p> <p>To support children’s retelling, refer to the book and slides.</p> <p>Group the children in triads. Assign a reporter for each group. Read the prompts with time in between for children to think and discuss. Remind children to cite evidence for their thinking. Return to the whole group to share after children have discussed both prompts.</p> <p>Prompt 1: <i>How did the lizard respond to the problem differently than other animals?</i> [She persevered and sought help from her community.]</p> <p>Prompt 2: <i>How did the community end up working together to respond to the problem?</i> [sun dance, Emperor’s help, woodpeckers help]</p> <p>As reporters share for each group, ask them to support their thinking with evidence from the text. Turn back to specific pages as children refer to them.</p>
Closing 1 minute	<i>Tomorrow we’ll revisit this story to identify the elements that make it a folktale.</i>
Weekly Question Chart 5 minutes	<p>Refer to the Weekly Question Chart.</p> <p><i>This week we have been thinking about this question: How do inventors and innovators make a difference?</i></p> <p>Read the chart together. Add any essential ideas that may be missing. Identify and color-code two or three themes that emerge. Some themes might be: inventors can make inventions that make people’s daily’s lives easier, like the square-bottom bag and the long-lasting light bulb; Innovators think of ideas that no one before them thought of; Innovators show persistence and perseverance.</p>
Standards	<p>R.5.1.a Retell texts, including details about who, what, when, where, and how; demonstrate an understanding of the theme.</p> <p>R.6.1.a Describe characters, settings, and major events in a story, including details about who, what, when, where, and how.</p> <p>SL.2.1.a Ask and answer questions about key details in a text read aloud or information presented orally or through other media.</p> <p>SL.1.1.b Build on others' talk in conversations by responding to the comments of others through multiple exchanges.</p>
Ongoing assessment	<p>Listen to children’s responses during whole and small group conversations.</p> <p>Do children retell the major events, including the problem and resolution?</p>

	<p>How do children work with their partners for joint retelling? What do children communicate about the character traits and actions of the lizard? Do children cite evidence from the text in response to the prompts?</p>
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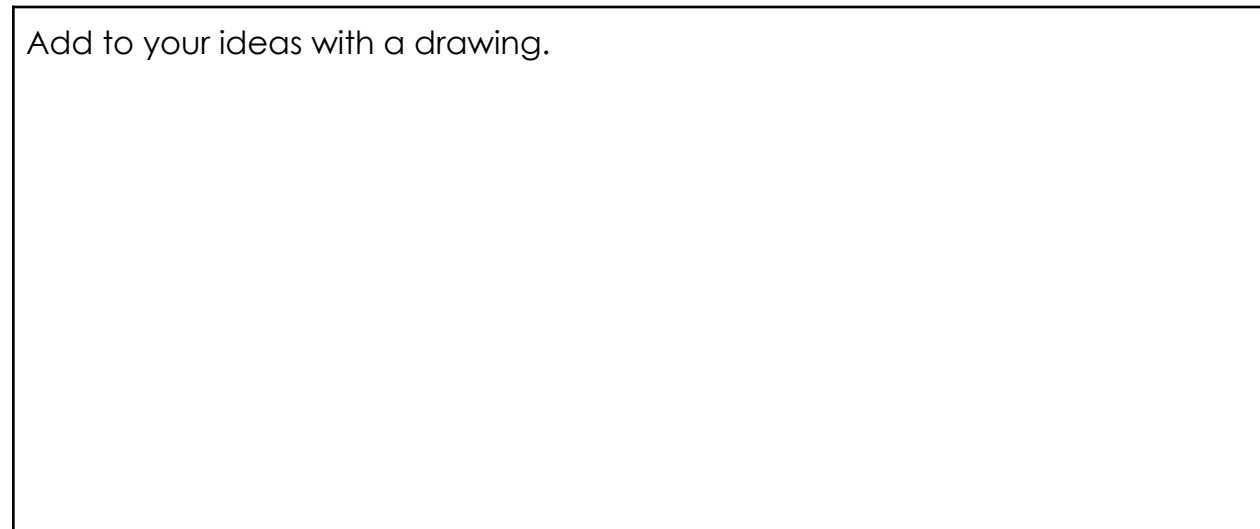
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Listen to and **read** the text carefully.

Then, respond to the questions below.

1. How did Lewis Latimer's invention improve the light bulb?
Use at least two details from the text to support your response.

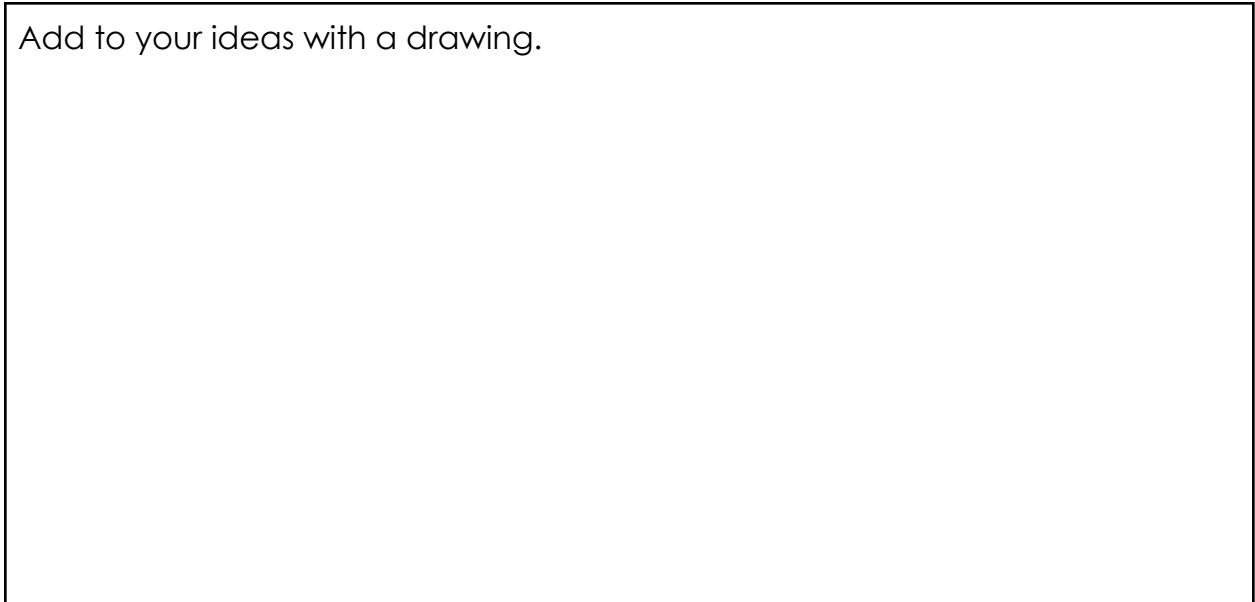
Add to your ideas with a drawing.



2. Do you think all first graders should learn about Lewis Latimer?
Why or why not?

State your **opinion** and provide at least two reasons using details from the text.

Add to your ideas with a drawing.



End of Unit Assessment Rubric

Unit 4 Prompt

1. How did Lewis Latimer's invention improve the light bulb?
Use at least two details from the text to support your response.
2. Do you think all first graders should learn about Lewis Latimer? Why or why not?
State your opinion and provide at least two reasons using details from the text.

Relevant Unit 4 Big Idea

- People innovate and invent to solve problems.

1 = Shows little evidence of meeting the standard; 2 = Shows some evidence of meeting the standard; 3 = Meets the standard			
	1	2	3
Accurately answers questions about the text by connecting key ideas and details from the text. (R.6.1.a) (Q1 Boston)	Does not accurately answer questions about key details in the text.	Somewhat accurately answers the question, with some connections between key ideas and details from the text.	Accurately answers the question by connecting key ideas and details from the text.
Identifies the main topic and retells key details from the text. (R.5.1.b) (Q1, Q2 Boston)	Begins to retell key details, but response veers from the prompt or does not retell key details.	Retells key details, but does not demonstrate full understanding in response to the prompt.	Retells the text's key details and demonstrates understanding in response to the prompt.
Draws on information from a source to demonstrate conceptual understanding and knowledge about the topic. (W.1.1.b) (Q1, Q2 - Boston)	Does not draw on information from the text to create a response that aligns to the unit's Big Ideas.	Response draws somewhat on information from the text and aligns to the unit's Big Ideas.	Draws on information from the text to demonstrate conceptual understanding and knowledge about the unit's Big Ideas.
Clearly states an opinion supported by a reason, and the organization of the response is appropriate to the task and purpose of the prompt. (W.3.1.b, W.2) (Q2)	Does not clearly state an opinion and organization of the response is not appropriate to the task and purpose of the prompt.	States an opinion, but does not support a reason. The organization of the response is somewhat appropriate to the task and purpose of the prompt.	States an opinion with a supporting reason(s). The organization of the written response is appropriate to the task and purpose of the prompt.

End of Unit Assessment Rubric U4 W7

1 = Shows little evidence of meeting the standard; 2 = Shows some evidence of meeting the standard; 3 = Meets the standard; 4 = Exceeds the standard				
Conventions	1	2	3	4
Sentence Complexity L.1.1.i	Includes frequent errors in usage; sentences are often difficult to understand.	Writes in clear, simple sentences and phrases.	Writes in complete simple and compound sentences.	Uses a variety of simple and compound sentences.
Capitalization L.2.1.a	Uses upper case letters minimally or incorrectly.	Inconsistently capitalizes the first word in a sentence, the pronoun <i>I</i> , names, and dates.	Capitalizes the first word in a sentence, the pronoun <i>I</i> , names, and dates.	Makes no errors in capitalization.
Punctuation L.2.1.b	Includes frequent errors in end punctuation, making the piece difficult to read.	Inconsistently uses end punctuation.	Correctly uses end punctuation.	Correctly uses commas and/or apostrophes in addition to end punctuation.
Spelling L.2.1.d L.2.1.e	Includes severe errors in spelling that often obscure meaning.	Includes frequent errors in the spelling of grade-appropriate words.	Uses conventional spelling for words with common patterns and for frequently occurring irregular words; spells untaught words phonetically.	Generalizes learned spelling patterns and shows evidence of using reference materials (word walls, personal dictionaries, etc.) when writing words.

For children who are emerging writers and whose writing does not yet demonstrate their full understanding, also record oral responses.

Trick Word Memory

work

there

being

write

word

own

want

own

first

work

there

write

want

being

first

word

Skills: Recognize and read grade-appropriate irregularly spelled words.

Name: _____

Garrett Morgan

By Brooke Childs, modified from "Inventions in Black" by Vicki Hall

The streets back in 1920

Had cars, buggies, and bikes a plenty.

No lights or stop signs caused lots of messes,

Walkers were scared in their old-fashioned dresses!

When the flow of traffic was out of hand,

Inventor Garrett A. Morgan came up with a plan.

He stopped us on red, started us on green,

Kept us all safe, with yellow in between.

Unit 4: Communicating with Sound and Light

WEEK 7

Shared Reading
“Garrett Morgan”

Weekly Question	How do inventors and innovators make a difference?
Materials and Preparation	<ul style="list-style-type: none">● chart paper and markers Write out the poem for whole group reading.● “Garrett Morgan” slides● pointer● highlighter tape (optional)
Opening 1 minute	<p><i>Our Shared Reading text this week is a poem titled “Garrett Morgan;” it’s modified from a poem written by Vicki Hall titled “Inventions in Black.” Garrett Morgan was an inventor one hundred years ago. As we read this poem, we’ll find out what he invented!</i></p> <p><i>Before we read the poem, we’ll do some work with letters and sounds.</i></p>
Phonological Awareness 6 minutes	<p>Blend sounds to make a word. <i>Let’s listen to these sounds and blend them together to think of the word they make.</i> <i>The sounds are /l/ /ī/ /t/ /s/. What’s the word? (lights)</i> <i>The sounds are /p/ /l/ /an/. What’s the word? (plan)</i> <i>The sounds are /k/ /ĕ/ /p/ /t/. What’s the word? (kept)</i></p> <p>Segment sounds and substitute the medial vowel sound. <i>The word is “green.” How many sounds do we hear in the word? (4)</i> <i>What word can we make when we substitute the vowel sound /ē/ with /ō/? (groan)</i></p> <p><i>The word is “bikes.” How many sounds do we hear? (4)</i> <i>What word can we make when we substitute the vowel sound /ī/ with /ā/? (bakes)</i></p>

	<p><i>The word is "lots." What word can we make when we substitute the vowel sound /ɒ/ with /ă/? (lats)</i></p> <p>Delete and substitute syllables.</p> <p><i>The word is "invent." When we delete the second syllable (vent), what do we have left? (in)</i></p> <p><i>The word is "plenty." When we delete the first syllable (plen), what do we have left? (tee)</i></p> <p><i>The word is "between." When we substitute the second syllable with /hind/ what's the new word? (behind)</i></p> <p>Delete and substitute phonemes.</p> <p><i>The word is "stop." When we delete the first sound, /s/, what do we have left? (top)</i></p> <p><i>The word is "cars." When we delete the final sound, /s/, what do we have left? (car)</i></p> <p><i>The word is "hand." When we substitute the first sound with the sound /b/, what's the new word? (band)</i></p> <p><i>The word is "flow." When we substitute the ending sound with /ī/, what's the new word? (fly)</i></p>
<p>Shared Reading 8 minutes</p>	<p>Read the full poem while tracking the print.</p> <p>Then echo read the full poem while tracking the print. Model expression and emphasize on words that will help children understand the meaning of the poem. Use fluency to support children’s comprehension.</p> <p>Connect the poem to unit content.</p> <p><i>Based on the details in the poem, what did Garrett Morgan invent? [the traffic light with three colors] How do you know?</i></p> <p>Identify words and phrases in the text that provide that information.</p> <p><i>What do we learn from this poem about what life was like one hundred years ago, in the 1920s?</i></p>

	<p><i>Our weekly question this week is, How do inventors and innovators make a difference? How did Garrett Morgan help make a difference?</i></p> <p>Identify and review key letter-sound relationships. <i>As we read the poem again, look for words that end with -es.</i> Together with the children, identify one example before reading. (dresses, messes) <i>When we need a plural noun (more than one of something) that already ends in -s, we add -es. Signal when you find another one.</i></p> <p>Chorally read the poem again for fluency practice. Scoop the phrases to support children with prosody.</p>
<p>Closing 5 minute</p>	<p><i>You will continue to practice reading the poem “Garrett Morgan” in the Reading Station.</i></p>
<p>Standards</p>	<p>R.2.1.a Distinguish long from short vowel sounds in spoken single-syllable words. R.2.1.b Produce single-syllable words by blending sounds (phonemes), including consonant blends. R.2.1.c Isolate and pronounce initial, medial vowel, and final sounds (phonemes) in spoken single-syllable words. R.2.1.d Segment spoken single-syllable words into their complete sequence of individual sounds (phonemes). R.3.1.b Decode regularly spelled one-syllable words. R.3.1.c Know final -e and common vowel team conventions for representing long vowel sounds. R.3.1.e Decode two-syllable words following basic patterns by breaking the words into syllables. R.3.1.f Read words with inflectional endings. R.12.1.a Read various on-level text with purpose and understanding.</p>
<p>Ongoing Assessment</p>	<p>Listen to children through the lesson as they read. Do children blend and segment phonemes? Do children break words into syllables? Do children substitute syllables correctly? Do children substitute sounds?</p> <p>Listen to children chorally read. Do children read with appropriate phrasing and expression? Do children use the correct intonation for punctuation?</p>
<p>Daily Practice</p>	<p>To reinforce fluency with this text, find five minutes each day for choral or paired reading.</p>

Possible extensions in small or whole group:

- With teacher dictation, children use cubes or chips to change words into plural with -es. For example: dress-->dresses, mess-->messes, quiz-->quizzes, toss-->tosses, wax-->>waxes, box-->boxes. Focus on where the -es would orally be added by using elkonin boxes. Demonstrate that only one sound is added with these two letters.
- With teacher dictation, children use letter tiles or write with markers on whiteboards to build plural -es words. Focus on the spelling of words with -es ending. For examples, see words above.

Notes

Unit 4: Communicating with Sound and Light

WEEK 7

Stations

End of Unit Assessment
<p>Materials and Preparation</p> <ul style="list-style-type: none">● End of Unit Assessment slides● projector and screen● End of Unit Assessment Prompt, one copy for each child● End of Unit Assessment Rubric and Exemplar
<p>On Day 4, after Text Talk (“Lewis Latimer and the Long-Lasting Light Bulb”), Stations time is used to administer an end of unit assessment. Children have had an opportunity to think together about the unit’s Big Ideas; now they draw on that discussion as they think, draw, and write independently to demonstrate their understanding.</p> <p>Show the slides, and read the assessment prompts aloud.</p> <p><i>How did Lewis Latimer's invention improve the light bulb?</i></p> <p><i>Do you think all first graders should learn about Lewis Latimer? Why or why not?</i></p> <p>Distribute copies of the text, and send the children off to write. As children finish, they can read independently while others continue the assessment.</p>

See reverse for Stations overview page.

Station	Activities	Materials Writing tools at each station
Shared Reading	"Garrett Morgan"	<ul style="list-style-type: none"> ● Shared Reading text on chart and/or slides ● pointer
Teacher Groups	Strategic small group instruction	<ul style="list-style-type: none"> ● as needed
Reading	Independent and Partner Reading	<ul style="list-style-type: none"> ● "Garrett Morgan" child copies ● individual book bags ● pencils
Listening & Speaking	Talk, Draw, Talk	<ul style="list-style-type: none"> ● Week 7 image (colored lights installation) ● Week 7 prompt and recording sheet ● sand timers ● drawing tools
	Listen and Respond: <i>Marvelous Mattie</i>	<ul style="list-style-type: none"> ● audio recording and technology ● <i>Marvelous Mattie</i> book ● conversation prompts
Vocabulary	Draw for Meaning <i>warn, reflect, transparent, opaque, translucent, dim</i>	<ul style="list-style-type: none"> ● Unit 4, Week 6 Weekly Words cards ● Draw for Meaning sheets
Science Literacy	How can I use the engineering design process to improve my project? Filling in weather calendar	<ul style="list-style-type: none"> ● Week 7 prompt, printed as stickers or copied and cut apart, with glue sticks ● science journals ● colored pencils and pencils
Word Work (align with phonics program)	Fluent Reader's Challenge	<ul style="list-style-type: none"> ● Week 7 Fluent Reader's Challenge sheets ● sand timers ● Fluent Reader's Challenge directions card
	Name It, Write It, Mark It	<ul style="list-style-type: none"> ● Week 7 Name It, Write It, Mark It sheets ● Name It, Write It, Mark It directions card
	Trick Word Memory	<ul style="list-style-type: none"> ● Week 7 Trick Word Memory sheets ● scissors ● Memory directions card
	Sort Suffixes -s, -es	<ul style="list-style-type: none"> ● Week 7 Sort sheets ● scissors ● Sort directions card

Stations U4 W7

Name: _____

Fluent Reader's Challenge

We write many **words** in **our** classes.

Their pup gave wet kisses.

First, fill **the** glasses with milk.

Their dresses **are being** mended.

Mom and Dad **do** not like **to do their** taxes.

Jack tosses **the** ball **to** Fran.

Fill **the** boxes with **your work**.

Their quizzes had many mistakes.



Minutes:

Skills:

Recognize and read grade-appropriate irregularly spelled words.

Read with sufficient accuracy and fluency to support comprehension.

Word Work Station U4 W7

Name: _____

Plural Suffix Sort

Cut the pictures apart. Name the pictures.
Do they use the suffix **-s** or **-es** to mean more than one?

Place each picture into the correct column. Write the words.

-s	-es

Skills: Recognize and read grade-appropriate irregularly spelled words.

Name: _____

Write words with suffixes

-s

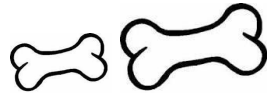
-es

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flake



bone



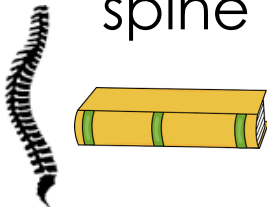
kiss



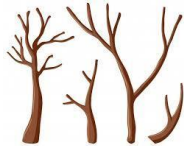
buzz



spine



branch



cake



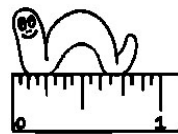
gate



napkin



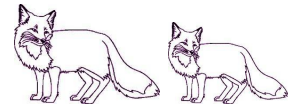
inch



glass



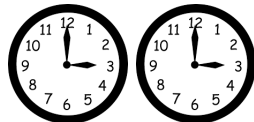
fox



bench



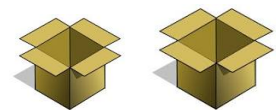
clock



kid



box



stick



dress



watch



star



bush



brush



sox



match








Name: _____

Name It	Write It	Mark It
---------	----------	---------

Write the word. Mark the suffix.

Word Bank							
wax	press	crunch	kiss	fax	splash	punch	wish

 bushes	 _____	 _____
 _____	 _____	 _____
 _____	 _____	 _____

Skills: Know and apply grade-level phonics and word analysis skills in decoding words.

Talk, Draw, Talk Week 7



https://en.wikipedia.org/wiki/Dan_Flavin



https://en.wikipedia.org/wiki/Dan_Flavin

Listening & Speaking U4 W7.1

Name: _____

Talk Draw Talk

Look carefully at the image. Talk with your partner about how the artist, Dan Flavin, used light to create art. After you talk, draw a sketch for an idea you have about a work of art that uses light. Talk with your partner about your drawings.



Listening & Speaking U4 W7.1

Focus on First/ 1st Grade for ME | Boston Public Schools Department of Early Childhood P-2/
Maine Department of Education

Marvelous Mattie: How Margaret E. Knight Became an Inventor Conversation Prompts: Cut apart and provide with text and audio recording.

Question 1

What is one challenge Mattie faced?

How did she respond to it?

Marvelous Mattie

Question 2

Who are some of the important characters in the story?

Why are they important to Mattie's development as an inventor?

Marvelous Mattie

Unit 4: Sound and Light

WEEK 7 Lesson 1

Science and Engineering
Using the Engineering Design Process

Big Ideas	Vibrating materials make sound. Sound makes materials vibrate. Materials interact with light in different ways. Light and sound travel. Humans and other animals communicate with light and sound. People innovate and invent to solve problems.
S & E Guiding Question	What is the Engineering Design Process?
Content Objective	I can use the engineering design process to design technology that uses light or sound to send a message over a distance. (Practice 3, 1.K-2-ETS1-1, 1.K-2-ETS1-2)
Language Objective	I can ask and answer questions about my design to gather additional information or clarify something that I do not understand. (SL.2.1.b)
Vocabulary	design: to plan something for a specific purpose engineer: someone who designs and builds engines, machines, or structures technology: any thing, system, or process that people create to make things easier or to solve a problem
Materials and Preparation	For information about the Engineering Design Process and to prepare for this and upcoming lessons, review the EiE website . (https://www.eie.org/why-eie). A free poster of the Engineering Design Process graphic can be downloaded here. <ul style="list-style-type: none">● Engineering Design Process slides● Engineering Design Process cards● chart paper and marker● Science and Engineering journals● children’s work in progress








	<p>On the whiteboard, write the following questions. For my Look and Listen! project, I have already _____. I am in the _____ part of the engineering design process. Some challenges with my project are: _____. The next thing I need to do for my project is _____.</p>
<p>Opening 4 minutes</p>	<p><i>Last week, we started talking about engineering and technology. What is technology?</i> Harvest, affirm, and clarify children’s responses.</p> <p><i>What does an engineer do?</i> Harvest, affirm, and clarify children’s responses.</p> <p><i>Last week, we started talking about the Look and Listen! project. For the next few weeks, you will work as engineers to develop or improve tools for sending a message using sound and light. We will learn about how inventors, innovators, and engineers design technology. For this project, we will be following the Engineering Design Process. This process will help us organize our project.</i></p>
<p>Investigation 10 minutes</p>	<p>Show and read the slides one at a time to walk through the Engineering Design Process. Simultaneously, create a class chart using the Engineering Design Process cards and marker, leaving the center blank.</p> <div data-bbox="548 1041 1312 1608" data-label="Diagram"> <p>The diagram is a circular flowchart titled "Engineering Design Process". It features five colored circles arranged in a ring, each with a label and an icon: "Ask" (red circle with a question mark), "Imagine" (orange circle with a brain), "Plan" (yellow circle with a notepad and pencil), "Create" (green circle with gears), and "Improve" (blue circle with a star and upward arrow). A thick grey line connects these circles in a clockwise direction. In the center of the ring, the text "The Goal" is written.</p> </div> <p>Pause on slide 2. <i>Let’s think about our “Look and Listen!” project. What is the problem we are trying to solve?</i> In the center of the chart write Goal: to create a tool for children in K1 to send a message using sound or light.</p>

	<p><i>What are some ways other people have solved this problem? What tools do people use to send messages using sound or light?</i></p> <p>Harvest several responses.</p> <p>Continue showing and reading the slides. Stop on slide 8. <i>Turn and talk to your partner. Where is your Look and Listen! project in the engineering design process? Are you at Ask? Imagine? Plan? Create?</i></p> <p>Refer to the questions on the board to support conversation, and encourage children to take turns talking and to ask each other questions.</p>
<p>Journal Writing 12 minutes</p>	<p>Distribute children’s science and engineering journals and writing tools. <i>Spend a few minutes writing and drawing to describe where you are in the engineering design process right now. If you have ideas about what you will do next or how you can improve your design, include that in your writing.</i></p>
<p>Closing 1 minute</p>	<p>Invite a few children to share their conversations and journal entries.</p>
<p>Standards and Practices</p>	<p>1.K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change that can be solved by developing or improving an object or tool.*</p> <p>1.K-2-ETS1-2. Generate multiple solutions to a design problem and make a drawing (plan) to represent one or more of the solutions.*</p> <p>Practice 3. Planning and carrying out investigations</p>
<p>Ongoing assessment</p>	<p>Listen in on children’s conversations and review their journals.</p> <p>What are they planning? How are they thinking about next steps? What feedback do they offer each other?</p>

Notes



Week 7 Prompt

<p>How can I use the engineering design process to improve my project?</p>	<p>Date: _____ Temperature: _____ Daylight Hours: _____</p>	<p>Phase of the Moon </p>
<p>How can I use the engineering design process to improve my project?</p>	<p>Date: _____ Temperature: _____ Daylight Hours: _____</p>	<p>Phase of the Moon </p>
<p>How can I use the engineering design process to improve my project?</p>	<p>Date: _____ Temperature: _____ Daylight Hours: _____</p>	<p>Phase of the Moon </p>
<p>How can I use the engineering design process to improve my project?</p>	<p>Date: _____ Temperature: _____ Daylight Hours: _____</p>	<p>Phase of the Moon </p>
<p>How can I use the engineering design process to improve my project?</p>	<p>Date: _____ Temperature: _____ Daylight Hours: _____</p>	<p>Phase of the Moon </p>
<p>How can I use the engineering design process to improve my project?</p>	<p>Date: _____ Temperature: _____ Daylight Hours: _____</p>	<p>Phase of the Moon </p>
<p>How can I use the engineering design process to improve my project?</p>	<p>Date: _____ Temperature: _____ Daylight Hours: _____</p>	<p>Phase of the Moon </p>

Engineering Design Process

Ask

Imagine

Plan

Create

Improve

WEEK 7 Lesson 2

Science and Engineering
Using the Engineering Design Process

Big Ideas	Vibrating materials make sound. Sound makes materials vibrate. Materials interact with light in different ways. Light and sound travel. Humans and other animals communicate with light and sound. People innovate and invent to solve problems.
S & E Guiding Question	What is the Engineering Design Process?
Content Objective	I can give and receive feedback to improve a design that is a solution to an engineering problem. (Practices 1 and 6, 1-PS4-4, 1.K-2-ETS1-1, 1.K-2-ETS1-2)
Language Objective	I can ask and answer questions about my design to gather additional information or clarify something that is not understood. (SL.2.1.b)
Vocabulary	design: to plan something for a specific purpose improve: to make better
Materials and Preparation	<ul style="list-style-type: none"> ● Engineering Design Process chart, from Lesson 1 ● Engineering Design Process slides ● one child’s work in progress <p>Talk with this child to prepare them for sharing their work and receiving suggestions for improvement.</p>
Opening 10 minutes	<p><i>Last time, we identified the parts of the Engineering Design Process. Review the chart.</i></p> <p><i>Now that you’ve had a little bit more time to work, let’s revisit the process and share ideas about how we can improve our designs, or make them better.</i></p> <p><i>We’ll start by looking at one project. We’ll listen to the engineer talk about their design, ask questions, and share some ideas to help improve it.</i></p> <p>Invite the child forward to present their work. Support them to describe</p>

	the communication tool and to demonstrate how it works. If the child is encountering a challenge in design or creating, invite them to describe that challenge. Then, invite other children to ask clarifying questions and then to offer suggestions for improving the design.
Investigation 15 minutes	Have children work in groups of three to describe their projects, ask questions, and make suggestions, giving each child about five minutes to present. Circulate while they do this, and select one group to share their experience at the close of the lesson.
Closing 5 minute	Return to the whole group. Invite the selected group to share highlights of their conversation. Articulate any shared understandings they have reached or next steps they have identified, especially those that may resonate with many children.
Standards and Practices	1-PS4-4. Use tools and materials to design and build a device that uses light or sound to send a signal over a distance.* 1.K-2-ETS1-1. Ask questions, make observations, and gather information about a situation people want to change that can be solved by developing or improving an object or tool.* 1.K-2-ETS1-2. Generate multiple solutions to a design problem and make a drawing (plan) to represent one or more of the solutions.* Practice 1. Asking questions and defining problems Practice 6. Constructing explanations and designing solutions
Ongoing assessment	Reflect on children’s conversations and the next steps they identify.

Notes

WEEK 7 Studios



How do inventors and innovators make a difference?

More Look and Listen! Ideas

In addition to continuing to build their communication tools for PreK students, children plan and begin related projects, individually, in their established small groups, or with new partners. Specific work in the studios will depend on projects taken on by each small group.

<p>Big Ideas</p>	<p>Humans and other animals communicate with light and sound.</p> <p>People innovate and invent to solve problems.</p>															
<p>Materials and Preparation</p>	<p>Read the Look and Listen! Project Introduction (Unit 4 Introduction documents), and consider the variety of activities that might be proposed to and by the children, and the implications of realizing each one.</p> <ul style="list-style-type: none"> ● Studios prompts, cut apart and added to each bin ● Studios Planner ● observation sheets ● children’s Look and Listen! Project Planning sheets ● children’s Evaluating Our Design sheets ● chart paper and markers <p>Prepare the chart, More Look and Listen! Ideas.</p> <table border="1" data-bbox="589 1480 1333 1827" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th colspan="3">More Look and Listen! Ideas</th> </tr> <tr> <th>Names</th> <th>Project Idea</th> <th>Studio and Materials</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	More Look and Listen! Ideas			Names	Project Idea	Studio and Materials									
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	<table border="1" data-bbox="591 149 1333 296"> <tr> <td></td> <td></td> <td></td> </tr> <tr> <td></td> <td></td> <td></td> </tr> </table> <p>Refresh each studio’s bin with all materials introduced so far. Make sure tools and materials in all studios are accessible.</p>						
<p>Opening</p>	<p><i>This week you will continue to design and build message-sending tools using sound and light for children in PreK. That is your most important work, because next week we will present those tools to the younger children!</i></p> <p><i>You might also want to work on other projects related to your communication tools. You can work with your tool-making small group, on your own, or with another partner.</i></p> <p>Propose some ideas (see the Project Overview), and elicit others from the children. As they land on work they might like to pursue, write it on the More Look and Listen! Ideas chart. This does not commit children to a particular endeavor but serves as a brainstorm.</p> <p>Distribute children’s project planning sheets.</p> <p><i>Turn and tell a partner what you would like to work on, alongside building your communication tool.</i></p> <p>Ask a couple of children to share their plans. Make notations on the chart. Encourage children doing similar work to situate themselves in proximity to each other to allow for easy collaboration, even if they choose to create individual products.</p> <p>Remind children to continue to refer to their Project Planning and Evaluating Our Design sheets as a way to stay on track with creating their communication tools.</p>						
<p>Facilitation</p>	<p>Refer children to the Engineering Design Process as they proceed. Remind them of the qualities of characters in Unit texts (<i>Rosie Revere, Engineer</i>, “Lewis Latimer and the Long-Lasting Light Bulb,” <i>Marvelous Mattie</i>) to encourage them to write and draw their ideas, to complete successive trials, to persevere, and to collaborate.</p> <p>Engage children in conversation about their endeavors, surfacing and reinforcing relevant vocabulary. Exploit opportunities to highlight connections to the Weekly Question and the unit’s Big Ideas. Offer support in the form of material and print resources, strategies, adaptive tools, and consultation with peers.</p>						

	<p>Use the boxes below to record the work children are taking up in relation to their tools. Encourage children to participate in documenting the process of developing their tools and related work.</p> <p>While children work, consider which piece of work to bring to a Thinking and Feedback meeting.</p>
Closing Studios	<p>Support smooth clean up of studios materials and organization of works in progress.</p> <p>Facilitate a short, whole group meeting after Studios to discuss children’s activities, discoveries, and questions.</p>
Ongoing Assessment	<p>Review children’s Look and Listen! Projects in process.</p> <p>Does the central idea of the design draw upon learning about light and sound?</p> <p>Is the plan realistic? Does it use available materials? Can the children build it so that it works in a satisfying way?</p> <p>Will four year olds be able to use the tool? What suggestions will help the group (re)consider this audience?</p> <p>Are all the children in each group working toward the same end? Would any children or groups benefit from reassignment?</p> <p>Review any additional work children have taken up. Make notes, considering what kinds of support will help them move toward satisfying projects.</p>

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Studio:

Names:

Working on:

Next steps:

Practical support: resources, materials, collaboration:

Additional Notes

Art Studio

How does this work connect to what I have been learning about light or sound?

What might I do next?

Building Studio

How does this work connect to what I have been learning about light or sound?

What might I do next?

Drama Studio

How does this work connect to what I have been learning about light or sound?

What might I do next?

Library Studio

How does this work connect to what I have been learning about light or sound?

What might I do next?

Science and Engineering Studio

How does this work connect to what I have been learning about light or sound?

What might I do next?

Writing and Drawing Studio

How does this work connect to what I have been learning about light or sound?

What might I do next?

Unit 4: Communicating with Sound and Light

WEEK 7 Days 1-3, continued from Week 6, Days 3-5

During Days 1-3, children continue to write independently and to receive feedback on their work using Thinking and Feedback (see Week 6, Day 2 for a detailed lesson). In addition, children's writing is assessed using the Explanation Observation Tool, and individual/small group/whole group lessons are added in response to children's needs.

Preparation:

Review children's Explanation Observation Tools. Note any trends that are emerging. Plan for individual, small group, and whole group instruction based on these needs. Areas of need may include, but are not limited to, the following.

Writing Explanation: (see the attached lessons for recommendations)

- explanation steps
- verbs
- nouns
- images

Conventions: (no suggested lessons included)

- writing complete sentences
- including spaces between words in a sentence
- capitalization
- punctuation
- applying rules and strategies taught in Foundations (or similar program)

Writing Behaviors: (no suggested lessons included)

- using spelling strategies, such as tapping
- using environmental print and word walls for spelling
- re-reading own writing

Use the following sheet to plan instruction for Days 1-3. Make additional copies as necessary to plan for multiple individual, small group, and/or whole group lessons.

Day 1

Target Students (individual, small group, or whole group?):

Topic:

Day 2

Target Students (individual, small group, or whole group?):

Topic:

Day 3

Target Students (individual, small group, or whole group?):

Topic:

Writing Explanation

Deconstruction and Revision: Explanation Steps

Materials:

- Explanation anchor chart, from Week 4, Day 2
- unit texts about sound
- children's explanations

Process (small or whole group):

- Show the Explanation anchor chart. Review the stages and language of explanation.
- Remind children that explanation steps include all steps needed to explain the phenomenon, in order.
- Guide children to read their explanations to a partner to identify whether they have included all steps, in order.
- Refer children to unit texts to support their knowledge of how sound travels.
- Guide children to add missing steps or reorder steps, as needed.

Writing Explanation

Deconstruction and Revision: Verbs

Materials:

- Explanation anchor chart, from Week 4, Day 2
- mentor text for explanation: *From Sheep to Sweater, From Cocoa Bean to Chocolate*, or a child's writing that uses present tense action verbs
- children's explanations

Process (small or whole group):

- Show the Explanation anchor chart. Review the stages and language of explanation.
- Read the mentor text.
- Together identify the present tense action verbs.
- Refer children back to their own explanations. Have them underline the verbs.
- If children identify verbs that are not present tense action verbs, have them work with a partner or with teacher guidance to choose the appropriate replacement verbs.

Writing Explanation

Deconstruction and Revision: Nouns

Materials:

- Explanation anchor chart, from Week 4, Day 2
- mentor text for explanation: *From Sheep to Sweater, From Cocoa Bean to Chocolate*, or a child's writing that uses general nouns
- children's explanations

Process (small or whole group):

- Show the Explanation anchor chart. Review the stages and language of explanation.
- Read the mentor text.
- Together identify the general nouns. Remind children that they are writing explanations about how sound travels, not just how one particular sound traveled.
- Refer children back to their own explanations. Have them underline the nouns.
- If children identify specific nouns, have them work with a partner or with teacher guidance to change them to general nouns.

Writing Explanation

Deconstruction and Revision: Images

Materials:

- explanation planning chart, from Week 5, Day 4
- mentor text for explanation: *From Sheep to Sweater, From Cocoa Bean to Chocolate*, or a child's writing with clear images that demonstrate how sound travels
- children's explanations

Process (small or whole group):

- Refer to the planning chart and mentor texts to reinforce the importance of images in explanations, particularly for the audience of K1 students.
- Remind children that their explanations show how sound travels.
- Have them illustrate each step of the explanation, showing how sound travels and matching the images to the words in each explanation step.

Unit 4: Communicating with Sound and Light

WEEK 7 Day 4

Writing Explanation

Individual Construction: Phenomenon Statement

Content Objective	I can use research to write an explanation. (W.3.1.b, W.2, W.1.1.a, W.1.1.b)
Language Objective	I can write using present tense action verbs and general nouns. (L.1.1.b, L.1.1.d)
Vocabulary	<p>explain: to describe in detail</p> <p>phenomenon statement: the beginning of an explanation, where the phenomenon is introduced</p> <p>feedback: specific, helpful suggestions given to improve work</p> <p>explanation: a genre of writing whose purpose is to explain a phenomenon in sequence</p> <p>explanation steps: the phenomenon explained, in order</p>
Materials and Preparation	<ul style="list-style-type: none">● explanation planning chart, from Week 5, Day 4● Explanation anchor chart, from Week 4, Day 2● Phenomenon Statement sheet, one copy for each child● writing tools● children’s writing folders● Explanation Observation Tools, from Week 5, Day 1● unit texts about sound, available for children’s reference
Opening 5 minutes	<p><i>You have been writing to explain to children in PreK how sound travels. Today you will write the phenomenon statement and prepare your writing for feedback tomorrow.</i></p> <p>Refer to the Explanation anchor chart. Briefly review the stages and language of explanation.</p> <p><i>The phenomenon statement introduces what is being explained. It can be helpful to think of the phenomenon statement as answering a question.</i></p> <p>Refer to the planning chart.</p>

	<p><i>Remember, the question you are answering in your explanation is, How does sound travel?</i></p> <p><i>Think of a phenomenon statement you could write to introduce your explanation; then tell it to a partner.</i></p>
<p>Individual Construction 24 minutes</p>	<p>Send children with materials to write. As children work, circulate to support them with writing phenomenon statements. After children complete their phenomenon statements, guide them to put their explanations in order and to ensure that they include all explanation steps.</p>
<p>Closing 1 minute</p>	<p><i>Today you finished writing your explanations. Tomorrow you will give each other feedback to make your work even better.</i></p>
<p>Standards</p>	<p>W.3.1.b Use a combination of drawing and writing to communicate a topic with details.</p> <p>W.2 Develop, strengthen, and produce polished writing by using a collaborative process that includes the age-appropriate use of technology.</p> <p>W.1.1.a Investigate questions by participating in shared research and writing projects.</p> <p>W.1.1.b Gather information from provided sources and/or recall information from experiences in order to answer questions with guidance and support from adults.</p> <p>L.1.1.b Use singular and plural nouns with matching verbs in basic sentences (e.g., <i>He hops; We hop</i>).</p> <p>L.1.1.d Use verbs to convey a sense of past, present, and future (e.g., <i>Yesterday I walked home; Today I walk home; Tomorrow I will walk home</i>).</p>
<p>Ongoing assessment</p>	<p>Review children’s work using the Explanation Observation Tool, focusing on Phenomenon Statement, Verbs, and Nouns.</p>

<p>Notes</p>

Phenomenon Statement

Name: _____ Date: _____

Unit 4: Communicating with Sound and Light

WEEK 7 Day 5

Writing Explanation
Peer-to-Peer Feedback

Content Objective	I can use feedback to plan for revising my explanation. (W.2.1.a, W.3.1.b, W.2)
Language Objective	I can discuss my writing with a partner, following the routine for providing feedback. (SL.1.1a)
Vocabulary	explanation: a genre of writing whose purpose is to explain a phenomenon in sequence explanation steps: the phenomenon explained, in order feedback: specific, helpful suggestions given to improve work image: a representation of something in the form of a drawing, photograph, etc.
Materials and Preparation	<ul style="list-style-type: none">● Explanation Feedback packet, one copy for each child● writing tools● children’s writing folders, including their explanations <p>Children will work with partners. Pair them strategically so that each child can give and receive meaningful feedback.</p>
Opening 1 minute	<i>Today you and a classmate will provide each other with feedback.</i>
Peer-to-Peer Feedback Introduction 8 minutes	Show the Explanation Feedback packet, pointing to each part as it is discussed. <i>This is the packet you will use to give feedback. At the top, there is a space for the writer’s name and the reviewer’s name. If you are the person reading your own writing, you are the writer. If you are the person giving feedback, you are the reviewer.</i> <i>Here’s how this will work: When you begin working with your partner, you, the writer, will lay out all of your explanation pages, in order, and then read them out loud.</i>

	<p><i>After listening to your explanation, your partner, the reviewer, will answer three questions. The first two questions are about the explanation steps.</i></p> <p><i>The first question is, “Does it include all explanation steps?” If the explanation includes all steps, the reviewer will check “Yes.” If not, they will check “No.” If steps are missing, talk about what is missing, and write the steps in the box below.</i></p> <p><i>The second question is, “Are the explanation steps in the correct sequence?” If they are in the right order, the reviewer will check “Yes.” If not, they will check “No.” If the sequence needs to be changed, discuss the change that needs to be made and write a plan in the box.</i></p> <p><i>After discussing the explanation steps, you will look carefully at the images.</i></p> <p><i>The third and last question is, “Do the images match the words?” If they match, the reviewer will check “Yes.” If not, they will check “No.” If they do not all match, discuss changes that can be made to the images or words to ensure that they match. Write the plan in the box below.</i></p> <p><i>After providing feedback to one partner, repeat the process to provide feedback to the other partner.</i></p>
<p>Peer-to-Peer Feedback 20 minutes</p>	<p>Partner the children and send them to work with writing folders, writing tools, and Explanation Feedback packets.</p> <p>As the children work, circulate to support them. Have children store their Explanation Feedback packets in their writing folders.</p>
<p>Closing 1 minute</p>	<p><i>Today you provided each other with feedback to make your writing even better! Next week you will revise and publish your explanations.</i></p>
<p>Standards</p>	<p>W.3.1.b Use a combination of drawing and writing to communicate a topic with details.</p> <p>W.2 Develop, strengthen, and produce polished writing by using a collaborative process that includes the age-appropriate use of technology.</p> <p>W.2.1.a With guidance and support from adults, focus on a topic, respond to questions and suggestions from peers, and add details to strengthen writing as needed.</p>

	SL.1.1a. Follow agreed-upon rules for discussions (e.g., listening to others with care, speaking one at a time about the topics and texts under discussion).
Ongoing assessment	Observe and take notes as children provide feedback. What feedback are children given? Does it match your assessment? What next steps do children set for themselves? Are there any trends emerging?

Notes



Explanation Feedback

Writer's Name: _____

Reviewer's Name: _____

Explanation Steps

Does it include all **explanation steps**?

Yes

No

explanation steps to add:

Are the **explanation steps** in the right sequence?

Yes

No

explanation steps sequence plan:

Images

Do the **images** match the words?

Yes

No

images plan: