h			Literacy Workshop			Writer's Workshop & G	rammar	Math Workshop Number Routine-5-7 min	Content Workshop (30 minutes) *Integrate across the curriculum.
	Interactive Read Aloud (15 minutes)	Word Study: Phonics and Spelling (20-30 minutes)	Shared Reading/Mini-Lesson (20-30 minutes)	Small Group Share and Reflect (45 minutes)	Independent Learning Centers	Writer's Workshop (45 minutes)	Grammar Study	Launch- 5-7 min Explore & Develop- 20 min Practice & Reflect- 10 min Assess-10 min Differentiate- 10 min	
	Launching the Reader's Workshop: 15-day planner pacing guide:				Options should be a continuation of independent practice that promote automaticity and transfer. Options should reflect lessons from literacy, writer's, and content workshop. The options should be focused on hands-on, minds-on meaningful activities and not worksheets. They are designed to promote fluent reading and comprehending strategies.	Writer's Workshop Framework: Whole Class: Write Aloud, Shared/Interactive writing, Mini-lessons, Share Time *Use of knowledge of text structure, composing strategies, and knowledge Small Group: Guided Writing,, Conferences, Tailored Mini-lessons Independent Practice: One on one conferences, independent/writing, projects			
	Launching the Reader's Workshop: Model and Practice Routines: Routine 1 Routine 2 Routine 3 Routine 4 Routine 5 Routine 6 Routine 7 Routine 8 Interactive Read Aloud: 1. Be an Active Listener 2: Think and Talk about Reading	Launching the Phonics Workshop Blend words Build automaticity Read accountable texts Spell and sort words Build fluency from mastery to transfer Handwriting Getting started lessons	Read Aloud for Enjoyment: Fiction: The Red Tail Angels Informational Text: Animals in Film Reader's Workshop Mini-Lessons 1: Why Readers Read 2: Ways to read a book. 3: How Readers Figure Out New Words 4-Distinguishing Characteristics of Fiction and Informational Texts 5-Informational Text Features 6- Fiction: Character 7-Fiction: Setting Shared Reading: 1: Self- Correct Word Recognition and Understanding	Teacher – Student Conferences Student to Student Conferences Flexible collaborative reasoning groups to discuss essential questions using short, narrative text (5-7 days) Teach purpose, procedures - demonstration/fishbowl Read text to determine the issue Prepare for discussion - read and annotate text/take notes Participate in CR discussion - purpose to understand multiple perspectives Reflect on CR discussion - set group goals	Independent Reading and Teacher – student conferences Possible Writing About Reading Opportunities Reading survey setting reading resolutions best and worst reading times some-day lists How I know I have a just-right book Write an "at home reading" plan Write about favorite genre/why? Respond to focus statement. What did you learn about your character/topic today? Make a prediction about what might happen next in the story. Reflect on reading habits, goal setting. What action steps will be taken to reach the goal? Leave sticky notes/ thoughts that could be used in the conference. What were you thinking? Why were you thinking that? Reflect on your reading stamina. Chart progress. Set goals and reflect on them. Response to reading from read aloud Leave sticky notes to use in the partner conference Using the reading log as an artifact for reflection and goal setting.	Writer's Workshop Kickoff • Finding inspiration for writing • Categorizing Writing Types • Examining a Writer's Notebook • Examining a Writer's Technique • Using a Writer's Notebook		Unit 1 Math Is *Readiness Diagnostic/Unit Opener- Ignite • 1.1 Math is Mine • 1.2 Math is Exploring and Thinking • 1.3 Math is in my World • 1.4 Math is Explaining and Sharing	Unit: Animal & Plant Adaptation Skills: At the end of this unit, students will be able to Construct an argument that plants, and animals have internal and external structures that function to supposurvival, growth, behavior, and reproduction. (4-LS1-Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information different ways. (4-LS1-2 Suggested Resource: Mystery Science: Animal & Plant Adaptions Units Optional Resources: HMH: Unit 4 Plant Structure and Function HMH: Unit 5: Animal Structure and Function Animal & Plant Adaptions Unit Anchor Phenomenon/Lesson 1 Lesson 2 & Lesson 3 Assessments: Lesson 1-3
	Launching the Reader's Workshop: Model and Practice Routines: Routine 9 Routine 10 Routine 11 Routine 12 Routine 13 Routine 14 Interactive Read Aloud: 3: Reread to Support Comprehension 4: Use Pictures to Support Comprehension 5: Ask Questions to Support Comprehension 6- Draw Inferences	Launching the Phonics Workshop • Spelling/Dictation • Reading Big Words • Decode by analogy • High frequency words • Extend the learning Handwriting • Getting started lessons	Reader's Workshop Mini-Lessons 8: Problem and Resolution 9-Introduction and Book Talks 10- How the Classroom Library is Organized 11- How We Shop for Books in the Classroom Library 12- Making Good Book Choices 13- How We Use our Book Bags Shared Reading: 2: Read with Short Pauses/Read with Full Stops	Write to sources - select position and support with text evidence	Begin teaching independent opportunities. Options: Independent reading Reading Responses Collaborative Study Author/Genre Study Research study Word, Language, & Vocabulary Study Book talks Peer Discussion Listening Technology	Writer's Workshop Kickoff • Getting Writing Started • Planning Out Ideas • Rehearsing Writing with a Partner • Spelling Words Correctly • Repeating the Writing Process		1.5 Math is Finding Patterns 1.6 Math is Ours Unit Review/Fluency Practice	

Assessments for Instruction:

Literacy Footprint Assessment
 Reading Proficiency Checklist
 Writing Proficiency Checklist
 Writing Proficiency Checklist
 Content Areas Unit tests
 Phonics Assessments
 Math Assessments

		Literacy Workshop			Writer's Worksho	p & Grammar	Math Workshop Number Routine-5-	Content Workshop (30 minutes) *Integrate across the curriculum.
Interactive Read Aloud (15 minutes)	Word Study: Phonics and Spelling (20-30 minutes)	Shared Reading/Mini-Lesson (20-30 minutes)	Small Group Share and Reflect (45 minutes)	Independent Learning Centers	Writer's Workshop (45 minutes)	Grammar Study	Launch- 5-7 min Explore & Develop- 20 min Practice & Reflect- 10 min Assess-10 min Differentiate- 10 min	*Integrate across the curriculum.
Launching the Reader's Workshop: Model and Practice Routines: Routine 15 Routine 16 Routine 17 Routine 18 Routine 19 Routine 19 Routine 20 Interactive Read Aloud: T- Check Understanding While Reading S- Constructive Conversation To- Fiction: Identify New Vocabulary Words To-Informational Text: Identify New Vocabulary Words Interactive Read-Aloud Beautiful Butterflies Shenandoah Insects Teacher's Choice Unit 1: Week 2 In the Wild Interactive Read-Aloud Beautiful Butterflies Shenandoah Insects Teacher's Choice Unit 1: Week 2 In the Wild Interactive Read-Aloud The Chipmunk The Opossum Constructed Reading Response – Focus on character traits (Teach the structure of a constructed response: Introduction with thesis, title of book, and possible hook. Reasons and evidence to support the thesis. Pushing thinking, Closing. Close read of mentor text to generate an idea(s) about a character. Select an idea about a character trait. Teach students to craft a thesis statement to make sure the thesis can be supported. Gather evidence and teach how to organize a plan (ex. Boxes and bullets/Claim, Evidence, Reasoning) Teach students how to support the thesis with evidence by either summarizing/paraphrase the text Unit 1: Week 3: In the Wild Interactive Read-Aloud Keeping Wildlife Wild Delight in Nature Constructed Response Continued: Teach students how to support the thesis by using a direct Read-Aloud Exemply Wildlife Wild Delight in Nature Constructed Response Continued: Teach students how to push their thinking and provide a closing statement	Unit 1 Week 1 • Long a (a_e, ai,ay,ei,ea) and short a Handwriting • i, t Unit 1 Week 2 • Long e (e_e, ea. Ee.ey. y,ie,e) and short e Handwriting • u, w Unit 1 Week 3 • Long o (o_e, oa, ow, oe, o) and short o Handwriting e, 1	Reader's Workshop Mini-Lessons 14- How to Work with Reading Partners 15- Reading Partners: Accountability During Reading 16- Why Readers Abandon 17- Responding to Reading 18- How We Recommend Books 19- Using Self-Sticks Notes as I Read 20-Preparing for the Reading Conference 21- Annotating Texts Shared Reading: 3: Read with Appropriate Inflection/Intonation Volume Shared Reading: Beautiful Butterflies Shenandoah Insects Fluency lesson AR6-AR7 Mini-Lessons: Introduce the Unit Ask Questions Before and During Reading Determine Central Idea and Explain Supporting Evidence Build Vocabulary: Use Context Clues Interpret Text and Graphic Features Shared Reading: The Chipmunk The Opossum Fluency Lesson AR8-AR9 Mini-Lessons: Introduce the Genre: Personal Narrative Ask Questions After Reading Build Vocabulary: Use Resources to Determine or Clarify Meaning Analyze First-Person Point of View Explain Author's Purpose and Message Shared Reading: Keeping Wildlife Wild Delight in Nature Fluency AR10-AR11 Mini-Lessons: Determine Central Idea and Infer Author's Purpose Build Vocabulary: Use Context Clues Analyze Text and Graphic Features Introduce the Genre: Poetry Unit Wrap-Up	Guided Reading Close reading Independent reading Partner Conferences Teacher – Student Conferences Reciprocal Teaching Possible Writing About Reading Opportunities Throughout the Unit: Sticky note features and state how it deepens understanding of the text Reflect how understanding has changed as you read informational text, I used to think but now I know Annotate texts Notice and name text structures Boxes and Bullets New Vocabulary: Word- Inferred meaning- actual definition Questions – Explicit and implicit Summarize text Book Clubs	WRITING ABOUT READING OPPORTUNITIES (tied into whole group, small group and/or independent reading) • Sketch to stretch (Revisit, Reflect, Retell by Linda Hoyt p. 177), • paragraphed response • SWBST, story arc, • T-chart or boxes and bullets to name a character trait and support with evidence from text. • Paragraphed response describing how events of a story would change if narrated from another character's point of view. • Annotate text while reading – sticky notes • Just Like from Read, Revisit, Retell by Linda Hoyt p. 105-106 • Triple journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response • Use boxes and bullets to create and support a theory about a character- use to write a paragraphed response • QAR, questions before, during, after reading. • Boxes and bullets, paragraphed response on big idea or theme of the text and how it is applicable to people's lives today. • Double journal entry, reflect on contribution to discussion group and how the discussion changed your understanding of the text • Sticky notes, t-charts to encourage problem solving of meanings of unfamiliar words • Story arc • paragraphed response on describing how the significant events are related to the problem or solution of the story • paragraphed response to compare and contrast how the different settings in the book affect the story elements • Notice, record, understand, and discuss figurative and descriptive language (double or triple journal entry Options: • Independent reading • Reading Responses/Writing about Reading • Collaborative Study • Word, Language, & Vocabulary Study • Book talks • Peer Discussion • Listening • Technology • Partner conferences • Research and Inquiry Project: National park Naturalist	Writer's Workshop Kickoff Creating a Writing Goal Exploring Informational Writing Exploring Opinion Writing Growing a Piece of Writing Adding Ideas to Writing Writer's Workshop Kickoff Editing for Conventions Sharing Writing Giving Feedback Reflecting on Writing Sharing About Writer's Workshop Writing As a Naturalist Gearing up for the Unit Studying a Mentor Text Comparing Different Overall Structures Studying Elaboration Techniques Writing As a Naturalist Generating Ideas for Active Nonfiction Generating More Ideas Narrowing Down Ideas and Trying Out Different Categories Choosing an Overall Structure Planning Sections	Unit 1: Designing Lots of Different Sentences 1. Pre-Assessment: Simple, Compound, and Complex Sentences 2. Look at a Mentor Text 3. Look at a Second Mentor Text 4. Compare Mentor Texts 5. Shared Writing: Revisit Goals 6. Compare Simple, Compound, and Complex Sentences with Prepositional Phrases 7. How to Make a Simple Sentence 8. Sort Sentences 9. Create Compound Sentences 10. Revisit Goals	Unit 2: Generalize Place-Value Structure *Choose one application station per unit *Readiness Diagnostic/Unit Opener-Ignite • 2.1 Understand the Structure of Multi-Digit Numbers • 2.2 Read and Write Numbers to One Million • 2.3 Compare Multi-Digit Numbers • 2.4 Round Multi-Figit Numbers • Math Probe • Unit Review/Fluency Practice • Performance Task Unit Assessment Unit Assessment Unit 3: Addition and Subtraction Strategies and Algorithms *Choose one application station per unit • Readiness Diagnostic/Unit Opener-Ignite • 3-1 Estimate Sums or Differences • Math Probe • 3-2 Strategies to Add Multi-Digit Numbers • 3-4 Understand an Addition Algorithm • 3-4 Understand an Addition Algorithm Involving Regrouping • 3-5 Strategies to Subtract Multi- Digit Numbers • 3-6 Understand a Subtraction Algorithm Involving Regrouping	Unit: Human Body, Vision, & the Brain Skills: At the end of this unit, students we be able to Construct an argument that plants, and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. (4-LS1-1) Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond the information in different ways. (4-LS2) Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen. (4-PS4-2) Suggested Resource: Mystery Science: Human Body, Vision, & The Brain Optional Resources: HMH: Unit 4 Plant Structure and Function HMH: Unit 5: Animal Structure and Function Defined Learning: Botanical Design (LS1-1, ETS 1) Defined Learning: Business of Farming (LS1-1) Defined Learning: Dietitian (LS1-1, ET 1) Human Body, Vision, & The Brain Anchor Phenomenon/ Lesson 1 Lesson 2 & Lesson 3 Lesson 4 Assessments: Lesson 1-4

h			Literacy Workshop			Writer's Workshop &	& Grammar	Math Workshop Number Routine-5-7 min	Content Workshop (30 minutes) *Integrate across the curriculum.
	Interactive Read Aloud (15 minutes)	Word Study: Phonics and Spelling (20-30 minutes)	Shared Reading/Mini-Lesson (20-30 minutes)	Small Group Share and Reflect (45 minutes)	Independent Learning Centers	Writer's Workshop (45 minutes)	Grammar Study	Launch- 5-7 min Explore & Develop- 20 min Practice & Reflect- 10 min Assess-10 min Differentiate- 10 min	
	Unit 2: Week 1: Characters in Focus Interactive Read-Aloud • Vanessa and Me • Here, Boy On Demand Writing: "Just Like Home" and "Life Doesn't Frighten Me" IAR Practice Reading and Writing -Theme Writing Opportunity • RL4.1-Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. • RL 4.2-Determine a theme of a story, drama, or poem from details in a text; summarize the text • RL 4.3-Describe in depth a character, setting, or event, drawing on specific details in the text • RL 4.4- Determine the meaning of words and phrases as they are used in a text. • RL 4.5-Explain major differences between poems, drama, and prose. • Write an essay that explains how the theme of the story is show through the characters and how the theme of the poem is show through the speaker (RL4.1, RL 4.2, W4-10) Unit 2: Week 2: Characters in Focus Interactive Read-Aloud • The Miser • Sugar Maple and Woodpecker • Teacher's Choice Unit 3: Week 1: Your Government at Work Unit 3: Week 1: Your Government at Work Interactive Read-Aloud • Solving Problems • You are Old, Father, William • Teacher's Choice	Unit 2 Week 1 • Long i(i_e, igh,y,ie,i) and short I Handwriting b, h Unit 2 Week 2: • Long u (u_e, ue, ew,u) and short u Handwriting f, k Unit 2 Week 3 • Closed syllables Handwriting r, s Unit 3 Week 1: • Open Syllables Handwriting j, p	Shared Reading: Vanessa and Me Here, Boy Fluency Lesson AR-6-AR7 Mini-Lessons: Introduce the Unit Describe Characters and Explain Their Interactions Create Mental Images to Describe Characters Build Vocabulary: Use Context Clues Explain Character Interactions and Changes Shared Reading: The Miser Sugar Maple and Woodpecker Fluency Lesson AR8-AR9 Mini-Lessons: Introduce Traditional Genres: Fables and Folktales Create Mental Images to Describe Story Events Build Vocabulary: Use Context Clues to Define Homophones Analyze Characters and Plot Determine the Theme of Folktales Shared Reading: The Sunglasses You are Old, Father, William Fluency Lesson AR10-AR11 Mini-Lessons: Draw Inferences About Character's Interactions Build Vocabulary: Use Context Clues Draw Inferences About Character Interactions and Changes Analyze Author's Use of Descriptive Language Unit Wrap-Up Shared Reading: Solving Problems The State Government and its Citizens Fluency Lesson AR6-AR7 Mini-Lessons: Introduce the Unit Determine Text Importance Summarize Informational Texts Build Vocabulary: Identify and Use Roots Recognize Text Structure: Compare and Contrast	Guided Reading/Leveled Texts Word Work/Word Study including vocabulary Reading text at highest instructional level (Annotating text leaving evidence of active reading, teacher/student 1:1 conference, running record) Discussion of the text: tailored strategy work, foundational skills, within, beyond, about texts Rereading texts: for text support, prepare for writing about reading, fluency practice Collaborative reasoning groups Guided reading around opinion articles Philosophical Chairs Socratic Seminar Book Clubs	WRITING ABOUT READING OPPORTUNITIES (tied into whole group, small group and/or independent reading) • Sketch to stretch (Revisit, Reflect, Retell by Linda Hoyt p. 177), • paragraphed response • SWBST, story arc, • T-chart or boxes and bullets to name a character trait and support with evidence from text. • Paragraphed response describing how events of a story would change if narrated from another character's point of view. • Annotate text while reading – sticky notes • Just Like from Read, Revisit, Retell by Linda Hoyt p. 105-106 • Triple journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response • Use boxes and bullets to create and support a theory about a character- use to write a paragraphed response • QAR, questions before, during, after reading. • Boxes and bullets, paragraphed response on big idea or theme of the text and how it is applicable to people's lives today. • Double journal entry, reflect on contribution to discussion group and how the discussion changed your understanding of the text • Sticky notes, t-charts to encourage problem solving of meanings of unfamiliar words • Story arc • paragraphed response on describing how the significant events are related to the problem or solution of the story • paragraphed response to compare and contrast how the different settings in the book affect the story elements • Notice, record, understand, and discuss figurative and descriptive language (double or triple journal entry) Options: • Independent reading • Reading Responses/Writing about Reading • Collaborative Study • Word, Language, & Vocabulary Study • Book talks • Peer Discussion • Listening • Technology • Research and Inquiry Study: Author Study	Writing As a Naturalist Planning Out Text and Graphic Features Getting Ready to Draft Moving from Notes to Draft Drafting with Transitions Kicking Off Revision with Important Words Writing As a Naturalist Adding Direct Quotes Varying Sentence Length Writing an Introduction Writing a Conclusion Revising with a Balance of Text Features Writing As a Naturalist Independent Writing Prompt- Revising with Feedback from Partners Maing and Using Our Own Revision Checklist Begin Editing While Revising Editing On the Go for Capitals Editing Quotations Writing As a Naturalist Making Final Edits Unit Wrap-Up Phase: Publishing Final Reflection and Celebration Quick Write Quick Write	Unit 1: Trying Out Sentences of All Different Shapes and Sizes 11. Create Complex Sentences 12. Sorting Sentences 13. How to Punctuate Compound and Complex Sentences 14. Design Compound and Complex Sentences 15. Revisit Goals 16. Compare Sentences With and Without Prepositional Phrases 17. Adding Prepositional Phrases 18. Making Sentences with Prepositional Phrases 19. Combine sentences 20. Revisit Goals 21. Revisit Mentor Text 22. Write Different Types of Sentences 23. Try Out Some Sentences 24. Try Out Sentences win Your Writing 25. Post-Assessment	3-8 Represent and Solve Multi-Step Problems 3-9 Solve Multi-Step Problems 3-9 Solve Multi-Step Problems Involving Additiona and Subtraction Unit Review/Fluency Practice Performance Task Unit Assessment Unit 4: Multiplication as Comparison *Choose one application station per unit Readiness Diagnostic/Unit Opener-Ignite 4-1 Understand Comparing with Multiplication 4-2 Represent Comparison Problems 4-3 Solve Comparison Problems Unit Review/Fluency Practice Performance Task Unit Review/Fluency Practice Readiness Diagnostic/Unit S: Numbers and Number Patterns *Choose one application station per unit Readiness Diagnostic/Unit Opener-Ignite 5-1 Understand factors of a Number Math Probe	Content: Geography in Our State, Our Nation (Regions) Skills: Students will be able to: Construct print and digital maps and othe topographic representations to show the of places and regions and their environment characteristics. (SS. 4. G. 1) Explain how the cultural and environment characteristics of places change over time. (SS. 4. G. 2) Investigate the human effects on the physical environment over time. (SS. 4. G. 3) Content: History in Our State, Our Nation Skills: At the end of this unit, students will be able to: Study important individuals or major everorder to recognize and explain that there multiple cultural perspectives. (SS. 4. H. 1) Generate questions about multiple historical events and developments. (SS. 4. Explain probable causes and effects of everand developments in Illinois history (SS. 4. Optional Resources: MyWorld Chapter 1: Geography of the U.S. MyWorld Chapter 7: Regions: Midwest MyWorld Chapter 12: American and their H. MyWorld Chapter 10: History Today My World: Chapter 11: History of Illinois HMH: Geography* HMH: U.S. Landscapes HMH: Climate HMH: How Americans Live HMH: The Midwest, Northeast, Southeast Southwest, The West) EngageNY: Call For Change Essential Questions: 1. How do geographic features shape a state country's history? 2. How did Illinois Develop into a US state? 3. What makes Illinois valuable? Please see framework and integration template in Schofor more information. Common Assessment: Explore Illinois! Project Based Learning Assessemnt Travel Guide Presentation Individual Task Please see Schoology for Common Assessment Documents and their Presentation Individual Task

nth			Literacy Workshop			Writer's Workshop &	k Grammar	Math Workshop Number Routine-5-7 min	Content Workshop (30 minutes) *Integrate across the curriculum.
	Interactive Read Aloud (15 minutes)	Word Study: Phonics and Spelling (20-30 minutes)	Shared Reading/Mini-Lesson (20-30 minutes)	Small Group Share and Reflect (45 minutes)	Independent Learning Centers	Writer's Workshop (45 minutes)	Grammar Study	Launch- 5-7 min Explore & Develop- 20 min Practice & Reflect- 10 min Assess-10 min Differentiate- 10 min	
	Unit 3: Week 2: Your Government at Work Interactive Read-Aloud • From Remarks by the First Lady at Veterans' Homelessness Conference • Letter to the Springfield County Council • Teacher's Choice	Unit 3 Week 2 • Vowel team syllables	Shared Reading: From Remarks by the First Lady at Veterans' Homelessness Conference Letter to the Springfield County Council Fluency lesson AR8-AR9 Mini-Lessons: Introduce the Genre: Argumentative Determine Text Importance Build Vocabulary: Explain and Use Homophones Analyze Author's Voice in an Argumentative Text Recognize Text Structure: Problem and Solution	Guided Reading/Leveled Texts Word Work/Word Study including vocabulary Reading text at highest instructional level (Annotating text leaving evidence of active reading, teacher/student 1:1 conference, running record) Discussion of the text: tailored strategy work, foundational skills, within, beyond,	WRITING ABOUT READING OPPORTUNITIES (tied into whole group, small group and/or independent reading) Sketch to stretch (Revisit, Reflect, Retell by Linda Hoyt p. 177), paragraphed response SWBST, story arc, T-chart or boxes and bullets to name a character trait and support with evidence from text. Paragraphed response describing how events of a story would change if narrated from another character's point of view. Annotate text while reading – sticky notes Just Like from Read, Revisit, Retell by Linda Hoyt p. 105-106 Triple journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response Use boxes and bullets to create and support a theory about a character- use to write a paragraphed response	Writing Fan Fiction Gearing Up for the Unit Studying a Mentor Text/Goal Setting Imagining Possibilities for Our Own Stories Comparing and Trying Out Messages Elaboration Techniques	Unit 2: Writing Sentences with Different Times 1. Pre-Assessment: Knowledge of Verbs 2. Look at Mentor Text 3. Look at Second Mentor Text 4. Comparing Mentor Texts 5. Shared Writing: Design Guiding Questions 6. Simple Verb Tenses	 5-2 Understand Prime and Composite Numbers 5-3 Understand Multiples 5-4 Number or Shape Patterns 	Content: Civics in Our State, Our Nation Skills: At the end of the unit, students will be able to: Explain the roles and responsibilities of government of at the local, state and national levels and investigate heroles and responsibilities of government have changed time. (SS.4.CV.1) Define democracy and explain how limited participation affects the pollical representation of multiple groups(SS.4.CV.2) Identify core civic virtues and democratic principles the guide governments, society, and communities. (SS.4.CV.4) Using evidence explain how rules, regulations, and law or transform societies and how people from multiple communities' influence and experience this transform (SS.4.CV.4.) Optional Resources: MyWorld: Chapter 3, Government in the United State
4 B E	Unit 3: Week 3: Your Government at Work Interactive Read-Aloud Tax Dollars at Work A Nation's Strength Constructed Reading Response Unit #2— Integration of information across 2 texts Teach students to craft a thesis statement to make sure the thesis can be supported. Gather evidence and teach how to organize a plan (ex. Boxes and bullets/Claim, Evidence, Reasoning) Teach students how to support the thesis with evidence by either summarizing/paraphrase the text. Teach students how to support the thesis by using a direct quote. Use quotation marks and commas when quoting the text.	Unit 3 Week 3: Vowel r syllables Handwriting a, d	Shared Reading: Tax Dollars at Work A Nation's Strength Fluency Lesson AR10-AR11 Mini-Lessons: Summarize Informational Texts Build Vocabulary: Identify and Use Roots Recognize Text Structure: Compare and Contrast Identify and Understand Poetic Structures Unit Wrap-Up	about texts Rereading texts: for text support, prepare for writing about reading, fluency practice Collaborative reasoning groups Guided reading around opinion articles Philosophical Chairs Socratic Seminar Book Clubs	QAR, questions before, during, after reading. Boxes and bullets, paragraphed response on big idea or theme of the text and how it is applicable to people's lives today. Double journal entry, reflect on contribution to discussion group and how the discussion changed your understanding of the text Sticky notes, t-charts to encourage problem solving of meanings of unfamiliar words Story arc paragraphed response on describing how the significant events are related to the problem or solution of the story paragraphed response to compare and contrast how the different settings in the book affect the story elements Notice, record, understand, and discuss figurative and descriptive language (double or triple journal entry) Options:	writing Fan Fiction • Generating Ideas for Fan Fiction • Generating Ideas for Fan Fiction • Generating Even More Ideas for Fan Fiction • Generating Even More Ideas for Fan Fiction • Narrowing Down and Trying Out Different Possibilities • Trying Out Different Possibilities • Trying Out Our Message • Creating Plans Using Time Blocking • Verb Tale Sumple Ver	7. Teaching Changing Verb Tenes 8. Sort Sentences with Simple Verbs 9. Mimic Simple • 5-5 Generate a Pattern • 5-6 Analyze Features of a Pattern • Unit Review/Fluency Practice • MyWorld: EngageNY: • HMH: Geo HMH: How	 5-5 Generate a Pattern 5-6 Analyze Features of a Pattern Unit Review/Fluency Practice Performance Task Unit Assessment Essential Question Activities: Activities: 	MyWorld: Chapter 10, Illinois Today EngageNY: Government and Citizens HMH: Geography HMH: How Government Works Civics Essential Questions
	Unit 4: Week 1: Through the Storyteller's Eyes Interactive Read-Aloud Pecos Bill Hercules and the Golden Stag Constructed Reading Response Unit #2— Integration of information across 2 texts Teach students how to include both text evidence and push their thinking throughout the body paragraphs Teach students how to provide a closing statement that restates the thesis and why it matters Week 4: Week 2: Through the Storyteller's Eyes Interactive Read-Aloud My Name is Violet Calpurnia Would Do Teacher's Choice	Unit 4 Week 1 Compounds words Handwriting g, 0 Unit 4 Week 2 Vowel consonant e syllables Handwriting c, q	Shared Reading: Pecos Bill Hercules and the Golden Stag Fluency Lesson AR6-AR7 Mini-Lessons: Introduce the Unit Draw Inferences Analyze Third-Person Point of View Build Vocabulary: Understand Mythological Allusions Explain Character Interactions and Changes Shared Reading: My Name is Violet Calpurnia Would Do Fluency Lesson AR8-AR9 Mini-Lessons: Draw Inferences Analyze First-Person Point of View Build Vocabulary: Understand Mythological Allusions Analyze Voice and Use of Dialogue Determine Themes		 Independent reading Reading Responses/Writing about Reading Collaborative Study Word, Language, & Vocabulary Study Book talks Peer Discussion Listening Technology Research and Inquiry Study: Disaster Preparedness 	Writing Fan Fiction Planning a Story with Double-Rising Time Line Getting Ready to Draft Moving from Plan to Draft Drafting with Time Transitions Midpoint Reflection Day Writing Fan Fiction Kicking off Revision with Sensory Details Get Your Characters Talking Trying on Different Endings Admire, Borrow, Try It Out Playing with Verbs	15. Shared Writing: Compare Simple and Perfect tenses 16. Exploring Sentences with Progressive Tenses 17. Make Progressive Tenses 18. Playing with Sentences and Verb Tenses 19. Playing with Sentences and Verb Tenses 20. Revisit Goal and Reflect	Unit 6: Multiplication Strategies with Multi-Digit Numbers *Choose one application station per unit Readiness Diagnostic/Unit Opener-Ignite 6-1 Multiply by Multiples 6-2 Estimate Products 6-3 Use the Distributive Property to Multiply 6-4 Multiply 2- Digit by 1 Digit Factors	

		Literacy Workshop			Writer's Workshop &	k Grammar	Math Workshop Number Routine-5-7 min	Content Workshop (30 minutes) *Integrate across the curriculum.
Interactive Read Aloud (15 minutes)	Word Study: Phonics and Spelling (20-30 minutes)	Shared Reading/Mini-Lesson (20-30 minutes)	Small Group Share and Reflect (45 minutes)	Independent Learning Centers	Writer's Workshop (45 minutes)	Grammar Study	Launch- 5-7 min Explore & Develop- 20 min Practice & Reflect- 10 min Assess-10 min Differentiate- 10 min	
Unit 4: Week 3: Through the Storyteller's Eyes Interactive Read-Aloud • The Diamond Anklet • The Drum • Teacher's Choice	Unit 4 Week 3: Consonant -le syllables	Shared Reading: * The Diamond Anklet * The Drum * Fluency Lesson AR10-AR11 Mini-Lessons: • Explain Character Interactions and Changes • Build Vocabulary: Use Context Clues • Analyze Third Person Point of View • Analyze Free-Verse Poetry • Unit Wrap-Up	Guided Reading/Leveled Texts Word Work/Word Study including vocabulary Reading text at highest instructional level (Annotating text leaving evidence of active reading, teacher/student 1:1 conference, running record) Discussion of the	WRITING ABOUT READING OPPORTUNITIES (tied into whole group, small group and/or independent reading) • Sketch to stretch (Revisit, Reflect, Retell by Linda Hoyt p. 177), • paragraphed response • SWBST, story arc, • T-chart or boxes and bullets to name a character trait and support with evidence from text. • Paragraphed response describing how events of a story would change if narrated from another character's point of view. • Annotate text while reading – sticky notes • Just Like from Read, Revisit, Retell by Linda	 Writing Fan Fiction Revise with Feedback from Partners Making and Using Our Own Revision Checklist Begin Editing While Revising Editing for Capitals Editing Dialogue 	Unit 2: Writing Sentences with Different Times 21.Revisit a Mentor Text 22. Shared Writing: Use Different Verb Tenses 23. Try Out Some Verb Tenses 24. Explore Vary Verb Tenses in Previous Writing	6-5 Multiply Multi-Digit by 1 Digit Factors 6-6 Multiple Two Multiples of 10 6-7 Multiply Two 2- Digit Factors Math Probe 6-8 Solve Multi-Step Problems Involving Multiplication	Teacher's Choice
 Unit 5: Week 1: Robot Revolution Interactive Read-Aloud Humans and Robots Can Work Together Who's Driving? Teacher's Choice 	Unit 5 Week 1 Hard and soft c, g Handwriting n, m	Shared Reading: Humans and Robots Can Work Together Who's Driving? Fluency Lesson AR6-AR7 Mini-Lessons: Introduce the Unit Summarize and Synthesize Recognize the Claim and Supporting Evidence in an Argument Build Vocabulary: Identify and Use Affixes Recognize Text Structure: Cause and Effect	Discussion of the text: tailored strategy work, foundational skills, within, beyond, about texts Rereading texts: for text support, prepare for writing about reading, fluency practice Collaborative reasoning groups Guided reading around opinion articles Philosophical Chairs Socratic Seminar Book Clubs	work, foundational skills, within, beyond, about texts Rereading texts: for text support, prepare for writing about reading, fluency practice Collaborative reasoning groups Guided reading around opinion articles Philosophical Chairs Segment of Rereading texts: for text support, prepare for writing about reading, fluency practice Collaborative reasoning groups Guided reading around opinion articles Segment of the text and how it is applicable to people's lives today. Double journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response Use boxes and bullets to create and support a theory about a character- use to write a paragraphed response OAR, questions before, during, after reading. Boxes and bullets, paragraphed response on big idea or theme of the text and how it is applicable to people's lives today. Double journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response OAR, questions before, during, after reading. Double journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response OAR, questions before, during, after reading. Double journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response OAR, questions before, during, after reading. Double journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response OAR questions before, during, after reading. Double journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response OAR questions before, during, after reading. Double journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response	 Writing Fan Fiction Using an Editing Checklist Preparing for Publication Final Reflection and Celebration Setting Up Experiences for Transfer Setting Up Experiences for Transfer 	25. Post-Assessment	Practice Performance Task Unit Assessment Unit 7: Division Strategies with Multi-Digit Dividends and 1- Digit Divisors *Choose one application station per unit Readiness Diagnostic/Unit Opener-Ignite 7.1 Divide Multiples of 10, 100, 1000	
Interactive Read-Aloud Doctors Get a Helping Hand Robot Workers and Human Jobs Teacher's Choice	Unit 5 Week 2 R-controlled vowels (ar, or, oar, ore) Handwriting y, x	Shared Reading: Doctors Get a Helping Hand Robot Workers and Human Jobs Lesson AR8-AR9 Mini-Lessons: Summarize and Synthesize Explain Author's Use of Anecdote Build Vocabulary: Identify and Use Affixes Interpret Text and Graphic Features Recognize Text Structure: Problem and Solution		Chairs Socratic Seminar Sticky notes, t-charts to encourage problem solving of meanings of unfamiliar words	Writing to Persuade, Argue, and Advise Gearing Up for the Unit Studying a Mentor Text and Our Own Writing Studying Mentor Text and Organizing Ideas Studying Mentor Texts for Details and Making a Claim Studying Mentor Texts for Sentence Types and Structure	Unit 3: Fitting Sentences Together Like Puzzle Pieces 1. Pre-Assessment: Knowledge of Verbs 2. Look at Mentor Text 3. Look at Second Mentor Text 4. Compare Mentor Texts 5. Shared Writing: Sizing Up a Superior Sentence	 7.2 Estimate Quotients 7.3 Find Equal Shares 7.4 Understand Partial Quotients 7.5 Divide 4 Digit Dividends 7-6 Understand Remainders 	

nth			Literacy Workshop			Writer's Workshop &	z Grammar	Math Workshop Number Routine-5-7 min	Content Workshop (30 minutes) *Integrate across the curriculum.
	Interactive Read Aloud (15 minutes)	Word Study: Phonics and Spelling (20-30 minutes)	Shared Reading/Mini-Lesson (20-30 minutes)	Small Group Share and Reflect (45 minutes)	Independent Learning Centers	Writer's Workshop (45 minutes)	Grammar Study	Launch- 5-7 min Explore & Develop- 20 min Practice & Reflect- 10 min Assess-10 min Differentiate- 10 min	
	Unit 5: Week 3: Robot Revolution Interactive Read-Aloud Rise of The Drones Sun Tracks Teacher's Choice Unit 6: Week 1: Heroes and Villains Interactive Read-Aloud	Unit 5 Week 3: • R- controlled vowels (er, ir,ur) Handwriting v, z Unit 6 Week 1: • Adverb suffixes -ly, -	Shared Reading: Rise of the Drones Sun Tracks Fluency Lesson AR10-AR11 Mini-Lessons: Recognize the Claim and Supporting Evidence in an Argument Build Vocabulary: Use Greek and Latin Root Words Recognize Text Structure: Cause and Effect Analyze Author's Use of Figurative Language: Metaphors Unit Wrap Up Shared Reading: Saving Will Scarlet The Heist	Guided Reading/Leveled Texts Word Work/Word Study including vocabulary Reading text at highest instructional level (Annotating text leaving evidence of active reading, teacher/student 1:1 conference, running record) Discussion of the text: tailored strategy work, foundational skills, within, beyond, about texts Rereading texts: for text support, prepare	WRITING ABOUT READING OPPORTUNITIES (tied into whole group, small group and/or independent reading) • Sketch to stretch (Revisit, Reflect, Retell by Linda Hoyt p. 177), • paragraphed response • SWBST, story arc, • T-chart or boxes and bullets to name a character trait and support with evidence from text. • Paragraphed response describing how events of a story would change if narrated from another character's point of view. • Annotate text while reading – sticky notes • Just Like from Read, Revisit, Retell by Linda Hoyt p. 105-106 • Triple journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response • Use boxes and bullets to create and support a theory about a character- use to write a	Writing to Persuade, Argue, and Advise Generating Ideas Even More Generating Ideas for Argument Narrowing Down Designing a Claim Choosing an Overall Structure Writing to Persuade, Argue, and Advise Using Feedback for	Unit 3: Fitting Sentences Together Like Puzzle Pieces 6. Singular and Plural Nouns 7. What's So Special About Nouns 8. Relative and Reflexive Pronouns 9. Using Nouns, Pronouns, and Multiple Adjectives 10. Consider How Nouns and Pronouns Work 11. How Subjects and	7-7 Make Sense of the Remainder Math Probe 7-8 Solve Multi-Step Problems Using Division Unit Review/Fluency Practice Performance Task Unit Assessment Benchmark Assessment 2	Unit: Sound, Waves, and Communication Skills: At the end of the unit, students will be ab • Develop a model of waves to describe patterns
	 Saving Will Scarlet The Heist Teacher's Choice 	ily,-ways,-wise Handwriting A, O	Fluency Lesson – AR6-AR7 Mini-Lessons: Introduce the Unit Make Connections Analyze Plot Build Vocabulary: Determine the Meaning of Multiple-Meaning Words Compare and Contrast Themes in Stories From Different Cultures	for writing about reading, fluency practice • Collaborative reasoning groups • Guided reading around opinion articles • Philosophical Chairs	paragraphed response QAR, questions before, during, after reading. Boxes and bullets, paragraphed response on big idea or theme of the text and how it is applicable to people's lives today. Double journal entry, reflect on contribution to discussion group and how the discussion changed your understanding of the text Sticky notes, t-charts to encourage problem solving of meanings of unfamiliar words	Planning and Drafting	Verbs Agree 12. Subject/Verb Agreement 13. Matching Subjects and Verbs 14. How Nouns and Pronouns Agree 15. Noun and Pronoun Agreement 16. Sentences that Jibe 17. Sentences Under	Unit 8: Fraction Equivalence *Choose one application station per unit • Readiness Diagnostic/Unit Opener-Ignite • 8.1 Equivalent Fractions	terms of amplitude and wavelength and that we can cause objects to move. (4-PS4-1) • Generate and compare multiple solutions that patterns to transfer information.(4-PS4-3) Suggested Resource: • Mystery Science: Sound, Waves, and Communication
	Unit 6: Week 2: Heroes and Villains Interactive Read-Aloud If- Instructions on Not Giving Up Teacher's Choice	Unit 6 Week 2 • Variant vowels (00, ew,ue,ould,ull) Handwriting D, C	Shared Reading: If- Instructions on Not Giving Up Fluency lesson AR8-Ar9 Mini-Lessons: Determines Themes in a Poem Make Connections Analyze Author's Use of Figurative Language: Personification Build Vocabulary: Determine the Meaning of Multiple-Meaning Words	Chairs • Socratic Seminar • Book Clubs	Story arc paragraphed response on describing the significant events are related to problem or solution of the story paragraphed response to compare a contrast how the different settings book affect the story elements Notice, record, understand, and dist figurative and descriptive language or triple journal entry) Options:	Story arc paragraphed response on describing how the significant events are related to the problem or solution of the story paragraphed response to compare and contrast how the different settings in the book affect the story elements Notice, record, understand, and discuss figurative and descriptive language (double or triple journal entry) Options: Independent reading	Writing to Persuade, Argue, and Advise • Using Successes and Planning for Risks • Choosing the Next Draft Idea • Different September Construction 18. Fixing Fragments and Run-Ons 19. Fixing Double Negatives and Commas Splices • 8-2 Generate Equivalen Fractions using Models. • 8.3 Generate Equivalen Fractions Using Number • 8-4 Compare Fractions using Models. • 8-2 Generate Equivalen Fractions using Models. • 8-3 Generate Equivalen Fractions using Models. • 8-3 Generate Equivalen Fractions using Models. • 8-4 Compare Fractions using Number • 8-6 Generate Equivalen Fractions using Models. • 8-7 Generate Equivalen Fractions using Models. • 8-8 Generate Equivalen Fractions using Models. • 8-8 Generate Equivalen Fractions using Models. • 8-9 Generate Equivalen Fractions using Models. • 8-9 Generate Equivalen Fractions Using Number • 8-9 Generate Equivalen Fractions Using Number	• 8.5 Other ways to Compare	Optional Resources: • HMH Unit 3: Waves and Information Transfer Essential Questions: Activities: Anchor Phenomenon Lessons 1-4 Assessments: Lessons 1-4
	Unit 6: Week 3: Heroes and Villains Interactive Read-Aloud It Takes a Thief to Catch a Thief Humanity Teacher's Choice	Unit 6 Week 3: • Adjective suffixes -ful, -ous,-ible,-able,-some Handwriting E	Shared Reading: It Takes a Thief to Catch a Thief Humanity Fluency Lesson AR10-AR11 Mini-Lessons: Analyze Plot Build Vocabulary :Explain Idioms, Adages, and Proverbs Compare and Contrast Themes in Stories from Different Cultures		 Reading Responses/Writing about Reading Collaborative Study Author Study Word, Language, & Vocabulary Study Book talks Peer Discussion Listening Technology Research and Inquiry Study: Technology Benefits and Consequences/Portrait of a Hero 	Writing to Persuade, Argue, and Advise Partnerships Using Short Chunks of Texts for Impact Editing for Punctuation Balancing Argument and Advice Final Edit	24. Writing with Agreement 25. Revising Your Writing 26. Post-Assessment	Math Probe Unit Review/Fluency Practice Performance Task Unit Assessment Unit 9: Addition and Subtraction Meanings and Strategies with Fractions *Choose one application station per unit Readiness Diagnostic/Unit Opener-Ignite	

th			Literacy Workshop			Writer's Workshop & Gr	ammar	Math Workshop Number Routine-5-7 min	Content Workshop (30 minutes)
	Interactive Read Aloud (15 minutes)	Word Study: Phonics and Spelling (20-30 minutes)	Shared Reading/Mini-Lesson (20-30 minutes)	Small Group Share and Reflect (45 minutes)	Independent Learning Centers	Writer's Workshop Handwriting (45 minutes)	Grammar Study	Launch- 5-7 min Explore & Develop- 20 min Practice & Reflect- 10 min Assess-10 min Differentiate- 10 min	*Integrate across the curriculun Integrate across the curriculum. Independent time in literacy can be utilized.
	Unit 7: Week 1: Changing Lives, Changing Communities Interactive Read-Aloud Refugee City Tex Mex: An Edible History ODW/IAR Practice: "Wild Horses and Wild Ponies" IAR Research Practice Opportunity RI 4.1-Refer to details and examples in a text when explaining what the text says, explicitly and when drawing inferences. RI 4.2-Determine the main idea of a text and explain how it is supported by key details; summarize the text RI 4.3- Explain events, procedures, ideas, or concepts in a text, including what happened and why, based on specific information in the text. RI 4.4- Determine the meaning of general academic and domain specific words or phrases RI 4.5- Describe the overall structure of events, ideas, concepts, or information in a text or part of a text.	Unit 7 Week 1 • Dipthongs /ou, /oi/	Shared Reading: Refugee City Tex Mex: An Edible History Fluency Lesson AR6-AR7 Mini-Lessons: Introduce the Unit Use Fix-Up and Monitoring Strategies Interpret Text and Graphic Features Build Vocabulary: Use Context Clues Recognize Text Structure: Chronological Order	Guided Reading/Levele d Texts Word Work/Word Study including vocabulary Reading text at highest instructional level (Annotating text leaving evidence of active reading, teacher/student 1:1 conference, running record) Discussion of the text: tailored strategy work, foundational skills, within,	WRITING ABOUT READING OPPORTUNITIES (tied into whole group, small group and/or independent reading) • Sketch to stretch (Revisit, Reflect, Retell by Linda Hoyt p. 177), • paragraphed response • SWBST, story arc, • T-chart or boxes and bullets to name a character trait and support with evidence from text. • Paragraphed response describing how events of a story would change if narrated from another character's point of view. • Annotate text while reading – sticky notes • Just Like from Read, Revisit, Retell by Linda Hoyt p. 105-106 • Triple journal prediction chart (what, how, why, turn and talk/stop and	Writing to Persuade, Argue, and Advise Getting Ready to Publish Publishing Final Reflection and Celebration Setting Up Experiences for Transfer Setting Up Experiences for Transfer		9-1 Understand Decomposing Fractions 9-2 Represent Adding Fractions 9-3 Add Fractions with Like Denominators 9-4 Represent Subtracting Fractions	Unit: Earth's Features & P Skills: At the end of this un students will be able to: • Identify evidence from pat rock formations and fossils layers to support an explan changes in a landscape ove (4-ESS1-1) • Make observations and/or measurements to provide e of the effects of weathering rate of erosion by water, ic or vegetation.(4-ESS2-1) • Analyze and interpret data maps to describe patterns of features.(4-ESS2-2)
	Unit 7: Week 2: Changing Lives, Changing Communities Interactive Read-Aloud Fitting in Far From Home: Scene 1 Fitting in Far From Home: Scene 2	Unit 7 Week 2 • Prefixes trans, pro, sub,super,inter Handwriting N, M	Shared Reading: Fitting in Far From Home: Scene 1 Fitting in Far From Home: Scene 2 Fluency Lesson AR8-AR9 Mini-Lessons: Introduce the genre: Drama Use Fix-Up and Monitoring Strategies	beyond, about texts Rereading texts: for text support, prepare for writing about reading, fluency practice	jot, paragraphed response Use boxes and bullets to create and support a theory about a character-use to write a paragraphed response QAR, questions before, during, after reading. Boxes and bullets, paragraphed response on big idea or theme of the	Test Taking as a Genre • Analyze a Prompt and Two Articles • Writing on the Spot: • Reviewing and Revising Your Informative Essay		9-5 Subtract fractions with Like Denominators Math Probe 9.6 Solve Problems Involving Fractions Unit Review/Fluency Practice	Generate and compare musclutions to reduce the imnatural Earth processes or (4-ESS3-2) Suggested Resource: Myst Science: Earth's Features
1	Cont: ODW L4.4-Determine or clarify the meaning of unknown and multiple meaning words and phrases. Write an essay explaining what can be learning from the illustrations about the lives of the ponies described in the passages. RI 4.1, RI4.7, RI4.9, W4-10		Build Vocabulary: Use Greek and Latin Root Words Identify the Elements of Drama Analyze Voice	Collaborative reasoning groups Guided reading around opinion	text and how it is applicable to people's lives today. • Double journal entry, reflect on contribution to discussion group and how the discussion changed your understanding of the text	 Analyze a Narrative and a Prompt Writing on the Spot - Narrative 		Performance Task Unit Assessment	Processes Optional Resources: • HMH: Unit 6 Changes to
•	Unit 7: Week 3: Changing Lives, Changing Communities Interactive Read-Aloud The Great Migration Constructed Reading Response Unit #3 – Focus on theme, symbols or author's craft Review the structure of a constructed response: Introduction with thesis, title of book, and hook (questions, quote, create the setting). Reasons and evidence to support the thesis, including both summarizing the text and quoting the text. Pushing thinking/reasoning, Closing. Close read of mentor text to generate an idea(s) about a possible themes, symbols or craft. Select an idea about a. possible theme, symbol or aspect of the author's craft. Support students in crafting a thesis statement to make sure the thesis can be supported. Gather evidence and teach how to organize a plan (ex. Boxes and bullets/Claim, Evidence, Reasoning)	Unit 7 Week 3 • Homophones Handwriting H, K,	Shared Reading: The Great Migration Concord Hymn Fluency Lesson AR10-AR11 Mini-Lessons: Recognize Text Structure: Chronological Order Build Vocabulary: Use Context Clues Interpret Text and Graphic Features Determine the Theme of a Poem Unit Wrap-Up	around opinion articles • Philosophical Chairs • Socratic Seminar • Book Clubs	Philosophical problem solving of meanings of unfamiliar words Socratic Seminar Philosophical problem solving of meanings of unfamiliar words Story arc	Test Taking as a Genre Revising and Editing Your Essay Revising Passages Editing Sentences Correcting Errors Taking a Practice Test	Unit 4: A Deep Dive into Punctuation and Quotes 1. Pre-Assessment 2. Look at A Mentor Text 3. Look at a Second Mentor Text 4. Compare Mentor Texts 5. Shared Writing: Our Curiosities about Punctuation 6. Consider Commas in Dates 7. Commas in	Unit 10: Addition and Subtraction Strategies with Mixed Numbers *Choose one application station per unit Readiness Diagnostic/Unit Opener-Ignite 10.1 Understand Decomposing Mixed Numbers 10.2 Represent Adding Mixed Numbers 10.3 Add Mixed Numbers	Earth's Surface HMH: Unit 7 Rocks and F HMH: Unit 8: Natural Resand Hazards Activities: Anchor Phenomenon Lessons 1-5 Assessments: Lessons: 1-5
	Unit 8: Week 1: Nature's' Fury Interactive Read-Aloud • Shelter from the Storm • Unexpected! Constructed Reading Response Unit #3 – Focus on theme, symbols or author's craft • Scaffold the students in how to support the thesis by using a direct quote. Use quotation marks and commas when quoting the text. • Scaffold the students pushing their thinking and writing a closing statement or paragraph.	Unit 8 Week 1 Negative prefixes de, un,in, im,dis Handwriting U, Y	Shared Reading: Shelter from the Storm Unexpected! Fluency Lesson AR6-AR7 Mini-Lessons: Introduce the Unit Summarize and Synthesize Informational texts Analyze First- Person Point of View Build Vocabulary: Determine the Meaning of Multiple-Meaning Words Interpret Text and Graphic Features:		 Collaborative Study Author Study Word, Language, & Vocabulary Study Book talks Peer Discussion Listening Technology Research and Inquiry Study: Community History 	Poetry to Fight Injustice Gearing Up for the Unit and Studying Our Own Writing Studying Mentor Texts and Generating Ideas Narrowing Ideas Studying a Mentor Text for Imagery and Making a Belief Statement Studying a Mentor Text for Figurative Language	Transitional Phrases 8. Transitional Phrases and Commas 9. Punctuate Appositives 10. Commas with Appositives	10-4 Represent Subtracting Mixed Numbers 10.5 Subtract Mixed Numbers 10.6 Solve Problems Involving Mixed Numbers Math Probe Unit Review/Fluency Practice	

nth			Literacy Workshop			Writer's Workshop & Gr	rammar	Math Workshop	Content Workshop (30
	Interactive Read Aloud (15 minutes)	Word Study: Phonics and Spelling (20-30 minutes)	Shared Reading/Mini-Lesson (20-30 minutes)	Small Group Share and Reflect (45 minutes)	Independent Learning Centers	Writer's Workshop Handwriting (45 minutes)	Grammar Study	Number Routine-5-7 min Launch- 5-7 min Explore & Develop- 20 min Practice & Reflect- 10 min Assess-10 min Differentiate- 10 min	minutes) *Integrate across the curriculum. Integrate across the curriculum. Independent time in literacy can also be utilized.
	Unit 8: Week 2: Nature's Fury Interactive Read-Aloud Earthquakes Krakatoa Sunsets Teacher's Choice Unit 8: Week 3: Nature's Fury	Unit 8 Week 2 Greek and Latin Roots geo,archae,rup t	Shared Reading: • Earthquakes • Krakatoa Sunsets • Fluency Lesson AR8-AR9 Mini-Lessons: • Create Mental Images of Steps in a Process • Interpret Text and Graphic Features: Maps and Diagrams • Build Vocabulary: Understand and Use Word Roots • Explain Author's USe of Anecdote • Determine Central Idea and Explain Supporting Evidence	Guided Reading/Levele d Texts Word Work/Word Study including vocabulary Reading text at highest instructional level (Annotating text leaving evidence of active reading, teacher/student 1:1 conference, running record) Discussion of the text: tailored strategy work, foundational skills, within, beyond, about	WRITING ABOUT READING OPPORTUNITIES (tied into whole group, small group and/or independent reading) • Sketch to stretch (Revisit, Reflect, Retell by Linda Hoyt p. 177), • paragraphed response • SWBST, story arc, • T-chart or boxes and bullets to name a character trait and support with evidence from text. • Paragraphed response describing how events of a story would change if narrated from another character's point of view. • Annotate text while reading – sticky notes • Just Like from Read, Revisit, Retell by Linda Hoyt p. 105-106 • Triple journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response	Poetry to Fight Injustice Generating Ideas for Poems Writing Swiftly Structuring and Revising Poems Developing and Revising Poems Writing Different Versions of Poetry	Unit 4: A Deep Dive into Punctuation and Quotes 11. Explore Commas in Phrases 12. Commas in Transitional Phrases 13. Transitional Phrases and Commas 14. Punctuation Appositives 15. Commas with Appositives 16. Write with Appositives and Phrases	Performance Task Unit Assessment Benchmark Assessment Unit 11: Multiply Fractions by Whole Numbers *Choose one application station per unit Readiness Diagnostic/Unit Opener-Ignite 11.1 Represent Multiplication of a Unit Fraction by a Whole Number 11.2 Understand Multiplying a	Continue: <u>Unit: Earth's Feature</u> & Processes Skills
•	Interactive Read-Aloud The Eruption of Vesuvius Negotiations with a Volcano Teacher's Choice	Variant vowel (au, al,aw) Handwriting Z, V	The Eruption of Vesuvius Negotiations with a Volcano Fluency Lesson AR10-AR11 Mini-Lessons: Compare and Contrast_Information in a Firsthand and Secondhand Account Build Vocabulary: Use Context Clues Determine Text Importance Determine the Theme of a Poem Unit Wrap-Up	texts Rereading texts: for text support, prepare for writing about reading, fluency practice Collaborative reasoning groups Guided reading around opinion articles Philosophical Chairs Socratic Seminar Book Clubs	Use boxes and bullets to create and support a theory about a character- use to write a paragraphed response QAR, questions before, during, after reading. Boxes and bullets, paragraphed response on big idea or theme of the text and how it is applicable to people's lives today. Double journal entry, reflect on contribution to discussion group and how the discussion changed your understanding of the text Sticky notes, t-charts to encourage problem solving of meanings of unfamiliar words Story arc paragraphed response on describing	Using Resources to Revise Planning to Celebrate Celebration! Poetry Café Writing a Different Kind of Poem Revising a Social Studies Poem	17. Choose Punctuation 18. The Effects of Punctuation 19. Punctuate for Effect 20. Consider the Effects of Punctuation 21. Shared Writing: What We Know 22. Revise Shared Writing 23. Try Out Some Sentences 24. Revise Your Sentences 25. Revisit Pre- Assessment	Fraction by a Whole Number 11.3 Multiply a Fraction by a Whole Number 11.4 Multiply a Mixed Number by a Whole Number	
	Unit 9: Week 1: Resources Impact Economies Interactive Read-Aloud • Why Resources Matter • Seattle: Up and Down and Up Again • Teacher's Choice	Unit 9 Week 1 Noun suffixes - dom, -ity, - ition,-ment,- ness Handwriting W, X	Shared Reading: Why Resources Matter Seattle: Up and Down and Up Again Fluency Lesson AR6-AR7 Mini-Lessons: Introduce the Unit Draw Inferences Interpret Text and Graphic Features: Section Heads Build Vocabulary: Use Context Clues to Define Words Recognize Text Structure and Explain Author's Purpose		how the significant events are related to the problem or solution of the story paragraphed response to compare and contrast how the different settings in the book affect the story elements Notice, record, understand, and discuss figurative and descriptive language (double or triple journal entry) Options: Independent reading Reading Responses/Writing about Reading	Writing On-The-Scene Accounts Gearing Up for the Unit Studying a Mentor Text and Studying Your Ow Writing Studying Newspapers and Brainstorming Ideas Studying Mentor Texts and Asking Questions Studying Mentor Text Structure and Structure Writing	Unit 5: Capitols, Apostrophes, Commas, and More 1. Pre-Assessment 2. Read Mentor Text 1 3. Read Mentor Text 2 4. Share Writing: Guided Questions 5. Mentor Texts: Articles 6. Capital Patterns 7. Capital Rules 8. Use Capitals in Titles	Math Probe 11.5 Solve Problems Involving Fractions and Mixed Numbers Unit Review/Fluency Practice Performance Task	Explain how profits rewards and influence sellers. (SS.4.EC.1) Describe how goods and service are produced using human, nat and capital resources (e.g. tools machines)(SS.4.EC.2) Analyze how spending choices a influenced by price as well as mother factors. (e.g. advertising, pressure, options)(SS.4.EC.FL.3) Explain that income can be save spent on good and services, or the services and services.
	Unit 9: Week 2: Resources Impact Economies Interactive Read-Aloud • Sweet Talk • Land of Opportunity • Teacher's Choice	Unit 9 Week 2 Latin Roots mis, agri, duc/ duct, man Handwriting I, J	Shared Reading: Sweet Talk Land of Opportunity Fluency Lesson AR8-AR9 Mini-Lessons: Explain Character Interactions and Changes Determine Text Importance		 Collaborative Study Author Study Word, Language, & Vocabulary Study Book talks Peer Discussion Listening Technology Research and Inquiry Study: Earth Jobs/ All the World in a Classroom 	Writing On-The-Scene Accounts Generating Ideas for Articles Planning to Write Articles Drafting and Revising Articles Adding Text Features to Your Articles Adding Interview Quotes to Your Articles	9. Playing with Titles 10. Reflect Goal	Unit Assessment Unit 12: Decimal Fractions *Choose one application station per unit Readiness Diagnostic/Unit Opener-Ignite 12.1 Understand Tenths and Hundredths 12.2 Understand Decimal Notation 12.3 Compare Decimals	to pay taxes.(SS.4.EC.FL.4) Resource: JA: Our Region *This unit covers all Economic standards) Options: MyWorld: Chapter 4, The Economic EngageNY: Industrialization EngageNY: The Economy and Menuments HMH: How Americans

			Literacy Workshop			Writer's Workshop & Gr	ammar	Math Workshop Number Routine-5-7 min	Content Workshop (30 minutes)
	Interactive Read Aloud (15 minutes)	Word Study: Phonics and Spelling (20-30 minutes)	Shared Reading/Mini-Lesson (20-30 minutes)	Small Group Share and Reflect (45 minutes)	Independent Learning Centers	Writer's Workshop Handwriting (45 minutes)	Grammar Study	Launch- 5-7 min Explore & Develop- 20 min Practice & Reflect- 10 min Assess-10 min Differentiate- 10 min	*Integrate across the curriculum. Integrate across the curriculum. Independent time in literacy can a be utilized.
١	Unit 9: Week 3: Resources Impact Economies Interactive Read-Aloud A Changing African Resource They Were My People Teacher's Choice	Unit 9 Week 3 • R-controlled vowel (air, are, ear) Handwriting Q, T	Shared Reading: A Changing African Resource They Were My People Fluency Lesson AR10-AR11 Mini-Lessons: Summarize and Synthesize Informational Texts Build Vocabulary: Use Context Clues to Define Words Explain Author's Purpose and Message Interpret Figurative Language: Alliteration and Assonance Unit Wrap-Up	Guided Reading/Levele d Texts Word Work/Word Study including vocabulary Reading text at highest instructional level (Annotating text leaving evidence of active reading, teacher/student 1:1 conference, running record) Discussion of the	WRITING ABOUT READING OPPORTUNITIES (tied into whole group, small group and/or independent reading) • Sketch to stretch (Revisit, Reflect, Retell by Linda Hoyt p. 177), • paragraphed response • SWBST, story arc, • T-chart or boxes and bullets to name a character trait and support with evidence from text. • Paragraphed response describing how events of a story would change if narrated from another character's point of view. • Annotate text while reading – sticky notes	Writing On-The-Scene Accounts Using Your notebook Like a Reporter Finding and Citing Resources Reading Like a Reader to Revise Using Partner Feedback for Drafting Generating New Ideas for Articles	Unit 5: Capitols, Apostrophes, Commas, and More 11. Noticing Commas 12. Commas with Purposes 13. Growing Sentences 14. Explore Adjectives and Adverbs 15. Adjective and Adverb Roundup 16. Notice Apostrophes in Sentences	Math Probe 12-4 Adding Decimals Using Fractions 12-5 Solve Problems Involving Money Unit Review Fluency Practice Performance Task	Economics Continued Activities: • JA: Sessions 1-5 Essential Questions:
	Unit 10: Week 1: Exploring Electricity Interactive Read-Aloud The Following Can Power Line Safety Teacher's Choice	Unit 10 Week 1 • Adding endings with spelling changes Handwriting • F, G	Shared Reading: The Following Can Power Line Safety Fluency Lesson AR6-AR7 Mini-Lessons: Introduce the unit Ask Questions About a Text Introduce the Genre: Procedural Text Build Vocabulary: Use Context Clues Interpret Text and Graphic Features: Photographs and Diagram	text: tailored strategy work, foundational skills, within, beyond, about texts Rereading texts: for text support, prepare for writing about reading, fluency practice Collaborative reasoning groups	Iust Like from Read, Revisit, Retell by Linda Hoyt p. 105-106 Triple journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response Use boxes and bullets to create and support a theory about a character-use to write a paragraphed response QAR, questions before, during, after reading. Boxes and bullets, paragraphed response on big idea or theme of the text and how it is applicable to people's lives today. Double journal entry, reflect on	Writing On-The-Scene Accounts Generating Ideas that Interest You Trying Out Different Structures Starting Articles with Important Information Writing Conclusions Generating Ideas for Follow-Up Articles	17. Teacher Punctuate Possessives 18. Explore Pairing Possessives and Nouns 19. Shared Writing: Goals Revisited 20. Reflect Write and Sketch Homophones 21. Teach Break a Word with a Hyphen 22. Write with Punctuation	Unit Assessment Unit 13: Units of Measurement and Data *Choose one application station per unit Readiness Diagnostic/Unit Opener-Ignite 13.1 Relate Metric Units 13.2 Relate Customary Units of Weight 13.3 Relate Customary Units of	Content: Energy & Energy Tra Skills: At the end of this unit, st will be able to: • Use evidence to construct an explanation relating the speed of object to the energy of that obje PS3-1) • Ask questions and predict outcome about the changes in energy that when objects collide.(4-PS3-3) • Apply scientific ideas to design and refine a device that convert from one form to another. (4-PS)
	Unit 10: Week 2: Exploring Electricity Interactive Read-Aloud • A Shocking Tale Part 1 • A Shocking Tale Part 2 • Teacher's Choice	Unit 10 Week 2 • Words with final Handwriting S, L	Shared Reading: A Shocking Tale Part 1 A Shocking Tale Part 2 Fluency Lesson AR8-AR9 Mini-Lessons: Introduce the Genre: Graphic Stories Make Connections Build Vocabulary: Use Context Clues Introduce the Genre: Graphic Stories Explain Character Interactions and Changes	Guided reading around opinion articles Philosophical Chairs Socratic Seminar Book Clubs	contribution to discussion group and how the discussion changed your understanding of the text Sticky notes, t-charts to encourage problem solving of meanings of unfamiliar words Story arc paragraphed response on describing how the significant events are related to the problem or solution of the story paragraphed response to compare and contrast how the different settings in the book affect the story elements Notice, record, understand, and discuss	Writing On-The-Scene Accounts Choosing Articles to Publish Using All You Know to Revise Indenting Paragraphs Rereading with an Editor's Eye Checking Quotations	23. Try Out Some Sentences 24. Revisit Writing 25. Post-Assessment	Capacity • 13.4 Convert Units of Time • 13.5 Solve Problems That involve Units of Measure • Math Probe • 13.6 Solve More Problems That Involve Units of Measure	Suggested Resource: • Mystery Science: Energy & En Transfer Optional Resources: • HMH Unit 2 Energy Activities: Anchor Phenomenon Lessons 1-5
	Unit 10: Week 3: Exploring Electricity Interactive Read-Aloud Experimenting with Electromagnets The Simplicity of Electricity Teacher's Choice	Unit 10 Week 3 • Latin and Greeks roots ven(come), migr(move),grap h(write),mit(Send),aud(hear) Handwriting P, R	Shared Reading: Experimenting with Electromagnets The Simplicity of Electricity Fluency Lesson AR10-AR11 Mini-Lessons: Analyze Text Structure: Steps in a Procedure Build Vocabulary: Use Context Clues Interpret Text and Graphic Features: Procedural Steps and Illustrations Make Connections Between Texts and Visual Information Unit Wrap-Up		Notice, record, understand, and discuss figurative and descriptive language (double or triple journal entry) Options: Independent reading Reading Responses/Writing about Reading Collaborative Study Word, Language, & Vocabulary Study Book talks Peer Discussion Listening Technology Research and Inquiry Study: All the World in a Classroom/Scientific Breakthroughs	Writing On-The-Scene Accounts Preparing for Publishing Final Reflection and Celebration Reflecting On the Year Setting Up Experiences for Transfer		13.7 Solve Problems Using a Perimeter Formula 13.8 Solve Problems Using an Area Formula 13.9 Solve Problems Involving Perimeter and Area 13.10 Display and Interpret Data on a Line Plot 13.11 Solve Problems Involving Data on a Line Plot Extra week: Unit Review/Fluency Practice Performance Task Unit Assessment	Assessments: Lessons 1-5 Unit Assessment Content: Electricity, Light & Heat Skills: At the end of this unit, studen able to: • Make observations to provide evider energy can be transferred from place by sound, light, heat, and electric cur PS3-2) • Apply scientific ideas to design, test refine a device that converts energy if form to another. (4-PS3-4) Activities: Anchor Phenomenon Lessons 1-3 Assessments: Lessons 1-3 Unit Assessment

Trimester Month			Liter	acy Workshop		Writer's Worksho	op & Grammar	Math Workshop	Content Workshop (30 minutes)
	Interactive Read Aloud (15 minutes)	Word Study: Phonics and Spelling (20-30 minutes)	Shared Reading/Mini- Lesson (20-30 minutes)	Small Group Share and Reflect (45 minutes)	Independent Learning Centers	Writer's Workshop Handwriting (45 minutes)	Grammar Study	Number Routine-5-7 min Launch-5-7 min Explore & Develop- 20 min Practice & Reflect- 10 min Assess-10 min Differentiate- 10 min	*Integrate across the curriculum. Integrate across the curriculum. Independent time in literacy can also be utilized.
MAY				Guided Reading/Leveled Texts Word Work/Word Study including vocabulary Reading text at highest instructional level (Annotating text leaving evidence of active reading, teacher/student 1:1 conference, running record) Discussion of the text: tailored strategy work, foundational skills, within, beyond, about texts Rereading texts: for text support, prepare for writing about reading, fluency practice Collaborative reasoning groups Guided reading around opinion articles Philosophical Chairs Socratic Seminar Book Clubs	WRITING ABOUT READING OPPORTUNITIES (tied into whole group, small group and/or independent reading) • Sketch to stretch (Revisit, Reflect, Retell by Linda Hoyt p. 177), • paragraphed response • SWBST, story arc, • T-chart or boxes and bullets to name a character trait and support with evidence from text. • Paragraphed response describing how events of a story would change if narrated from another character's point of view. • Annotate text while reading – sticky notes • Just Like from Read, Revisit, Retell by Linda Hoyt p. 105-106 • Triple journal prediction chart (what, how, why, turn and talk/stop and jot, paragraphed response • Use boxes and bullets to create and support a theory about a character- use to write a paragraphed response • QAR, questions before, during, after reading. • Boxes and bullets, paragraphed response on big idea or theme of the text and how it is applicable to people's lives today. • Double journal entry, reflect on contribution to discussion group and how the discussion changed your understanding of the text • Sticky notes, t-charts to encourage problem solving of meanings of unfamiliar words • Story arc • paragraphed response on describing how the significant events are related to the problem or solution of the story • paragraphed response to compare and contrast how the different settings in the book affect the story elements • Notice, record, understand, and discuss figurative and descriptive language (double or triple journal entry) Options: • Independent reading • Reading Responses/Writing about Reading • Collaborative Study • Author Study: Research and Inquiry project(Unit 2) • Word, Language, & Vocabulary Study • Book talks • Peer Discussion • Listening • Technology • Research and Inquiry Study:			Unit 14: Geometric Figures *Choose one application station per unit Readiness Diagnostic/Unit Opener-lgnite 14-1 Understand Lines, Line Segments, and Rays 14-2 Classify Angles 14-3 Draw and Measure Angles Math Probe 14-4 Understand Parallel and Perpendicular Lines 14-5 Add and Subtract Angle Measures 14-6 Solve Problems Involving Unknown angle Measures 14-7 Classify Polygons 14-8 Classify Triangles 14-9 Understand Line Symmetry Unit Review/Fluency Practice Performance Task Unit Assessment/Summative Assessment	Continue: Content: Electricity, Light & Heat

4th grade English Language Arts Standards

Reading Literature

Key Ideas and Details:

CCSS.ELA-LITERACY.RL.4.1

Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

CCSS.ELA-LITERACY.RL.4.2

Determine a theme of a story, drama, or poem from details in the text; summarize the text.

CCSS.ELA-LITERACY.RL.4.3

Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text (e.g., a character's thoughts, words, or actions).

Craft and Structure:

CCSS.ELA-LITERACY.RL.4.4

Determine the meaning of words and phrases as they are used in a text, including those that allude to significant characters found in mythology (e.g., Herculean).

CCSS.ELA-LITERACY.RL.4.5

Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text.

CCSS.ELA-LITERACY.RL.4.6

Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations.

Integration of Knowledge and Ideas:

CCSS.ELA-LITERACY.RL.4.7

Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.

CCSS.ELA-LITERACY.RL.4.8

(RL.4.8 not applicable to literature)

CCSS.ELA-LITERACY.RL.4.9

Compare and contrast the treatment of similar themes and topics (e.g., opposition of good and evil) and patterns of events (e.g., the quest) in stories, myths, and traditional literature from different cultures.

Range of Reading and Level of Text Complexity:

CCSS.ELA-LITERACY.RL.4.10

By the end of the year, read and comprehend literature, including stories, dramas, and poetry, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Reading Informational

Key Ideas and Details:

CCSS.ELA-LITERACY.RI.4.1

Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text.

CCSS.ELA-LITERACY.RI.4.2

Determine the main idea of a text and explain how it is supported by key details; summarize the text.

CCSS.ELA-LITERACY.RI.4.3

Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Craft and Structure:

CCSS.ELA-LITERACY.RI.4.4

Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.

CCSS.ELA-LITERACY.RI.4.5

Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text.

CCSS.ELA-LITERACY.RI.4.6

Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided.

Integration of Knowledge and Ideas:

CCSS.ELA-LITERACY.RI.4.7

Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.

CCSS.ELA-LITERACY.RI.4.8

Explain how an author uses reasons and evidence to support particular points in a text.

CCSS.ELA-LITERACY.RI.4.9

Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably.

Range of Reading and Level of Text Complexity:

CCSS.ELA-<u>LITERACY.RI.4.10</u>

By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.

Foundational Skills

Phonics and Word Recognition:

CCSS.ELA-LITERACY.RF.4.3

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

CCSS.ELA-LITERACY.RF.4.3. A

Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multisyllabic words in context and out of context.

Fluency:

CCSS.ELA-LITERACY.RF.4.4

Read with sufficient accuracy and fluency to support comprehension.

CCSS.ELA-LITERACY.RF.4.4. A

Read grade-level text with purpose and understanding.

CCSS.ELA-LITERACY.RF.4.4. B

Read grade-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.

CCSS.ELA-LITERACY.RF.4.4.C

Use context to confirm or self-correct word recognition and understanding, rereading as necessary.

Writing

Text Types and Purposes:

CCSS.ELA-LITERACY.W.4.1

Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

CCSS.ELA-LITERACY.W.4.1. A

Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose.

CCSS.ELA-LITERACY.W.4.1. B

Provide reasons that are supported by facts and details.

CCSS.ELA-LITERACY.W.4.1.C

Link opinion and reasons using words and phrases (e.g., for instance, in order to, in addition).

CCSS.ELA-LITERACY.W.4.1. D

Provide a concluding statement or section related to the opinion presented.

CCSS.ELA-LITERACY.W.4.2

Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

CCSS.ELA-LITERACY.W.4.2. A

Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension.

CCSS.ELA-LITERACY.W.4.2. B

Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.

CCSS.ELA-LITERACY.W.4.2.C

Link ideas within categories of information using words and phrases (e.g., another, for example, also, because).

CCSS.ELA-LITERACY.W.4.2. D

Use precise language and domain-specific vocabulary to inform about or explain the topic.

CCSS.ELA-LITERACY.W.4.2. E

Provide a concluding statement or section related to the information or explanation presented.

CCSS.ELA-LITERACY.W.4.3

Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.

CCSS.ELA-LITERACY.W.4.3. A

Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally.

CCSS.ELA-LITERACY.W.4.3. B

Use dialogue and description to develop experiences and events or show the responses of characters to situations.

CCSS.ELA-LITERACY.W.4.3.C

Use a variety of transitional words and phrases to manage the sequence of events.

CCSS.ELA-LITERACY.W.4.3. D

Use concrete words and phrases and sensory details to convey experiences and events precisely.

CCSS.ELA-LITERACY.W.4.3. E

Provide a conclusion that follows from the narrated experiences or events.

Production and Distribution of Writing:

CCSS.ELA-LITERACY.W.4.4

Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)

CCSS.ELA-LITERACY.W.4.5

With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing (Editing for conventions should demonstrate command of Language standards 1-3 up to and including grade 4 here.)

CCSS.ELA-LITERACY.W.4.6

With some guidance and support from adults, use technology, including the Internet, to produce and publish writing as well as to interact and collaborate with others; demonstrate sufficient command of keyboarding skills to type a minimum of one page in a single sitting.

Research to Build and Present Knowledge:

CCSS.ELA-LITERACY.W.4.7

Conduct short research projects that build knowledge through investigation of different aspects of a topic.

<u>CCSS.ELA-LITERACY.W.4.8</u>

Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information and provide a list of sources.

CCSS.ELA-LITERACY.W.4.9

Draw evidence from literary or informational texts to support analysis, reflection, and research.

CCSS.ELA-<u>LITERACY.W.4.9.A</u>

Apply grade 4 Reading standards to literature (e.g., "Describe in depth a character, setting, or event in a story or drama, drawing on specific details in the text [e.g., a character's thoughts, words, or actions].").

CCSS.ELA-LITERACY.W.4.9. B

Apply grade 4 Reading standards to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").

Range of Writing

CCSS.ELA-LITERACY.W.4.10

Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences.

Speaking and Listening

Comprehension and Collaboration:

CCSS.ELA-LITERACY.SL.4.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.4.1. A

Come to discussions prepared, having read or studied required material; explicitly draw on that preparation and other information known about the topic to explore ideas under discussion.

CCSS.ELA-LITERACY.SL.4.1. B

Follow agreed-upon rules for discussions and carry out assigned roles.

CCSS.ELA-LITERACY.SL.4.1.C

Pose and respond to specific questions to clarify or follow up on information and make comments that contribute to the discussion and link to the remarks of others.

CCSS.ELA-LITERACY.SL.4.1. D

Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.

CCSS.ELA-LITERACY.SL.4.2

Paraphrase portions of a text read aloud, or information presented in diverse media and formats, including visually, quantitatively, and orally.

CCSS.ELA-LITERACY.SL.4.3

Identify the reasons and evidence a speaker provides to support particular points.

Presentation of Knowledge and Ideas:

CCSS.ELA-LITERACY.SL.4.4

Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace.

CCSS.ELA-LITERACY.SL.4.5

Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes.

CCSS.ELA-LITERACY.SL.4.

Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal English when appropriate to task and situation. (See grade 4 Language standards 1 here for specific expectations.)

Language

Conventions of Standard English:

CCSS.ELA-LITERACY.L.4.1

Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.

CCSS.ELA-LITERACY.L.4.1. A

Use relative pronouns (who, whose, whom, which, that) and relative adverbs (where, when, why).

CCSS.ELA-LITERACY.L.4.1. B

Form and use the progressive (e.g., I was walking; I am walking; I will be walking) verb tenses.

CCSS.ELA-LITERACY.L.4.1.C

Use modal auxiliaries (e.g., can, may, must) to convey various conditions.

CCSS.ELA-LITERACY.L.4.1. D

Order adjectives within sentences according to conventional patterns (e.g., a small red bag rather than a red small bag).

CCSS.ELA-LITERACY.L.4.1. E

Form and use prepositional phrases.

CCSS.ELA-LITERACY.L.4.1. F

Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.*

CCSS.ELA-LITERACY.L.4.1. G

Correctly use frequently confused words (e.g., to, too, two; there, their).*

CCSS.ELA-LITERACY.L.4.2

Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing

CCSS.ELA-LITERACY.L.4.2. A

Use correct capitalization.

CCSS.ELA-LITERACY.L.4.2. B

Use commas and quotation marks to mark direct speech and quotations from a text.

CCSS.ELA-LITERACY.L.4.2.C

Use a comma before a coordinating conjunction in a compound sentence.

CCSS.ELA-LITERACY.L.4.2. D

Spell grade-appropriate words correctly, consulting references as needed.

Knowledge of Language:

CCSS.ELA-LITERACY.L.4.3

Use knowledge of language and its conventions when writing, speaking, reading, or listening.

CCSS.ELA-LITERACY.L.4.3. A

Choose words and phrases to convey ideas precisely.*

CCSS.ELA-LITERACY.L.4.3. B

Choose punctuation for effect.*

CCSS.ELA-LITERACY.L.4.3.C

Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion).

Vocabulary Acquisition and Use:

CCSS.ELA-LITERACY.L.4.4

Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.

CCSS.ELA-LITERACY.L.4.4. A

Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.

CCSS.ELA-LITERACY.L.4.4. B

Use common, grade-appropriate Greek and Latin affixes and roots as clues to the meaning of a word (e.g., telegraph, photograph, autograph).

CCSS.ELA-LITERACY.L.4.4.C

Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.

CCSS.ELA-LITERACY.L.4.5

Demonstrate understanding of figurative language, word relationships, and nuances in word meanings.

CCSS.ELA-LITERACY.L.4.5. A

Explain the meaning of simple similes and metaphors (e.g., as pretty as a picture) in context.

CCSS.ELA-LITERACY.L.4.5. B

Recognize and explain the meaning of common idioms, adages, and proverbs.

CCSS.ELA-LITERACY.L.4.5.C

Demonstrate understanding of words by relating them to their opposites (antonyms) and to words with similar but not identical meanings (synonyms).

Acquire and use accurately grade-appropriate general academic and domain-specific words and phrases, including those that signal precise actions, emotions, or states of being (e.g., quizzed, whined, stammered) and that are basic to a particular topic (e.g., wildlife, conservation, and endangered when discussing animal preservation).

Math Standards

Operations & Algebraic Thinking

Use the four operations with whole numbers to solve problems.

CCSS.MATH.CONTENT.4.OA. A.1

Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5×7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.

CCSS.MATH.CONTENT.4.OA. A.2

Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.

CCSS.MATH.CONTENT.4.OA. A.3

Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

Gain familiarity with factors and multiples.

CCSS.MATH.CONTENT.4.OA. B.4

Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.

Generate and analyze patterns.

CCSS.MATH.CONTENT.4.OA. C.5

Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. For example, given the rule itself. numbers. Explain informally why the numbers will continue to alternate in this way.

Numbers & Operations in Base Ten

Generalize place value understanding for multi-digit whole numbers.

CCSS.MATH.CONTENT.4.NBT. A.1

Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. For example, recognize that $700 \div 70 = 10$ by applying concepts of place value and division.

CCSS.MATH.CONTENT.4.NBT. A.2

Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.

CCSS.MATH.CONTENT.4.NBT. A.3

Use place value understanding to round multi-digit whole numbers to any place.

Use place value understanding and properties of operations to perform multi-digit arithmetic.

CCSS.MATH.CONTENT.4.NBT. B.4

Fluently add and subtract multi-digit whole numbers using the standard algorithm.

CCSS.MATH.CONTENT.4.NBT. B.5

Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

Find whole-number quotients and remainders with up to four-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. 1 Grade 4 expectations in this domain are limited to whole numbers less than or equal to 1,000,000.

Numbers & Operations-Fractions

Extend understanding of fraction equivalence and ordering.

CCSS.MATH.CONTENT.4.NF.A.1

Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

CCSS.MATH.CONTENT.4.NF. A.2

Compare two fractions with different numerators and different numerators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.

Build fractions from unit fractions.

CCSS.MATH.CONTENT.4.NF. B.3

Understand a fraction a/b with a > 1 as a sum of fractions 1/b.

CCSS.MATH.CONTENT.4.NF. B.3.A

Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.

CCSS.MATH.CONTENT.4.NF. B.3.B

Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decomposition by an equation model. Examples: 3/8 = 1/8 + 1/8 + 1/8 = 1/8 + 1/8 = 1/8 + 1/8 = 1/8 + 1/8 = 1/8 + 1/8 = 1/8

CCSS.MATH.CONTENT.4.NF. B.3.C

Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.

CCSS.MATH.CONTENT.4.NF. B.3.D

Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

CCSS.MATH.CONTENT.4.NF. B.4

Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.

CCSS.MATH.CONTENT.4.NF. B.4.A

Understand a fraction a/b as a multiple of 1/b. For example, use a visual fraction model to represent 5/4 as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.

CCSS.MATH.CONTENT.4.NF. B.4.B

Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as 6/5. (In general, $n \times (a/b) = (n \times a)/b$.)

CCSS.MATH.CONTENT.4.NF. B.4.C

Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat 3/8 of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?

Understand decimal notation for fractions and compare decimal fractions.

CCSS.MATH.CONTENT.4.NF.C.5

Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.

CCSS.MATH.CONTENT.4.NF. C.6

Use decimal notation for fractions with denominators 10 or 100. For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.

CCSS.MATH.CONTENT.4.NF. C.7

Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.

1 Grade 4 expectations in this domain are limited to fractions with denominators 2, 3, 4, 5, 6, 8, 10, 12, and 100.

2 Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.

Measurement & Data

Solve problems involving measurement and conversion of measurements.

CCSS.MATH.CONTENT.4.MD. A.1

Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...

CCSS.MATH.CONTENT.4.MD.A.2

Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.

CCSS.MATH.CONTENT.4.MD. A.3

Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.

Represent and interpret data.

CCSS.MATH.CONTENT.4.MD. B.4

Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.

Geometric measurement: understand concepts of angle and measure angles.

CCSS.MATH.CONTENT.4.MD. C.5

Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement:

CCSS.MATH.CONTENT.4.MD.C.5.A

An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. CCSS.MATH.CONTENT.4.MD. C.5.B

An angle that turns through n one-degree angles is said to have an angle measure of n degrees.

CCSS.MATH.CONTENT.4.MD. C.6

Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.

CCSS.MATH.CONTENT.4.MD. C.7

Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.

Geometry

Draw and identify lines and angles and classify shapes by properties of their lines and angles.

CCSS.MATH. CONTENT.4. G.A.1

Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

CCSS.MATH. CONTENT.4. G.A.2

Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category and identify right triangles.

CCSS.MATH. CONTENT.4. G.A.3

Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

Illinois Learning Standards for Social Science-4th Grade

The <u>Social Science Standards</u> consist of both inquiry standards and disciplinary standards. In implementing the Social Science Standards, the inquiry standards should be used simultaneously with the individual disciplinary standards to ensure both students' comprehension and application of the knowledge and skills acquired. In addition to the Social Science Standards, there are State-mandated units of study that may apply to Social Science coursework or curriculum.

These mandates can be found in the School Code and summarized: https://www.isbe.net/Documents/IL-Mandated-Units-of-Study.pdf

Developing and Planning Inquiries	Evaluating Sources and Using Evidence	Communicating Conclusions and Taking Informed Action
SS.3-5.IS.1. Develop essential questions and explain the importance of the questions to self and others.	SS.3-5.IS.4. Gather relevant information and distinguish among fact and opinion to determine credibility of multiple sources.	SS.3-5.IS.6. Construct arguments using claims and evidence from multiple sources.
SS.3-5.IS.2. Students generate supporting questions that require investigation to help answer the essential questions.	SS.3-5.IS.5. Develop claims using evidence from multiple sources to answer essential questions.	SS.3-5.IS.7. Construct explanations using reasoning, correct sequences, examples, and details with relevant information and data.
SS.3-5.IS.3. Identify varied resources that answer essential and student-generated questions and that take into consideration multiple points of view.		SS.3-5.IS.8. Present a summary of arguments and explanations to others inside and/or outside of the classroom using print and oral technologies.
		SS.3-5.IS.9. Explain the use of inquiry strategies, approaches, and use of relevant sources students could take to address local, regional, state, national, and global problem
		SS.3-5.IS.10. Students will engage in reflective conversations to draw conclusions on inquiry findings and create action steps that consider multiple viewpoints.

Civics	Economics and Financial Literacy	Geography	History
SS.4.CV.1. Explain the roles and responsibilities of government officials at the local, State and national levels and investigate how the roles and responsibilities of government have changed over time.	SS.4.EC.1. Explain how profits reward and influence sellers	SS.4.G.1. Construct print and digital maps and other topographic representations to show the details of places and regions and their environmental characteristics	SS.4.H.1.Study important individuals or major events in order to recognize and explain that there are multiple cultural perspectives
SS.4.CV.2. Define democracy and explain how limited participation affects the political representation of multiple groups	SS.4.EC. 2. Describe how goods and services are produced using human, natural, and capital resources (e.g. tools and machines).	SS.4.G.2. Explain how the cultural and environmental characteristics of places change over time.	SS.4.H.2. Generate questions about multiple historical sources and their relationships to particular historical events and developments.
SS.4.CV.3. Identify core civic virtues and democratic principles that guide governments, society, and communities.	SS.4.EC.FL.3. Analyze how spending choices are influenced by prices as well as many other factors (e.g. advertising, peer pressure, options).	SS.4.G.3. Investigate the human effects on the physical environment over time.	SS.4.H.3.Explain probable causes and effects of events and developments in Illinois history.
SS.4.CV.4. Using evidence, explain how rules, regulations, and laws alter or transform societies and how people from multiple communities influence and experience this transformation.	SS.4.EC.FL.4. Explain that income can be saved, spent on good and services, or used to pay taxes.		

Science Standards

Quincy Public School Fourth Grade Curriculum Map

3-5-ETS1 Engineering Design

3-5-ETS1 Engineering Design

Students who demonstrate understanding can:

- 3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.
- 3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.
- 3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

The performance expectations above were developed using the following elements from the NRC document A Framework for K-12 Science Education.

Science and Engineering Practices

Asking Questions and Defining Problems Asking questions and defining problems in 3-5 builds on

grades K-2 experiences and progresses to specifying

 Define a simple design problem that can be solved through the development of an object, tool, process, or system and includes several criteria for success and constraints on materials, time, or cost. (3-5-ETS1-1)

Planning and Carrying Out Investigations

Planning and carrying out investigations to answer guestions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design

· Plan and conduct an investigation collaboratively to produce data to serve as the basis for evidence, using fair tests in which variables are controlled and the number of trials considered. (3-5-ETS1-3)

Constructing Explanations and Designing Solutions

Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems Generate and compare multiple solutions to a problem

based on how well they meet the criteria and constraints of the design problem. (3-5-ETS1-2)

ETS1.A: Defining and Delimiting Engineering Problems

 Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account. (3-5-ETS1-1)

ETS1.B: Developing Possible Solutions

- Research on a problem should be carried out before beginning to design a solution. Testing a solution involves investigating how well it performs under a range of likely conditions. (3-5-ETS1-2)
- · At whatever stage, communicating with peers about proposed solutions is an important part of the design process, and shared ideas can lead to improved designs. (3-5-ETS1-2)
- Tests are often designed to identify failure points or difficulties, which suggest the elements of the design that need to be improved. (3-5-ETS1-3)

ETS1.C: Optimizing the Design Solution

 Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints. (3-5-ETS1-3)

Crosscutting Concepts

Influence of Engineering, Technology, and Science on Society and the Natural World

- People's needs and wants change over time, as do their demands for new and improved technologies. (3-5-ETS1-1)
- Engineers improve existing technologies or develop new ones to increase their benefits, decrease known risks, and meet societal demands. (3-5-ETS1-2)

4-PS3 Energy

4-PS3 Energy

Students who demonstrate understanding can:

- 4-PS3-1. Use evidence to construct an explanation relating the speed of an object to the energy of that object. [Assessment ndary: Assessment does not include quantitative measures of changes in the speed of an object or on any precise or qu
- 4-PS3-2. Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electric currents. [Assessment Boundary: Assessment does not include quantitative measurements of energy.]
- Ask questions and predict outcomes about the changes in energy that occur when objects collide. [Clarification Statement: Emphasis is on the change in the energy due to the change in speed, not on the forces, as objects interact.] [Assessment Boundary: Assessment does not include
- Apply scientific ideas to design, test, and refine a device that converts energy from one form to another.* [Clarification tatement: Examples of devices could include electric circuits that convert electrical energy into motion energy of a vehicle, light, or sound; and, a passive solar heater that converts light into heat. Examples of constraints could include the materials, cost, or time to design the device.] [Assessment Boundary: Devices should be limited to those that convert motion energy to electric energy or use stored energy to cause motion or produce light or sound.

The performance expectations above were developed using the following elements from the NRC document A Framework for K-12 Science Education:

Science and Engineering Practices

Asking Questions and Defining Problems

Asking questions and defining problems in grades 3-5 builds on grades K-2 experiences and progresses to specifying qualitative relationships.

 Ask guestions that can be investigated and predict reasonable outcomes based on patterns such as cause and effect relationships, (4-PS3-3)

Planning and Carrying Out Investigations

Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.

 Make observations to produce data to serve as the basis for evidence for an explanation of a phenomenon or test a design solution. (4-PS3-2)

Constructing Explanations and Designing Solutions

Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.

- Use evidence (e.g., measurements, observations, patterns) to construct an explanation. (4-PS3-1)
- Apply scientific ideas to solve design problems. (4-

Disciplinary Core Ideas

PS3.A: Definitions of Energy

- The faster a given object is moving, the more energy it possesses. (4-
- Energy can be moved from place to place by moving objects or through sound, light, or electric currents. (4-PS3-2),(4-PS3-3)

PS3.B: Conservation of Energy and Energy Transfer

- Energy is present whenever there are moving objects, sound, light, or heat. When objects collide, energy can be transferred from one object to another, thereby changing their motion. In such collisions, some energy is typically also transferred to the surrounding air; as a result. the air gets heated and sound is produced. (4-PS3-2),(4-PS3-3)
- Light also transfers energy from place to place. (4-PS3-2)
- Energy can also be transferred from place to place by electric currents which can then be used locally to produce motion, sound, heat, or light. The currents may have been produced to begin with by transforming the energy of motion into electrical energy. (4-PS3-2),(4-

PS3.C: Relationship Between Energy and Forces

 When objects collide, the contact forces transfer energy so as to change the objects' motions, (4-PS3-3)

PS3.D: Energy in Chemical Processes and Everyday Life

 The expression "produce energy" typically refers to the conversion of stored energy into a desired form for practical use. (4-PS3-4)

ETS1.A: Defining Engineering Problems

· Possible solutions to a problem are limited by available materials and resources (constraints). The success of a designed solution is determined by considering the desired features of a solution (criteria). Different proposals for solutions can be compared on the basis of how well each one meets the specified criteria for success or how well each takes the constraints into account. (secondary to 4-PS3-4)

Crosscutting Concepts

Energy and Matter

 Energy can be transferred in various ways and between objects, (4-PS3-1),(4-PS3-2).(4-PS3-3).(4-PS3-4)

Connections to Engineering, Technology, and Applications of Science

Influence of Science, Engineering and Technology on Society and the Natural World

 Engineers improve existing technologies or develop new ones. (4-PS3-4)

Connections to Nature of Science

Science is a Human Endeavor

- Most scientists and engineers work in teams, (4-PS3-4)
- Science affects everyday life. (4-PS3-4)

Connections to other DCIs in fourth grade: N/A

Articulation of DCIs across grade-levels: K.PS2.B (4-PS3-3); K.ETS1.A (4-PS3-4); 2.ETS1.B (4-PS3-4); 3.PS2.A (4-PS3-3); 5.PS3.D (4-PS3-4); 5.LS1.C (4-PS3-4); MS.PS2.A (4-PS3-4); APS3-4 (4-PS3-4); APS3-5 (4-PS3-4); APS3-6 (4-PS3-3); MS.PS3.B (4-PS3-2); MS.PS3.A (4-PS3-1),(4-PS3-2),(4-PS3-3),(4-PS3-2),(4-PS3-3),(4-PS3-3),(4-PS3-3); MS.PS3.B (4-PS3-2); MS.PS3.B (4-PS3-3); MS PS3-4); MS.ETS1.C (4-PS3-4)

Common Core State Standards Connections.

ELA/Literacy -

Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. (4-PS3-1) RI.4.1

RI.4.3 Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text. (4-RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably. (4-PS3-1)

W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. (4-PS3-1)

Conduct short research projects that build knowledge through investigation of different aspects of a topic. (4-PS3-2),(4-PS3-3),(4-PS3-4) W.4.7

Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of W.4.8 sources. (4-PS3-1),(4-PS3-2),(4-PS3-3),(4-PS3-4)

W.4.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. (4-PS3-1) Mathematics -

4.0A.A.3

Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (4-PS3-4)

Connections to 3-5-ETS1.A: Defining and Delimiting Engineering Problems include. Fourth Grade: 4-PS3-4 Connections to 3-5-ETS1.B: Designing Solutions to Engineering Problems include:

Fourth Grade: 4-ESS3-2 Connections to 3-5-ETS1.C: Optimizing the Design Solution include:

Fourth Grade: 4-PS4-3

Articulation of DCIs across grade-bands: K-2.ETS1.A (3-5-ETS1-1),(3-5-ETS1-2),(3-5-ETS1-3); K-2.ETS1.B (3-5-ETS1-2); K-2.ETS1.C (3-5-ETS1-2),(3-5-ETS1-3); MS.ETS1.A (3-5-ETS1-3); MS.ETS1.A (3-5-ETS1

ETS1-1); MS.ETS1.B (3-5-ETS1-1),(3-5-ETS1-2),(3-5-ETS1-3); MS.ETS1.C (3-5-ETS1-2),(3-5-ETS1-3)

Common Core State Standards Connections:

ELA/Literacy -

Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text. (3-5-ETS1-2)

Draw on information from multiple print or digital sources, demonstrating the ability to locate an answer to a question quickly or to solve a problem efficiently. (3-5-

RI.5.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably. (3-5-ETS1-2) W.5.7 Conduct short research projects that use several sources to build knowledge through investigation of different aspects of a topic. (3-5-ETS1-1),(3-5-ETS1-3)

Recall relevant information from experiences or gather relevant information from print and digital sources; summarize or paraphrase information in notes and finished work, and provide a list of sources. (3-5-ETS1-1),(3-5-ETS1-3)

W.5.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. (3-5-ETS1-1),(3-5-ETS1-3)

Mathematics -

Reason abstractly and quantitatively. (3-5-ETS1-1),(3-5-ETS1-2),(3-5-ETS1-3) Model with mathematics. (3-5-ETS1-1),(3-5-ETS1-2),(3-5-ETS1-3) Use appropriate tools strategically. (3-5-ETS1-1),(3-5-ETS1-2),(3-5-ETS1-3) 3-5.OA Operations and Algebraic Thinking (3-5-ETS1-1),(3-5-ETS1-2)

4-PS4 Waves and their Applications in Technologies for Information Transfer

4-PS4 Waves and their Applications in Technologies for Information Transfer

Students who demonstrate understanding can:

- 4-PS4-1. Develop a model of waves to describe patterns in terms of amplitude and wavelength and that waves can cause objects to move. [Clarification Statement: Examples of models could include diagrams, analogies, and physical models using wire to illustrate wavelength and amplitude of waves.] [Assessment Boundary: Assessment does not include interference effects, electromagnetic waves, non-periodic waves, or quantitative models of
- 4-PS4-2. Develop a model to describe that light reflecting from objects and entering the eye allows objects to be seen. Assessment Boundary: Assessment does not include knowledge of specific colors reflected and seen, the cellular mechanisms of vision, or how the retina works.
- 4-PS4-3. Generate and compare multiple solutions that use patterns to transfer information.* [Clarification Statement: Examples of solutions could include drums sending coded information through sound waves, using a grid of 1's and 0's representing black and white to send information about a

The performance expectations above were developed using the following elements from the NRC document A Framework for K-12 Science Education.

Science and Engineering Practices

Modeling in 3-5 builds on K-2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.

- Develop a model using an analogy, example, or abstract representation to describe a scientific principle. (4-PS4-
- Develop a model to describe phenomena. (4-PS4-2)

Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in 3-5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.

· Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design solution. (4-PS4-3)

Connections to Nature of Science

Scientific Knowledge is Based on Empirical Evidence · Science findings are based on recognizing patterns. (4-PS4-1)

Disciplinary Core Ideas

- · Waves, which are regular patterns of motion, can be made in water by disturbing the surface. When waves move across the surface of deep water, the water goes up and down in place; there is no net motion in the direction of the wave except when the water meets a beach. (Note: This grade band endpoint was moved from K-2.) (4-PS4-
- Waves of the same type can differ in amplitude (height of the wave) and wavelength (spacing between wave peaks). (4-PS4-1)

PS4.B: Electromagnetic Radiation

 An object can be seen when light reflected from its surface enters the eyes. (4-PS4-2)

PS4.C: Information Technologies and Instrumentation

 Digitized information can be transmitted over long. distances without significant degradation. High-tech devices, such as computers or cell phones, can receive and decode information-convert it from digitized form to voice—and vice versa. (4-PS4-3)

ETS1.C: Optimizing The Design Solution

 Different solutions need to be tested in order to determine which of them best solves the problem, given the criteria and the constraints. (secondary to 4-PS4-3)

Crosscutting Concepts

- Similarities and differences in patterns can be used to sort and classify natural phenomena.
- · Similarities and differences in patterns can be used to sort and classify designed products. (4 PS4-3)

Cause and Effect

 Cause and effect relationships are routinely identified. (4-PS4-2)

Connections to Engineering, Technology, and Applications of Science

Interdependence of Science, Engineering, and Technology

· Knowledge of relevant scientific concepts and research findings is important in engineering. (4-PS4-3)

Connections to other DCIs in fourth grade: 4.PS3.A (4-PS4-1); 4.PS3.B (4-PS4-1); 4.ETS1.A (4-PS4-3) Articulation of DCIs across grade-levels: K.ETS1.A (4-PS4-3); 1.PS4.B (4-PS4-2); 1.PS4.C (4-PS4-3); 2.ETS1.B (4-PS4-3); 2.ETS1.C (4-PS4-3); 3.PS2.A (4-PS4-3); MS.PS4.A (4-PS4-1); MS.PS4.B (4-PS4-2); MS.PS4.C (4-PS4-3); MS.LS1.D (4-PS4-2); MS.ETS1.B (4-PS4-3)

Common Core State Standards Connections.

ELA/Literacy -

Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. (4-PS4-3)

RI.4.1 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably, (4-PS4-3) RI.4.9

Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes. (4-PS4-1),(4-PS4-2) SL.4.5

Mathematics -

Model with mathematics. (4-PS4-1).(4-PS4-2) MP.4

4.G.A.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. (4-PS4-1),(4-PS4-

4-LS1 From Molecules to Organisms: Structures and Processes

4-LS1 From Molecules to Organisms: Structures and Processes

Students who demonstrate understanding can:

- 4-LS1-1. Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. [Clarification Statement: Examples of structures could include thorns, stems, roots, colored petals, heart, stomach, lung, brain, and skin.] [Assessment Boundary: Assessment is limited to macroscopic structures within plant and animal systems.
- 4-LS1-2. Use a model to describe that animals receive different types of information through their senses, process the information in their brain, and respond to the information in different ways. [Clarification Statement: Emphasis is on systems of information transfer.] [Assessment Boundary: Assessment does not include the mechanisms by which the brain stores and recalls information or the mechanisms of

The performance expectations above were developed using the following elements from the NRC document A Framework for K-12 Science Education:

Science and Engineering Practices

Developing and Using Models

Modeling in 3-5 builds on K-2 experiences and progresses to building and revising simple models and using models to represent events and design solutions.

 Use a model to test interactions concerning the functioning of a natural system. (4-LS1-2)

Engaging in Argument from Evidence

Engaging in argument from evidence in 3-5 builds on K-2 experiences and progresses to critiquing the scientific explanations or solutions proposed by peers by citing relevant evidence about the natural and designed world(s).

· Construct an argument with evidence, data, and/or a model.

Disciplinary Core Ideas

LS1.A: Structure and Function

 Plants and animals have both internal and external structures that serve various functions in growth, survival, behavior, and reproduction. (4-LS1-1)

LS1.D: Information Processing

 Different sense receptors are specialized for particular kinds of information, which may be then processed by the animal's brain. Animals are able to use their perceptions and memories to guide their actions. (4-LS1-2)

Crosscutting Concepts

Systems and System Models

 A system can be described in terms of its components and their interactions. (4-LS1-1),(4-LS1-2)

Connections to other DCIs in fourth grade: N/A

Articulation of DCIs across grade-levels: 1.LS1.A (4-LS1-1); 1.LS1.D (4-LS1-2); 3.LS3.B (4-LS1-1); MS.LS1.A (4-LS1-1); MS.LS1.D (4-LS1-2); MS.LS1.

Common Core State Standards Connections

ELA/Literacy -

W.4.1 Write opinion pieces on topics or texts, supporting a point of view with reasons and information. (4-LS1-1)

SL.4.5 Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes. (4-LS1-2) Mathematics -

4.G.A.3

Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded across the line into matching parts. Identify linesymmetric figures and draw lines of symmetry. (4-LS1-1)

4-ESS3 Earth and Human Activity

4-ESS3 Earth and Human Activity

Students who demonstrate understanding can:

- 4-ESS3-1. Obtain and combine information to describe that energy and fuels are derived from natural resources and that their uses affect the environment. [Clarification Statement: Examples of renewable energy resources could include wind energy, water behind dams, and sunlight; non-renewable energy resources are fossil fuels and fissile materials. Examples of environmental effects could include loss of habitat due to dams, loss of habitat due to surface mining, and air pollution from burning of fossil fuels.]
- 4-ESS3-2. Generate and compare multiple solutions to reduce the impacts of natural Earth processes on humans.* [Clarification Statement: Examples of solutions could include designing an earthquake resistant building and improving monitoring of volcanic activity.] [Assessment Boundary: Assessment is limited to earthquakes, floods, tsunamis, and volcanic eruptions.]

The performance expectations above were developed using the following elements from the NRC document A Framework for K-12 Science Education:

Science and Engineering Practices

Constructing Explanations and Designing Solutions Constructing explanations and designing solutions in 3-5

builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.

 Generate and compare multiple solutions to a problem based on how well they meet the criteria and constraints of the design solution. (4-ESS3-2)

Obtaining, Evaluating, and Communicating Information

Obtaining, evaluating, and communicating information in 3-5 builds on K-2 experiences and progresses to evaluate the merit and accuracy of ideas and methods.

 Obtain and combine information from books and other reliable media to explain phenomena. (4-ESS3-1)

Disciplinary Core Ideas

ESS3.A: Natural Resources

 Energy and fuels that humans use are derived from natural sources. and their use affects the environment in multiple ways. Some resources are renewable over time, and others are not. (4-ESS3-1)

ESS3.B: Natural Hazards

 A variety of hazards result from natural processes (e.g., earthquakes, tsunamis, volcanic eruptions). Humans cannot eliminate the hazards but can take steps to reduce their impacts. (4-ESS3-2) (Note: This Disciplinary Core Idea can also be found in 3.WC.)

ETS1.B: Designing Solutions to Engineering Problems

 Testing a solution involves investigating how well it performs under a range of likely conditions. (secondary to 4-ESS3-2)

Crosscutting Concepts

Cause and Effect

- · Cause and effect relationships are routinely identified and used to explain change. (4-ESS3-1)
- Cause and effect relationships are routinely identified, tested, and used to explain change. (4-ESS3-2)

Connections to Engineering, Technology, and Applications of Science

Interdependence of Science, Engineering, and Technology

· Knowledge of relevant scientific concepts and research findings is important in engineering. (4-ESS3-1)

Influence of Science, Engineering and Technology on Society and the Natural World

- · Over time, people's needs and wants change, as do their demands for new and improved technologies. (4-ESS3-1)
- Engineers improve existing technologies or develop new ones to increase their benefits, to decrease known risks, and to meet societal demands. (4-ESS3-2)

Connections to other DCIs in fourth grade: 4.ETS1.C (4-ESS3-2)

Articulation of DCIs across grade-levels: K.ETS1.A (4-ESS3-2); 2.ETS1.B (4-ESS3-2); 2.ETS1.C (4-ESS3-2); 5.ESS3.C (4-ESS3-1); MS.PS3.D (4-ESS3-1); MS.ESS2.A (4-ESS3-1), (4-ESS3-1); MS.ESS2.A (4-ESS3 ESS3-2); MS.ESS3.A (4-ESS3-1); MS.ESS3.B (4-ESS3-2); MS.ESS3.C (4-ESS3-1); MS.ESS3.D (4-ESS3-1); MS.ETS1.B (4-ESS3-2)

ELA/Literacy

RI.4.1 Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text. (4-ESS3-2)

RI.4.9 Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably. (4-ESS3-2)

Conduct short research projects that build knowledge through investigation of different aspects of a topic. (4-ESS3-1)

W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources, (4-ESS3-1)

W.4.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. (4-ESS3-1)

Mathematics -

Reason abstractly and quantitatively. (4-ESS3-1),(4-ESS3-2)

Model with mathematics. (4-ESS3-1),(4-ESS3-2) 4.0A.A.1

Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations. (4-ESS3-1), (4-ESS3-2)

4-ESS2 Earth's Systems

4-ESS2 Earth's Systems

Students who demonstrate understanding can:

- 4-ESS2-1. Make observations and/or measurements to provide evidence of the effects of weathering or the rate of erosion by water, ice, wind, or vegetation. [Clarification Statement: Examples of variables to test could include angle of slope in the downhill movement of water, amount of vegetation, speed of wind, relative rate of deposition, cycles of freezing and thawing of water, cycles of heating and cooling, and volume of water flow.1 [Assessment Boundary: Assessment is limited to a single form of weathering or erosion.]
- 4-ESS2-2. Analyze and interpret data from maps to describe patterns of Earth's features. [Clarification Statement: Maps can include topographic maps of Earth's land and ocean floor, as well as maps of the locations of mountains, continental boundaries, volcanoes, and earthquakes.]

The performance expectations above were developed using the following elements from the NRC document A Framework for K-12 Science Education:

ESS2.A: Earth Materials and Systems

Science and Engineering Practices

Planning and Carrying Out Investigations

Planning and carrying out investigations to answer questions or test solutions to problems in 3-5 builds on K-2 experiences and progresses to include investigations that control variables and provide evidence to support explanations or design solutions.

· Make observations and/or measurements to produce data to serve as the basis for evidence for an explanation of a phenomenon. (4-ESS2-1)

Analyzing and Interpreting Data

Analyzing data in 3-5 builds on K-2 experiences and progresses to introducing quantitative approaches to collecting data and conducting multiple trials of qualitative observations. When possible and feasible, digital tools should be used.

· Analyze and interpret data to make sense of phenomena using logical reasoning. (4-ESS2-2)

found in a region. Water, ice, wind, living organisms, and gravity break rocks, soils, and sediments into smaller particles and move them

ESS2.B: Plate Tectonics and Large-Scale System Interactions The locations of mountain ranges, deep ocean trenches, ocean floor structures, earthquakes, and volcanoes occur in patterns. Most earthquakes and volcanoes occur in bands that are often along the boundaries between continents and oceans. Major mountain chains form inside continents or near their edges. Maps can help locate the

Rainfall helps to shape the land and affects the types of living things

different land and water features areas of Earth. (4-ESS2-2)

around, (4-ESS2-1)

Patterns

 Patterns can be used as evidence to support an explanation. (4-ESS2-2)

Cause and Effect

· Cause and effect relationships are routinely identified, tested, and used to explain change. (4-ESS2-1)

ESS2.E: Biogeology

Living things affect the physical characteristics of their regions. (4-

Connections to other DCIs in fourth grade: N/A Articulation of DCIs across grade-levels: 2.ESS1.C (4-ESS2-1); 2.ESS2.A (4-ESS2-1); 2.ESS2.B (4-ESS2-2); 2.ESS2.C (4-ESS2-2); 5.ESS2.A (4-ESS2-1); 5.ESS2.C MS.ESS1.C (4-ESS2-2); MS.ESS2.A (4-ESS2-2); MS.ESS2.B (4-ESS2-2)

Common Core State Standards Connections:

FLA/Literacy -

RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears, (4-ESS2-2)

W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic, (4-ESS2-1)

Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of W.4.8 sources. (4-ESS2-1)

Mathematics -

Reason abstractly and quantitatively. (4-ESS2-1)

MP.4 Model with mathematics, (4-ESS2-1) Use appropriate tools strategically. (4-ESS2-1)

4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, gz.; l, ml; hr, min, sec, Within a single system of measurement.

express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. (4-ESS2-1)

Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. (4-ESS2-1),(4-ESS2-2)

4-ESS1 Earth's Place in the Universe

4-ESS1 Earth's Place in the Universe

Students who demonstrate understanding can:

4-ESS1-1. Identify evidence from patterns in rock formations and fossils in rock layers to support an explanation for

changes in a landscape over time. [Clarification Statement: Examples of evidence from patterns could include rock layers with marine shell fossils above rock layers with plant fossils and no shells, indicating a change from land to water over time; and, a canyon with different rock layers in the walls and a river in the bottom, indicating that over time a river cut through the rock.] [Assessment Boundary: Assessment does not include specific knowledge of the mechanism of rock formation or memorization of specific rock formations and layers. Assessment is limited to relative time.]

The performance expectations above were developed using the following elements from the NRC document A Framework for K-12 Science Education:

Science and Engineering Practices Constructing Explanations and Designing

Constructing explanations and designing solutions in 3-

5 builds on K-2 experiences and progresses to the use of evidence in constructing explanations that specify variables that describe and predict phenomena and in designing multiple solutions to design problems.

· Identify the evidence that supports particular points in an explanation. (4-ESS1-1)

ESS1.C: The History of Planet Earth

Local, regional, and global patterns of rock formations

reveal changes over time due to earth forces, such as earthquakes. The presence and location of certain fossil types indicate the order in which rock layers were formed. (4-ESS1-1)

· Patterns can be used as evidence to support an explanation. (4-ESS1-1)

Connections to Nature of Science

Scientific Knowledge Assumes an Order and **Consistency in Natural Systems**

 Science assumes consistent patterns in natural systems (4-ESS1-1)

Connections to other DCIs in fourth grade: N/A

Articulation of DCIs across grade-levels: 2.ESS1.C (4-ESS1-1); 3.LS4.A (4-ESS1-1); MS.LS4.A (4-ESS1-1); MS.ESS1.C (4-ESS1-1) MS.ESS2.A (4-ESS1-1); MS.ESS2.B (4-ESS1-1) Common Core State Standards Connections

ELA/Literacy -

Conduct short research projects that build knowledge through investigation of different aspects of a topic. (4-ESS1-1) W.4.7

W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources, (4-ESS1-1)

W.4.9 Draw evidence from literary or informational texts to support analysis, reflection, and research. (4-ESS1-1)

Mathematics -

Reason abstractly and quantitatively. (4-ESS1-1)

MP.4 Model with mathematics. (4-ESS1-1)

4.MD.A.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. (4-ESS1-1)

Illinois Social Emotional Learning Standards

Goal 1: Develop self-awareness and self-management skills to achieve school and life success.

- A. Identify and manage one's emotions and behavior.
- B. Recognize personal qualities and external supports.
- C. Demonstrate skills related to achieving personal and academic goals.

Goal 2: Use social-awareness and interpersonal skills to establish and maintain positive relationships

- A. Recognize the feelings and perspectives of others.
- B. Recognize individual and group similarities and differences.
- C. Use communication and social skills to interact effectively with others.
- D. Demonstrate an ability to prevent, manage, and resolve interpersonal conflicts in constructive ways.

Goal 3: Demonstrate decision-making skills and responsible behaviors in personal, school, and community contexts.

- A. Consider ethical, safety, and societal factors in making decisions.
- B. Apply decision-making skills to deal responsibly with daily academic and social situations.
- C. Contribute to the well-being of one's school and community.

First Name: Last Name:					Room #			_
School:				Grade: 4th		# of Students:		
Time from	Time to	Minutes	Monday	Tuesday	Wednesday	Thursday	Friday	Minutes per week
8:25	8:45	20	Breakfast/Morning Routines					
8:45	9:15	30	Interactive Read Aloud/Word Study	MUSIC	Interactive Read Aloud/Word Study	MUSIC	Interactive Read Aloud/Word Study	
9:15	9:45	30	PE	PE	PE	PE	Word Study/Shared Reading	
9:45	10:15	30	Word Study/Shared Reading	Interactive Read Aloud/Word Study	Word Study/Shared Reading	Interactive Read Aloud/Word Study	Mini-lesson/Small Groups	
10:15	10:45	30	Mini-lesson/Small Groups	Word Study/Shared Reading	Mini-lesson/Small Groups	RW: Small Groups	Small Groups	
10:45	11:15	30	Small Groups	Mini-lesson/Small Groups	Small Groups	RW: Small Groups/Word Study	LIBRARY	
11:15	11:45	30	Writer's Workshop	Small Groups	Writer's Workshop	Small Groups	Writer's Workshop	
11:45	12:05	20	Writer's Workshop					
12:05	12:35	30	LUNCH					
12:35	12:50	15	RECESS					
12:50	1:15	25	Math	Writer's Workshop	Math	Writer's Workshop	Math	
1:15	1:30	15	Math					
1:30	2:00	30	Math					
2:00	2:15	15	Recess					
2:15	2:30	15	Content	Math	Content	Math	Content	
2:30	3:00	30	C	Content	ART	Content		
3:00	3:15	15	Content					
3:15	3:35	20	Dismissal					