

ELA | Math | Science | Social Studies



Year Long English Language Arts Standards:

Reading Fou	ndational	
	RF3a:	Identify and know the meaning of the most common prefixes and suffixes.
	RF3b:	Decode words with common Latin suffixes.
	RF3c:	Decode multi-syllable words
	RF4a:	Read on-level text with purpose and understanding.
	RF4b:	Read on-level prose and poetry orally with accuracy, appropriate rate, and expression on successive readings.
	RF4c:	Use context to confirm or self-correct word recognition and understanding, rereading as necessary.
	RF4d:	Read grade-appropriate irregularly spelled words.
Writing		
	W4:	With guidance and support from adults, produce writing in which the development and organization are appropriate to task and purpose. (Grade- specific expectations for writing types are defined in standards 1-3 above.)
	W5:	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 3.)
	W6:	With guidance and support from adults, use technology to produce and publish writing (using keyboarding skills) as well as to interact and collaborate with others.
	W8:	Recall information from experience or gather information from print and digital sources; take brief notes on sources and sort evidence into provided categories.
	W10:	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.
Language		
0 0	L2e:	Use conventional spelling for high-frequency and other studied words and for adding suffixes to base words (e.g., sitting, smiled, cries, happiness).
	L2f:	Use spelling patterns and generalizations (e.g., word families, position-based spellings, syllable patterns, ending rules, meaningful word parts) in writing words.



- **L2g:** Consult reference materials, including beginning dictionaries, as needed to check and correct spellings.
- L3a: Choose words and phrases for effect.
- L4a: Use sentence-level context as a clue to the meaning of a word or phrase.
- L4b: Determine the meaning of the new word formed when a known affix is added to a known word (e.g., agreeable/disagreeable, comfortable/uncomfortable, care/careless, heat/preheat).
- L4c: Use a known root word as a clue to the meaning of an unknown word with the same root (e.g., company, companion).
- L4d Use glossaries or beginning dictionaries, both print and digital, to determine or clarify the precise meaning of key words and phrases.
- L5b: Identify real-life connections between words and their use (e.g., describe people who are friendly or helpful).
- L6: Acquire and use accurately grade-appropriate conversational, general academic, and domain-specific vocabulary, including words and phrases that signal spatial and temporal relationships (e.g., After dinner that night we went looking for them).

Speaking and Listening

- **SL1a:** 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.
- **SL1b:** Follow agreed-upon rules for discussions (e.g., gaining the floor in respectful ways, listening to others with care, speaking one at a time about the topics and texts under discussion).



Semester 1 (August – December)

Unit A – Setting the Foundation (8 Weeks)

Overarching Standards for Unit A

Reading Literary

- **RL1:** Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
- **RL2:** Recount stories, including fables, folktales, and myths from diverse cultures; determine the central message, lesson, or moral and explain how it is conveyed through key details in the text.
- **RL4:** Determine the meaning of words and phrases both literal and nonliteral language as they are used in the text.
- **RL6:** Distinguish their own point of view from that of the narrator or those of the characters.
- **RL9** Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).

Writing

- W1a: Introduce the topic or book they are writing about, state an opinion, and create an organizational structure that lists reasons.
- **W1b:** Provide reasons that support the opinion.
- W1d: Provide a concluding statement or section.
- W3a: Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally
- **W3b:** Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.

Language

- L1a: Explain the function of nouns, pronouns, verbs, adjectives, and adverbs in general and their functions in particular sentences.
- L2a: Capitalize appropriate words in titles.
- L5a: Distinguish the literal and non-literal meanings of words and phrases in context (e.g., take steps).

Supporting Standards for Unit A

Reading Literary

- RL3: Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
- **RL5:** Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.

Writing

W3c: Use temporal words and phrases to signal event order.

Language

- **L1b**: Form and use regular and irregular plural nouns.
- L1c: Use abstract nouns (e.g., childhood).
- **L1d:** Form and use regular and irregular verbs.
- L1e: Form and use the simple (e.g., I walked; I walk; I will walk) verb tenses.
- L3b: Recognize and observe differences between the conventions of spoken and written standard English.

Speaking and Listening

- **SL1c:** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
- SL1d: Explain their own ideas and understanding in light of the discussion.
- **SL4:** Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
- **SL6:** Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language standards 1 and 3 for specific expectations.)

3rd Grade English Language Arts



Unit B – Key Ideas and Details (8 Weeks)

Overarching Standards for Unit B

Reading Informational

	RI1:	Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.
	RI2:	Determine the main idea of a text; recount the key details and explain how they support the main idea.
	RI3:	Describe the relationship between a series of historical events, scientific ideas or concepts, or steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.
Writing		
	W2a:	Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.
	W2b:	Develop the topic with facts, definitions, and details.
	W2d:	Provide a concluding statement or section.
Language		
	L1c:	Use abstract nouns (e.g., childhood).
	L5a:	Distinguish the literal and non-literal meanings of words and phrases in context (e.g., take steps).

Supporting Standards for Unit B

Reading Informational

- **RI4:** Determine the meaning of general academic and domain-specific words and phrases in a text relevant to a grade 3 topic or subject area.
- **RI5:** Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic quickly and efficiently.
- **RI8:** Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).



Writing

W2c: Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.

Speaking and Listening

- **SL2:** Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- **SL3:** Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
- **SL5** Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.

3rd Grade English Language Arts

Semester 2 (January – May)

Unit C – Integration of Knowledge (8 Weeks)

Overarching Standards for Unit C

Reading Informational

RI6:	Distinguish	their own	point	of view	from	that c	of the	author	of a	a text.

- **RI7:** Use information gained from illustrations (e.g., maps, photographs) and the words in a text to demonstrate understanding of the text (e.g., where, when, why, and how key events occur).
- **RI9:** Compare and contrast the most important points and key details presented in two texts on the same topic.

Writing

- W2a: Introduce a topic and group related information together; include illustrations when useful to aiding comprehension.
- **W2b:** Develop the topic with facts, definitions, and details.
- W2d: Provide a concluding statement or section.

Language

- L1g: Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.
- L1i: Produce simple, compound, and complex sentences.
- L2c: Use commas and quotation marks in dialogue.
- L2d: Form and use possessives.
- L5c: Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, suspected, heard, wondered).



Supporting Standards for Unit C

Reading Informational

RI2: Determine	the main idea of a text; red	count the key details and	explain how they su	pport the main idea.
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- **RI5:** Use text features and search tools (e.g., key words, sidebars, hyperlinks) to locate information relevant to a given topic quickly and efficiently.
- **RI8:** Describe the logical connection between particular sentences and paragraphs in a text (e.g., comparison, cause/effect, first/second/third in a sequence).

Writing

W2c: Use linking words and phrases (e.g., also, another, and, more, but) to connect ideas within categories of information.

Speaking and Listening

- **SL1c:** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
- **SL1d:** Explain their own ideas and understanding in light of the discussion.
- **SL2:** Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- **SL3:** Ask and answer questions about information from a speaker, offering appropriate elaboration and detail.
- **SL4:** Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
- **SL5:** Create engaging audio recordings of stories or poems that demonstrate fluid reading at an understandable pace; add visual displays when appropriate to emphasize or enhance certain facts or details.
- **SL6:** Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language standards 1 and 3 for specific expectations.)



Unit D – Literary Analysis (8 Weeks)

Overarching Standards for Unit D

Reading Literary

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	RL6:	Distinguish their own point of view from that of the narrator or those of the characters.
	RL9	Compare and contrast the themes, settings, and plots of stories written by the same author about the same or similar characters (e.g., in books from a series).
Writing		
	W3a:	Establish a situation and introduce a narrator and/or characters; organize an event sequence that unfolds naturally
	W3b:	Use dialogue and descriptions of actions, thoughts, and feelings to develop experiences and events or show the response of characters to situations.
	W3d:	Provide a sense of closure.
Language		
	L1i :	Produce simple, compound, and complex sentences.
	L1j:	Writes legibly in cursive.
	L2c:	Use commas and quotation marks in dialogue.
	L2d:	Form and use possessives.
	L5c:	Distinguish shades of meaning among related words that describe states of mind or degrees of certainty (e.g., knew, believed, suspected, heard, wondered).

Supporting Standards for Unit D

Reading Literary

- **RL3:** Describe characters in a story (e.g., their traits, motivations, or feelings) and explain how their actions contribute to the sequence of events.
- **RL5:** Refer to parts of stories, dramas, and poems when writing or speaking about a text, using terms such as chapter, scene, and stanza; describe how each successive part builds on earlier sections.

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Writing



W3c: Use temporal words and phrases to signal event order.

Language

- L1h: Use coordinating and subordinating conjunctions.
- L3b: Recognize and observe differences between the conventions of spoken and written standard English.

Speaking and Listening

- **SL1c:** Ask questions to check understanding of information presented, stay on topic, and link their comments to the remarks of others.
- **SL1d:** Explain their own ideas and understanding in light of the discussion.
- **SL4:** Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.
- **SL6:** Speak in complete sentences when appropriate to task and situation in order to provide requested detail or clarification. (See grade 3 Language standards 1 and 3 for specific expectations.)



Year Long Mathematical Practices (MP):

Display perseverance and patience in problem-solving. Demonstrate skills and strategies needed to succeed in mathematics, including critical thinking, reasoning, and effective collaboration, and expression. Seek help and apply feedback. Set and monitor goals.

- **MP.1** Make sense of problems and persevere in solving them.
- MP.2 Reason abstractly and quantitatively
- **MP.3** Construct viable arguments and critique reasoning of others.
- **MP.4** Model with mathematics.
- **MP.5** Use appropriate tools strategically.
- MP.6 Attend to precision.
- **MP.7** Look for and make use of structure.
- MP.8 Look for and express regularity in repeated reasoning.



The first weeks of school are focused on developing routines that support the Mathematical Practices. This unit will allow teachers to build upon previous learning, and students get to know themselves as math learners through statistical investigative activities. Students will strengthen their understanding of place value, addition, and subtraction up to 1,000 (as a review of 2nd Grade Mastery) through meaningful tasks and number sense routines.

Overarching Standards for Unit 1

- **NR.1:** Use place value understanding to represent, read, write, and compare numerical values up to 1,000 and round whole numbers up to 1,000.
- **PAR.2**: Use part-whole strategies, represent, and solve real-life problems involving addition and subtraction with whole numbers up to 1,000.
- MDR.5: Solve real-life, mathematical problems involving length, liquid volume (capacity), and mass up to 1,000.

Standards for Student Mastery for Unit 1

- **NR.1.1:** Read and write multi-digit whole numbers up to 1,000 to the hundreds using base-ten numerals and expanded form.
- **NR.1.2:** Use place value reasoning to compare multi-digit numbers up to 1,000, using >, =, and < symbols to record the results of comparisons.
- **PAR.2.1:** Continue to add and subtract fluently within 1,000 to solve problems using pictures, models, or words. Use addition and subtraction equations to solve real-world problems up to 1000.
- **MDR.5.1:** Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems involving length, liquid volume (capacity) and mass of objects relevant to everyday life.
- MDR.5.4: Use rulers to measure lengths in whole inches.
- **MDR.5.5:** Estimate and measure lengths, liquid volume (capacity) and mass of objects using customary units. Solve problems involving length, liquid volume (capacity) and mass given in the same unit, and reason about the relative sizes of measurement units within the customary system.

Unit 2 – Exploring Multiplication (5-6 weeks)

In Unit 2, students will explore multiplication through hands-on investigations and authentic problems. Students will explore patterns and properties and discover relationships between multiplication facts. Students will also represent and solve multiplication problems



through the context of picture and bar graphs. Students will create statistical investigative questions, collect, analyze, and interpret numerical and categorical data as an entry point for learning about equal-size groups and multiplication.

Overarching Standards for Unit 2

- **PAR.3:** Use part-whole strategies to solve real-life, mathematical problems involving multiplication with whole numbers within 100 using multiples of 10.
- **GSR.7**: Identify area as a measurable attribute of rectangles and determine the area of a rectangle presented in real-life, mathematical problems.
- MDR.5 Solve real-life, mathematical problems involving length, liquid volume (capacity), and mass.

Standards for Student Mastery for Unit 2

- **PAR.3.2:** Represent single digit multiplication and division facts using a variety of strategies. Explain the relationship between multiplication and division.
- **PAR.3.3:** Apply properties of operations (i.e., commutative property, associative property, distributive property) to multiply by multiples of 10 within 100.
- **PAR.3.6:** Solve practical, relevant problems involving multiplication within 100 using part-whole strategies, visual representations, and/or concrete models.
- PAR.3.1: Describe, extend, and create numeric patterns related to multiplication. Make predictions related to the patterns.
- **PAR.3.4:** Use the meaning of the equal sign to determine whether expressions involving addition, subtraction, and multiplication are equivalent.
- **GSR.7.1:** Investigate area by covering the space of rectangles presented in realistic situations using multiple copies of the same unit, with no gaps or overlaps, and determine the total area (total number of units that covered the space).
- **GSR.7.2:** Determine the area of rectangles (or shapes composed of rectangles) presented in relevant problems by tiling and counting.
- **MDR.5.1:** Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems involving length, liquid volume (capacity) and mass of objects relevant to everyday life.





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Unit 3– Relating Multiplication to Division (3-4 weeks)

In Unit 3, students will learn that multiplication and division are inverse operations that can be used to solve problems involving equal groups, arrays, and area measurements. Students will discover that numbers of objects can be divided by partitioning them into equal



shares (partitive) and by grouping them into groups of a known size (quotative). Students will use liquid volume to develop understanding of equal share.

Overarching Standards for Unit 3

- **PAR.3** Use part-whole strategies to solve real-life, mathematical problems involving multiplication and division with whole numbers within 100 using multiples of 10.
- **MDR.5** Solve real-life, mathematical problems involving liquid volume.

Standards for Student Mastery for Unit 3

- **PAR.3.2:** Represent single digit multiplication and division facts using a variety of strategies. Explain the relationship between multiplication and division.
- **PAR.3.3:** Apply properties of operations (i.e., commutative property, associative property, distributive property) to multiply and divide within 100 using multiples of 10.
- **PAR.3.4:** Use the meaning of the equal sign to determine whether expressions involving +, -, and x are equivalent.
- **PAR.3.5:** Use place value reasoning and properties of operations to multiply one-digit whole numbers by multiples of 10, in the range 10 90.
- **PAR.3.6:** Solve practical, relevant problems involving multiplication and division within 100 using part-whole strategies, visual representations, and/or concrete models.
- **PAR.3.7:** Use multiplication and division to solve problems involving whole numbers to 100. Represent these problems using equations with a letter standing for the unknown quantity. Justify solutions.
- **MDR.5.1:** Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems involving liquid volume relevant to everyday life.
- **MDR.5.5:** Estimate and measure liquid volumes of objects using customary units. Solve problems involving volume given in the same unit, and reason about the relative sizes of measurement units within the customary system.

Unit 4 – Place Value, Addition & Subtraction up to 10,000 (5-6 weeks)

In this unit, students will extend their understanding of the base-ten system to include numbers to 10,000. Students will use their understanding of place value to compare four-digit numbers, round whole numbers up to 1,000 to the nearest 10 or 100, fluently add and subtract within 1,000 while expanding the application of part-whole strategies, properties of operations and place value to add and



subtract within 10,000. Students will represent real-life, mathematical problems involving mass using equations with unknowns in all positions and assess the reasonableness of their answers.

Overarching Standards for Unit 4

NR.1:	Use place value understanding to represent, read, write and compare numerical values up to 10,000 and round whole numbers up to 1,000.
PAR.2 :	Use parts-whole strategies, represent, and solve real-life problems involving addition and subtraction with whole numbers within 10,000. Use computational fluency to master addition and subtraction to 1,000 by end of Grade 3.
MDR.5:	Solve real-life, mathematical problems involving mass.

Standards for Student Mastery for Unit 4

- **NR.1.1:** Read and write multi-digit whole numbers up to 10,000 to the thousands using base-ten numerals and expanded form.
- **NR.1.2:** Use place value reasoning to compare multi-digit numbers up to 10,000, using >, =, and < symbols to record the results of comparisons.
- NR.1.3: Use place value understanding to round whole numbers up to 1000 to the nearest 10 or 100.
- PAR.2.1: Practice adding and subtracting up to 10,000 while building computational fluency within 1,000 to solve problems.
- **PAR.2.2:** Apply part-whole strategies, properties of operations and place value understanding, to solve problems involving addition and subtraction within 10,000.
- **MDR.5.1:** Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems involving mass of objects relevant to everyday life.
- **MDR.5.5:** Estimate and measure masses of objects using customary units. Solve problems involving mass given in the same unit, and reason about the relative sizes of measurement units within the customary system.

Semester 2 (January – May)

Unit 5 – Two-Step Problems and Time (3-4 weeks)

Students solve and represent authentic problems using all four operations, including problems involving elapsed time. Students recognize problem situations that indicate when to add, subtract, multiply, or divide and build appropriate equations to solve them.



- **PAR.2:** Use part-whole strategies, represent, and solve real-life problems involving addition and subtraction with whole numbers within 10,000. Use computational fluency to master addition and subtraction to 1,000 by end of Grade 3.
- **PAR.3**: Use part-whole strategies to solve real-life, math problems involving multiplication and division with whole numbers within 100.
- MDR.5: Solve real-life, mathematical problems involving time.

Standards for Student Mastery for Unit 5

- **PAR.2.1:** Practice adding and subtracting up to 10,000 while building computational fluency within 1,000 to solve problems.
- **PAR.2.2:** Apply part-whole strategies, properties of operations and place value understanding, to solve problems involving addition and subtraction within 10,000.
- **PAR.3.4:** Use the meaning of the equal sign to determine whether expressions involving +, -, and x are equivalent.
- **PAR.3.6:** Solve practical, relevant problems involving multiplication and division within 100 using part-whole strategies, visual representations, and/or concrete models.
- **PAR.3.7:** Use multiplication and division to solve problems involving whole numbers to 100. Represent these problems using equations with a letter standing for the unknown quantity. Justify solutions.
- **MDR.5.1:** Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems involving elapsed time relevant to everyday life.
- **MDR.5.2:** Tell and write time to the nearest minute and estimate time to the nearest fifteen minutes (quarter hour) from the analysis of an analog clock.
- **MDR.5.3** Solve meaningful problems involving elapsed time, including intervals of time to the hour, half hour, and quarter hour where the times presented are only on the hour, half hour, or quarter hour within a.m. or p.m. only.

Unit 6 – Fractions as Numbers (4-5 weeks)

In this unit, students will develop an understanding of fractions as numbers with an emphasis on unit fractions. Students understand that fractions are numbers that describe the division of a whole into equal parts. Students represent fractions with models, diagrams, and number lines and use these models to compare, find, and generate equivalent fractions.

Overarching Standards for Unit 6

NR.4: Represent fractions with denominators of 2, 3, 4, 6 and 8 in multiple ways within a context using visual models.



Standards for Student Mastery for Unit 6

- **NR.4.1:** Describe a unit fraction for example $\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$, $\frac{1}{6}$, $\frac{1}{8}$. Explain how multiple copies of a unit fraction form a non-unit fraction, $\frac{1}{3} + \frac{1}{3} = \frac{2}{3}$. Use parts of a whole, parts of a set, points on a number line, distances on a number line and area models.
- NR.4.2: Compare two-unit fractions by using a variety of tools and strategies.
- NR.4.3: Represent fractions, including fractions greater than one, in multiple ways.
- NR.4.4: Recognize and generate simple equivalent fractions.

Unit 7 – Connecting Length, Perimeter, and Area (3-4 weeks)

In Unit 7, students use a ruler to measure length to the nearest $\frac{1}{2}$ or $\frac{1}{4}$ of an inch. Students also measure side lengths of polygons to determine the perimeter and extend their understanding of area measurement by explaining that the area of a rectangle can be determined by multiplying the side lengths.

Overarching Standards for Unit 7

- MDR.5: Solve real-life, mathematical problems involving length as applied to perimeter and area.
- **GSR.7:** Identify area as a measurable attribute of rectangles. Determine the area of a rectangle presented in real-life, math problems.
- **PAR.3**: Use part-whole strategies to solve real-life, math problems involving multiplication and division with whole numbers within 100.



GSR.8: Determine the perimeter of a polygon presented in real-life, mathematical problems.

Standards for Student Mastery for Unit 7

- **MDR.5.4**: Use rulers to measure lengths in halves and fourths (quarters) of an inch and a whole inch.
- **MDR.5.1:** Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems involving the length of objects relevant to perimeter and area problems in everyday life.
- **MDR.5.5:** Estimate and measure lengths of objects using customary units. Solve problems involving length relevant to perimeter and area given in the same unit, and reason about the relative sizes of measurement units within the customary system.
- **GSR.7.1:** Investigate area by covering the space of rectangles presented in realistic situations using multiple copies of the same unit, with no gaps or overlaps, and determine the total area (total number of units that covered the space).
- **GSR.7.2:** Determine the area of rectangles (or shapes composed of rectangles) presented in relevant problems by tiling and counting.
- **GSR.7.3:** Discover and explain how area can be found by multiplying the dimensions of a rectangle.
- **PAR.3.3:** Apply properties of operations (i.e., commutative property, associative property, distributive property) to multiply and divide within 100.
- **PAR.3.6:** Solve practical, relevant problems involving multiplication and division within 100 using part-whole strategies, visual representations, and/or concrete models.
- **PAR.3.7:** Use multiplication and division to solve problems involving whole numbers to 100. Represent these problems using equations with a letter standing for the unknown quantity. Justify solutions.
- **GSR.8.1:** Determine the perimeter of a polygon and explain that the perimeter represents the distance around a polygon. Solve problems involving perimeters of polygons.
- **GSR.8.2:** Investigate and describe how rectangles with the same perimeter can have different areas or how rectangles with the same area can have different perimeters.



In this unit, students will work with equal groups. They will create arrays to solve problems. Students will extend their knowledge of equal groups to determine odd and even. Students will write and solve equations to represent equal groups and arrays with up to 5 rows and 5 columns. Students will also identify, describe, create, and extend numerical patterns in addition and subtraction as related to equal groups and arrays. *Students will continue to review and develop their understanding of the value of numbers to 1,000, the counting sequence, and solve real world problems involving addition and subtraction within 1,000.

Overarching Standards for Unit 8

GSR.6: Identify the attributes of polygons, including parallel segments, perpendicular segments, right angles, and symmetry.

Standards for Student Mastery for Unit 8

- **GSR.6.1:** Identify perpendicular line segments, parallel line segments, and right angles, identify these in polygons, and solve problems involving parallel line segments, perpendicular line segments, and right angles.
- **GSR.6.2:** Classify, compare, and contrast polygons, with a focus on quadrilaterals, based on properties. Analyze specific 3-dimensional figures to identify and describe quadrilaterals as faces of these figures.
- **GSR.6.3:** Identify lines of symmetry in polygons.

Unit 9 - Culminating Capstone Unit - Using Mathematics to Answer Questions in My World (3-4 weeks)

The capstone unit applies content that has already been learned in previous interdisciplinary PBLs and units throughout the school year. The capstone unit is an interdisciplinary unit that allows students to create a presentation, report, or demonstration that could include their models used to answer an overarching driving question. (e.g., Students can present their solution(s), findings, project, or answer to the driving question to a larger audience during the culminating capstone unit.)

Overarching Standards for Unit 9

- **NR.1:** Use place value understanding to represent, read, write, and compare numerical values up to 10,000 and round whole numbers up to 1,000 to the nearest 10 or 100.
- **NR.4:** Represent fractions with denominators of 2, 3, 4, 6 and 8 in multiple ways within a context using visual models.



- **PAR.2:** Use part-whole strategies, represent, and solve real-life problems involving addition and subtraction with whole numbers within 10,000. Use computational fluency to demonstrate mastery of addition and subtraction to 1,000.
- **PAR.3:** Use part-whole strategies to solve real-life, mathematical problems involving multiplication and division with whole numbers within 100.
- **GSR.6:** Identify the attributes of polygons, including parallel segments, perpendicular segments, right angles, and symmetry.
- **GSR.7:** Identify area as a measurable attribute of rectangles and determine the area of a rectangle presented in real-life, mathematical problems.
- **GSR.8:** Determine the perimeter of a polygon presented in real-life, mathematical problems.
- **MDR.5:** Solve real-life, mathematical problems involving length, liquid volume, mass, and time.

Standards for Student Mastery for Unit 9

ALL associated learning objectives.

3rd Grade Science



Course Description

The Third Grade Cherokee Teaching & Learning Standards for Science engage students in making observations and using information they obtained to answer questions. Their communication skills allow them to record findings, analyze data, and recognize the importance of keeping records of observations without making alterations. Third graders add and subtract whole numbers mentally, on paper, and with a calculator. They observe, construct, and measure objects using ordinary hand tools. They observe things with many parts and describe the ways in which the parts influence or interact with one another. They represent objects in the real world with geometric figures, number sequences, graphs, diagrams, maps, and stories. The students will use this information to explain physical attributes of rocks and soils, understand how fossils provide evidence of organisms that lived long ago, describe ways in which heat energy is transferred and measured, identify features of plants and animals within the geographical regions of Georgia, and recognize the effects of pollution on the environment.

Science standards integrate the three dimensions of Science and Engineering Practices (SEPs), Crosscutting Concepts (CCCs), and Disciplinary Core Ideas (DCIs) to provide a comprehensive framework that emphasizes active engagement, interdisciplinary connections, and core scientific principles. Together, they show how science standards engage *students* in obtaining, evaluating, and communicating information.

Science and Engineering Practices	Crosscutting Concepts	Disciplinary Core Ideas	
Asking Questions (Science) and Defining Problems (Engineering)	Patterns	Engineering, Technology, and the	
Developing and Using Models	Cause and Effect: Mechanism and Explanation	Application of science (TES)	
Planning and Carrying Out Investigations	nd Carrying Out Investigations Scale, Proportion, and Quantity		
Analyzing and Interpreting Data	Systems and System Models		
Mathematics and Computational Thinking	Frank and Matter		
Constructing Explanations (Science) and Designing Solutions (Engineering)	Flows, Cycles, and Conservation	Life Science (L)	
Engaging in Argument from Evidence	Structure and Function		
Obtaining, Evaluating, and Communicating Information	Stability and Change	Earth and Space Science (E)	

Science and Engineering Practices are fundamental approaches that scientists and engineers use to investigate the natural world and solve practical problems. **Crosscutting Concepts** in science are overarching themes that bridge various disciplines, helping students and researchers see connections and deepen their understanding of the natural world. **Disciplinary Core Ideas** are fundamental concepts that students need to understand to develop a deep knowledge of science across various disciplines.

Semester 1 (August – December)

Unit 0: Thinking Like a Scientist (2 weeks)

This unit aims to immerse third-grade students in the process of scientific inquiry, focusing on developing intermediate scientific thinking skills. Students will learn to design experiments, analyze data, and draw evidence-based conclusions. Throughout the unit, students will use more complex scientific vocabulary, formulate hypotheses, conduct controlled experiments, utilize a range of tools and technology to gather and analyze data, and effectively communicate their results and conclusions. Thinking Like a Scientist standards should continue to be embedded and developed throughout the course across the entire school year.

Overarching Standard for Unit 0

TLS3-5: Develop intermediate scientific thinking skills by designing experiences, analyzing data, and drawing evidence-based conclusions.

- **TLS3-5.a**: Use more complex scientific vocabulary such as data, claim, hypothesis, analyze, variables, and justification.
- TLS3-5.b: Formulate hypotheses and conduct controlled experiments.
- TLS3-5.c: Use a range of tools and technology to gather and analyze data.
- **TLS3-5.d**: Communicate results and conclusions effectively, using various formats (e.g., reports, presentations, argument boards).

Unit 1: Habitats and Adaptations (9 weeks)

In this unit, students will gather information and construct explanations of plant/animal adaptations and habitats across geographic regions of Georgia. Students will investigate how adaptations enable survival and why organisms are suited to specific habitats based on evidence.

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Overarching Standard for Unit 1

- L1: Obtain, evaluate, and communicate information about the similarities and differences between plants, animals, and habitats found within geographic regions (Blue Ridge Mountains, Piedmont, Coastal Plains, Valley and Ridge, and Appalachian Plateau) of Georgia.
- L1.c: Use evidence to construct an explanation of why some organisms can thrive in one habitat and not in another.

- L1.a: Ask questions to differentiate between plants, animals, and habitats found within Georgia's geographic regions.
 - Differentiate between a habitat and a region.
- **L1.b:** Construct an explanation of how external features and adaptations (camouflage, hibernation, migration, mimicry) of animals allow them to survive in their habitat.



In this unit, students will analyze data and use patterns to recognize similarities and differences in rock and soil properties. Students will investigate the local environment to understand and explain the interactions between water, wind, soil, and rocks over time.

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Overarching Standard for Unit 2

- E1: Obtain, evaluate, and communicate information about the physical attributes of rocks and soils.
- **E1.c:** Make observations of the local environment to construct an explanation of how water and/or wind have made changes to soil and/or rocks over time.

(*<u>Clarification statement</u>: Examples could include ripples in dirt on a playground and a hole formed under gutters.*)

- E1.a: Ask questions and analyze data to classify rocks by their physical attributes (color, texture, luster, and hardness) using simple tests. (*Clarification statement*: Mohs scale should be studied at this level. Cleavage, streak and the classification of rocks as sedimentary, igneous, and metamorphic are not studied until sixth grade.)
- **E1.b:** Plan and carry out investigations to describe properties (color, texture, capacity to retain water, and ability to support growth of plants) of soils and soil types (sand, clay, loam).

Semester 2 (January – May)

Unit 3: Fossils (4 weeks)

In this unit, students will construct arguments based on evidence from fossil observations and develop models to explain the processes that lead to fossilization and preservation over time. Students will recognize trends and evidence from fossils that reveal past organisms and environments.

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Overarching Standard for Unit 3

- E2: Obtain, evaluate, and communicate information on how fossils provide evidence of past organisms.
- **E2.a:** Construct an argument from observations of fossils (authentic or reproductions) to communicate how they serve as evidence of past organisms and the environments in which they lived.
 - Use fossil evidence to justify where an organism once lived.

- **E2.b:** Develop a model to describe the sequence and conditions required for an organism to become fossilized.
 - (*<u>Clarification statement</u>: Types of fossils (cast, mold, trace, and true) are not addressed in this standard.*)



In this unit, students will ask questions to gather information about sources and effects of pollution on plants and animals to communicate solutions, such as conservation and recycling. Students will emphasize cause and effect in recognizing the interconnectedness of human activities, pollution, and environmental impacts on ecosystems.

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Overarching Standard for Unit 4

- L2: Obtain, evaluate, and communicate information about the effects of pollution (air, land, and water) and humans on the environment.
 - Identify sources of pollution (air, land and water).
- **L2.b:** Explore, research, and communicate solutions, such as conservation of resources and recycling of materials, to protect plants and animals.
 - Explain the benefits of conserving resources and recycling materials.

Supporting Standards for Student Mastery in Unit 4

L2.a: Ask questions to collect information and create records of sources and effects of pollution on the plants and animals.



Unit 5: Heat (9 weeks)

In this unit, students will investigate ways that heat energy is transferred and measured to design and construct devices based on gathered data. Students will focus on the concepts of energy and matter, in understanding heat sources and their effects, while exploring how different materials and structures can influence the warming effects of sunlight.

Overarching Standard for Unit 5

- P1: Obtain, evaluate, and communicate information about the the ways heat energy is transferred and measured.
- **P1.c:** Use tools and everyday materials to design and construct a device/structure that will increase/decrease the warming effects of sunlight on various materials.

(*<u>Clarification statement</u>*: Conduction, convection, and radiation are taught in upper grades.)

- P1.a: Ask questions to identify sources of heat energy.
 - (Clarification statement: Examples could include sunlight, friction, and burning.)
 - Explain how heat energy is created.
- **P1.b:** Plan and carry out an investigation to gather data using thermometers to produce tables and charts that illustrate the effect of sunlight on various objects.
 - (Clarification statement: The use of both Fahrenheit and Celsius temperature scales is expected.)



United States History – American Indian Cultures through Colonization

In third grade, students begin a three-year study of United States history in which all four strands (history, geography, civics/ government, and economics) are integrated. Students learn about American Indian cultures and the exploration and colonization of North America. The geography strand emphasizes the influence of geography on early U.S. history. In the civics/government strand, students learn about the elements of our representative democracy and their rights and responsibilities as good citizens. Students will extend and apply their understanding of basic economic concepts.

Social Studies standards integrate the three dimensions of **Information Processing Skills (ISPs)**, **Map and Globe Skills (MGSs)**, and **Disciplinary Domains (DDs)** to provide a comprehensive framework that emphasizes active engagement, interdisciplinary connections, and K-12 Connecting Themes and Enduring Understandings. Together, they show how social studies standards engage *students* in obtaining, evaluating, and communicating information.

Information Processing Skills	Map and Globe Skills	Disciplinary Domains
IPS. 1 : Compare similarities and differences (A)	MGS.1: Introduce the use of a compass rose to successfully identify cardinal directions (north, south, east, west). (A)	Historical Understandings (H)
IPS. 2: Organize items chronologically (M)	MGS.2: Introduce the use of intermediate directions when describing location (northeast,	
IPS.3 : Identify issues and/or problems and alternative solutions (D)	southeast, northwest, southwest). (A)	
IPS.4: Distinguish between facts and opinion.	MGS.3: Use a letter/number grid system to	Geographic Understandings (G)
(M)	determine location. (M)	



IPS.5: Identify main idea, detail, sequence of	MGS.4: Compare and contrast the categories	
events, and cause and effect in a social studies	of natural, cultural, and political features on a	
context. (D)	map. (M)	
 IPS.6: Identify and use primary and secondary sources. (D) IPS.7: Interpret timelines, charts, and tables. (D) 	MGS.6: Use a map key/legend to acquire information from historical, physical, political, resource, product, and economic maps. (D)	
IPS.8: Identify social studies reference		Government/Civic Understandings (CG)
resources to use for a specific purpose. (M)	MGS.7: Use a map to explain the impact of	
IPS.9: Construct charts and tables. (M)	geography on historical and current events. (D)	
IPS.10: Analyze artifacts. (D)		
IPS.11: Draw conclusions and make generalizations. (I)IPS.12: Analyze graphs and diagrams. (I)	MGS.8: Draw conclusions and make generalizations based on information from maps. (I)	Economic Understandings (E)
IPS.13: Translate dates into centuries, eras, or ages. (I)	MGS.9: Use latitude and longitude to determine location. (I)	

The goal of the **Information Processing Skills (IPS)** is for a student to be able to locate, analyze, and synthesize information related to social studies topics and apply this information to solve problems and/or make decisions. Students are working to master these skills over multiple grade levels. **Map and Globe Skills (MGS)** are the expected skills that a student should successfully use to retrieve social studies information from maps. The expected level of mastery for IPS and MGS are indicated by one of the following letters in parentheses: Introduced (I), Developing (D), Mastery (M), and Application (A). **Disciplinary Domains** are the four areas of fundamental concepts that students need to understand to develop a deep knowledge of social studies.



Semester 1 (August – December)

- Unit 1 United States Geography (4 weeks)
- **G.1:** Locate major topographical features on a physical map of the United States.
- **G.1.a:** Locate major rivers of the United States of America: Mississippi, Ohio, Rio Grande, Colorado, Hudson, and St. Lawrence.
- **G.1.b:** Locate major mountain ranges of the United States of America: Appalachian, Rocky.
- **G.2:** Locate and describe the equator, prime meridian, and lines of latitude and longitude on a globe.
 - **MGS.3:** Use a letter/number grid system to determine location.
 - **MGS.6:** Use a map key/legend to acquire information from historical, physical, political, resource, product, and economic maps.
 - **MGS.9:** Use latitude and longitude to determine location.

Unit 2 – American Indians (5 weeks)

- H.1: Describe early American Indian cultures and their development in North America.
- H1.b: Compare and contrast how American Indians in each region used their environment to obtain food, clothing, and shelter.
 - H1.a: Locate the regions where American Indians settled in North America: Arctic, Northwest Southwest, Plains, Northeast, and Southeast.
 - MGS.2: Use intermediate directions when describing location (northeast, southeast, northwest, southwest).
 - **MGS.3:** Use a letter/number grid system to determine location.
 - H1.c: Discuss how American Indians continue to contribute to American life (e.g., arts, literature).
 - **G.3.a:** Explain why American Indian groups occupied the areas they did, with emphasis on why some developed permanent villages and others did not.



- MGS.7: Use a map to explain the impact of geography on historical and current events.
- **MGS.8:** Draw conclusions and make generalizations based on information from maps.

Unit 3 – European Explorers – (5 weeks)

- **H.2:** Describe European exploration in North America.
- **H2.b:** Describe the accomplishments of: John Cabot (England), Vasco Núñez de Balboa (Spain), Hernando de Soto (Spain), Christopher Columbus (Spain), Henry Hudson (The Netherlands), and Jacques Cartier (France).
 - **H2.a:** Describe the reasons for and obstacles to the exploration of North America.
 - **H2.c:** Describe examples of cooperation and conflict between European explorers and American Indians.
 - **G.3.b:** Describe how the early explorers adapted, or failed to adapt, to the various physical environments in which they traveled.
 - **MGS.4:** Compare and contrast the categories of natural, cultural, and political features on a map.
 - **MGS.6:** Use a map key/legend to acquire information from historical, physical, political, resource, product, and economic maps.
 - MGS.7: Use a map to explain the impact of geography on historical and current events.
 - **MGS.8:** Draw conclusions and make generalizations based on information from maps.



Unit 4 – British Colonial America (4 weeks)

- H3: Explain the factors that shaped British Colonial America.
- **H3.b:** Compare and contrast colonial life in the New England, Mid-Atlantic, and Southern colonies (education, economy, and religion).
 - **H3.a:** Identify key reasons why the New England, Mid-Atlantic, and Southern colonies were founded (religious freedom and profit).
 - **H3.c:** Describe colonial life in America from the perspectives of various people: large landowners, farmers, artisans, women, children, indentured servants, slaves, and American Indians.
 - **G3.c:** Explain how the physical geography of the New England, Mid-Atlantic, and Southern colonies helped determine economic activities.
 - MGS.6: Use a map key/legend to acquire information from historical, physical, political, resource, product, and economic maps.
 - **MGS.7:** Use a map to explain the impact of geography on historical and current events.
 - **MGS.8:** Draw conclusions and make generalizations based on information from maps.

3rd Grade Social Studies



Semester 2 (January – May)

- Unit 4 (continued) British Colonial America (5 weeks)
- **H3:** Explain the factors that shaped British Colonial America.
- **H3.b:** Compare and contrast colonial life in the New England, Mid-Atlantic, and Southern colonies (education, economy, and religion).
 - H3.a: Identify key reasons why the New England, Mid-Atlantic, and Southern colonies were founded (religious freedom and profit).
 - **H3.c:** Describe colonial life in America from the perspectives of various people: large landowners, farmers, artisans, women, children, indentured servants, slaves, and American Indians.
 - **G3.c:** Explain how the physical geography of the New England, Mid-Atlantic, and Southern colonies helped determine economic activities.
 - **MGS.6:** Use a map key/legend to acquire information from historical, physical, political, resource, product, and economic maps.
 - MGS.7: Use a map to explain the impact of geography on historical and current events.
 - **MGS.8:** Draw conclusions and make generalizations based on information from maps.

Unit 5– Government (5 weeks)

- **CG1:** Describe the elements of representative democracy/republic in the United States.
- **CG1.c:** State the main responsibility of each branch: executive (enforcing laws), legislative (making laws), judicial (determining if laws are fair).
- **CG2:** Explain the importance of Americans sharing certain central democratic beliefs and principles, both personal and civic.
- **CG2.b:** Explain the necessity of obeying reasonable laws/rules voluntarily and explain why it is important for citizens in a democratic society to participate in public (civic) life (staying informed, voting, volunteering, and communicating with public officials).



- **CG1.a:** Describe the three branches of national government: executive (president), legislative (Congress), and judicial (Supreme Court of the United States).
- **CG1.b:** Describe the three branches of state government: executive (governor), legislative (Georgia General Assembly), and judicial (Supreme Court of Georgia).
- **CG.2.a:** Explain the necessity of respecting the rights of others and promoting the common good.

Unit 6 – Economics (8 weeks)

- **E.1:** Define and give examples of the four types of productive resources.
- **E.1.d:** Entrepreneurship (risk-taking and combining natural, human, and capital resources in an attempt to make a profit)
- **E.2:** Explain that governments provide certain types of goods and services in a market economy (schools, libraries, roads, police/fire protection, and military) and pay for these through taxes.
- **E.3:** Give examples of interdependence and trade and explain the benefits of voluntary exchange.
- **E.3.a:** Describe the interdependence of consumers and producers.
- **E.4:** Explain the concept of opportunity cost as it relates to making a saving or spending choice.
 - E.1.a: Natural (land)
 - E.1.b: Human (labor)
 - **E.1.c:** Capital (capital goods)
 - **E.3.b:** Describe how goods and services are allocated by price in the marketplace.
 - **E.3.c:** Explain that some goods are made locally, some elsewhere in the country, and some in other countries.
 - **E.3.d:** Explain that most countries create their own currency for use as money.