

FOURTH GRADE SYLLABUS

Language Arts (Revised 2008)

The language arts curriculum is designed to address standards that are organized three strands: Reading, Written Communication, and Research. Many of the academic standards associated with each strand play an integral part in student learning throughout the school year. These include:

TIMEFRAME	UNIT OF STUDY	STANDARDS
August - Mid-September (4 weeks)	Theme 1: Journeys	<p>READING</p> <p>Standard 4-1 The student will read and comprehend a variety of literary texts in print and nonprint formats.</p> <ul style="list-style-type: none">Analyze the details that support the expression of the main idea in a given literary text.Analyze literary texts to draw conclusions and make inferences.Distinguish between first-person and third-person points of view.Analyze the impact of characterization and conflict on plot.Interpret the effect of the author's craft (for example, word choice, sentence structure, the use of figurative language, and the use of dialogue) on the meaning of literary texts.Create responses to literary texts through a variety of methods (for example, writing, creative dramatics, and the visual and performing arts).Analyze cause-and-effect relationships in literary texts.Read independently for extended periods of time for pleasure. <p>READING</p> <p>Standard 4-2 The student will read and comprehend a variety of informational texts in print and nonprint formats.</p> <ul style="list-style-type: none">Summarize evidence that supports the central idea of a given informational text.Analyze informational texts to draw conclusions and make inferences.Analyze informational texts to locate and identify facts and opinions.Create responses to informational texts through a variety of methods (for example, drawings, written works, and oral presentations).Use headings, subheadings, print styles, white space, captions, and chapter headings to gain information.Use graphic features (including illustrations, graphs, charts, maps, diagrams, and

<p>Mid-September- October</p>	<p>Theme 2: <u>Sign of the Beaver</u> novel</p>	<p>graphic organizers) as sources of information.</p> <ul style="list-style-type: none"> ▪ Use functional text features (including tables of contents, glossaries, indexes, and appendixes) as sources of information. ▪ Analyze informational texts to identify cause-and-effect relationships. ▪ Read independently for extended periods of time to gain information. <p>READING Standard 4-3 The student will use word analysis and vocabulary strategies to read fluently.</p> <ul style="list-style-type: none"> ▪ Generate the meaning of unfamiliar and multiple-meaning words by using context clues (for example, those that provide an example or a definition). ▪ Use base words and affixes to determine the meanings of words. ▪ Spell correctly <ul style="list-style-type: none"> -words with prefixes and suffixes, and -multisyllabic words. <p>READING Standard 4-1 The student will read and comprehend a variety of literary texts in print and nonprint formats.</p> <ul style="list-style-type: none"> ▪ Analyze the details that support the expression of the main idea in a given literary text. ▪ Analyze literary texts to draw conclusions and make inferences. ▪ Distinguish between first-person and third-person points of view. ▪ Analyze the impact of characterization and conflict on plot. ▪ Interpret the effect of the author's craft (for example, word choice, sentence structure, the use of figurative language, and the use of dialogue) on the meaning of literary texts. ▪ Create responses to literary texts through a variety of methods (for example, writing, creative dramatics, and the visual and performing arts). ▪ Analyze cause-and-effect relationships in literary texts. ▪ Read independently for extended periods of time for pleasure. <p>READING Standard 4-2 The student will read and comprehend a variety of informational texts in print and nonprint formats.</p> <ul style="list-style-type: none"> ▪ Summarize evidence that supports the central idea of a given informational text. ▪ Analyze informational texts to draw conclusions and make inferences. ▪ Analyze informational texts to locate and identify facts and opinions.
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		<ul style="list-style-type: none"> ▪ Create responses to informational texts through a variety of methods (for example, drawings, written works, and oral presentations). ▪ Use headings, subheadings, print styles, white space, captions, and chapter headings to gain information. ▪ Use graphic features (including illustrations, graphs, charts, maps, diagrams, and graphic organizers) as sources of information. ▪ Use functional text features (including tables of contents, glossaries, indexes, and appendixes) as sources of information. ▪ Analyze informational texts to identify cause-and-effect relationships. ▪ Read independently for extended periods of time to gain information. <p>READING</p> <p>Standard 4-3 The student will use word analysis and vocabulary strategies to read fluently.</p> <ul style="list-style-type: none"> ▪ Generate the meaning of unfamiliar and multiple-meaning words by using context clues (for example, those that provide an example or a definition). ▪ Use base words and affixes to determine the meanings of words. ▪ Interpret the meaning of idioms encountered in texts. ▪ Spell correctly <ul style="list-style-type: none"> -words with prefixes and suffixes, and -multisyllabic words.
November-December (4 weeks)	Theme 3: That's Amazing	<p>READING</p> <p>Standard 4-1 The student will read and comprehend a variety of literary texts in print and nonprint formats.</p> <ul style="list-style-type: none"> ▪ Analyze the details that support the expression of the main idea in a given literary text. ▪ Analyze literary texts to draw conclusions and make inferences. ▪ Distinguish between first-person and third-person points of view. ▪ Analyze the impact of characterization and conflict on plot. ▪ Interpret the effect of the author's craft (for example, word choice, sentence structure, the use of figurative language, and the use of dialogue) on the meaning of literary texts. ▪ Create responses to literary texts through a variety of methods (for example, writing, creative dramatics, and the visual and performing arts). ▪ Classify works of fiction (including fables, tall tales, and folktales) and works of nonfiction (including biographies and personal essays) by characteristics ▪ Analyze cause-and-effect relationships in literary texts. ▪ Read independently for extended periods of time for pleasure.

January
(4 weeks)

Theme 4:
Problem Solvers

READING

Standard 4-2 The student will read and comprehend a variety of informational texts in print and nonprint formats.

- Summarize evidence that supports the central idea of a given informational text.
- Analyze informational texts to draw conclusions and make inferences.
- Analyze informational texts to locate and identify facts and opinions.
- Create responses to informational texts through a variety of methods (for example, drawings, written works, and oral presentations).
- Analyze informational texts to identify cause-and-effect relationships.
- Read independently for extended periods of time to gain information.

READING

Standard 4-3 The student will use word analysis and vocabulary strategies to read fluently.

- Generate the meaning of unfamiliar and multiple-meaning words by using context clues (for example, those that provide an example or a definition).
- Use base words and affixes to determine the meanings of words.
- Interpret the meaning of idioms encountered in texts.
- Spell correctly
 - words with prefixes and suffixes, and
 - multisyllabic words.

READING

Standard 4-1 The student will read and comprehend a variety of literary texts in print and nonprint formats.

- Analyze the details that support the expression of the main idea in a given literary text.
- Analyze literary texts to draw conclusions and make inferences.
- Distinguish between first-person and third-person points of view.
- Distinguish among devices of figurative language (including simile, metaphor, personification, and hyperbole) and sound devices (including onomatopoeia and alliteration).
- Analyze the impact of characterization and conflict on plot.
- Interpret the effect of the author's craft (for example, word choice, sentence structure, the use of figurative language, and the use of dialogue) on the meaning of literary texts.
- Create responses to literary texts through a variety of methods (for example, writing, creative dramatics, and the visual and performing arts).

<p>February (4 weeks)</p>	<p>Theme 5: <i>Heroes</i></p>	<ul style="list-style-type: none"> ▪ Classify works of fiction (including fables, tall tales, and folktales) and works of nonfiction (including biographies and personal essays) by characteristics. ▪ Analyze cause-and-effect relationships in literary texts. ▪ Read independently for extended periods of time for pleasure. <p>READING</p> <p>Standard 4-2 The student will read and comprehend a variety of informational texts in print and nonprint formats.</p> <ul style="list-style-type: none"> ▪ Summarize evidence that supports the central idea of a given informational text. ▪ Analyze informational texts to draw conclusions and make inferences. ▪ Analyze informational texts to locate and identify facts and opinions. ▪ Create responses to informational texts through a variety of methods (for example, drawings, written works, and oral presentations). ▪ Use headings, subheadings, print styles, white space, captions, and chapter headings to gain information. ▪ Use graphic features (including illustrations, graphs, charts, maps, diagrams, and graphic organizers) as sources of information. ▪ Use functional text features (including tables of contents, glossaries, indexes, and appendixes) as sources of information. ▪ Analyze informational texts to identify cause-and-effect relationships. ▪ Read independently for extended periods of time to gain information. <p>READING</p> <p>Standard 4-3 The student will use word analysis and vocabulary strategies to read fluently.</p> <ul style="list-style-type: none"> ▪ Generate the meaning of unfamiliar and multiple-meaning words by using context clues (for example, those that provide an example or a definition). ▪ Use base words and affixes to determine the meanings of words. ▪ Interpret the meaning of idioms encountered in texts. ▪ Spell correctly <ul style="list-style-type: none"> -words with prefixes and suffixes, and -multisyllabic words. <p>READING</p> <p>Standard 4-1 The student will read and comprehend a variety of literary texts in print and nonprint formats.</p> <ul style="list-style-type: none"> ▪ Analyze the details that support the expression of the main idea in a given literary text.
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- Analyze literary texts to draw conclusions and make inferences.
- Distinguish between first-person and third-person points of view.
- Analyze the impact of characterization and conflict on plot.
- Interpret the effect of the author's craft (for example, word choice, sentence structure, the use of figurative language, and the use of dialogue) on the meaning of literary texts.
- Create responses to literary texts through a variety of methods (for example, writing, creative dramatics, and the visual and performing arts).
- Recognize the characteristics of poetry (including stanza, rhyme, and repetition).
- Analyze cause-and-effect relationships in literary texts.
- Read independently for extended periods of time for pleasure.

READING

Standard 4-2 The student will read and comprehend a variety of informational texts in print and nonprint formats.

- Summarize evidence that supports the central idea of a given informational text.
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March-April

Theme 6:
Nature: Friend or Foe
(Novel: Sarah, Plain
and Tall)

READING

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- Analyze literary texts to draw conclusions and make inferences.
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- Read independently for extended periods of time to gain information.

<p>May-June</p>	<p>Theme 7: <u>The Big Friendly Giant</u> Novel</p> <p>End of the year review</p>	<p>READING Standard 4-1 The student will read and comprehend a variety of literary texts in print and nonprint formats.</p> <ul style="list-style-type: none"> ▪ Analyze the details that support the expression of the main idea in a given literary text. ▪ Analyze literary texts to draw conclusions and make inferences. ▪ Distinguish between first-person and third-person points of view. ▪ Distinguish among devices of figurative language (including simile, metaphor, personification, and hyperbole) and sound devices (including onomatopoeia and alliteration). ▪ Analyze the impact of characterization and conflict on plot. ▪ Interpret the effect of the author's craft (for example, word choice, sentence structure, the use of figurative language, and the use of dialogue) on the meaning of literary texts. ▪ Create responses to literary texts through a variety of methods (for example, writing, creative dramatics, and the visual and performing arts). ▪ Classify works of fiction (including fables, tall tales, and folktales) and works of nonfiction (including biographies and personal essays) by characteristics. ▪ Read independently for extended periods of time for pleasure. <p>READING Standard 4-2 The student will read and comprehend a variety of informational texts in print and nonprint formats.</p> <ul style="list-style-type: none"> ▪ Summarize evidence that supports the central idea of a given informational text. ▪ Analyze informational texts to draw conclusions and make inferences. ▪ Analyze informational texts to locate and identify facts and opinions. ▪ Create responses to informational texts through a variety of methods (for example, drawings, written works, and oral presentations). ▪ Analyze informational texts to identify cause-and-effect relationships. ▪ Read independently for extended periods of time to gain information. <p>READING Standard 4-3 The student will use word analysis and vocabulary strategies to read fluently.</p> <ul style="list-style-type: none"> ▪ Generate the meaning of unfamiliar and multiple-meaning words by using context clues (for example, those that provide an example or a definition). ▪ Use base words and affixes to determine the meanings of words. ▪ Interpret the meaning of idioms encountered in texts.
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		<p>Spell correctly</p> <ul style="list-style-type: none"> -words with prefixes and suffixes, and -multisyllabic words.
<p>December- January</p> <p>(Incorporated All Year)</p>	<p>Poetry Unit</p>	<p>WRITING</p> <p>These Reading Standards are covered in Writing:</p> <p>Standard 4-1 The student will read and comprehend a variety of literary texts in print and nonprint formats.</p> <ul style="list-style-type: none"> • Distinguish among devices of figurative language (including simile, metaphor, personification, and hyperbole) and sound devices (including onomatopoeia and alliteration). • Recognize the characteristics of poetry (including stanza, rhyme, and repetition). <p>WRITTEN COMMUNICATION</p> <p>Standard 4-4 The student will create written work that has a clear focus, sufficient detail, coherent organization, effective use of voice, and correct use of the conventions of written Standard American English.</p> <ul style="list-style-type: none"> ▪ Generate and organize ideas for writing using prewriting techniques (for example, creating lists, having discussions, and examining literary models). ▪ Use complete sentences in a variety of types (including simple and compound sentences) in writing. ▪ Create multiple-paragraph compositions that include a central idea with supporting details and use appropriate transitions between paragraphs. ▪ Use grammatical conventions of written Standard American English including <ul style="list-style-type: none"> ▪ subject-verb agreement; ▪ past, present, and future verb tenses; ▪ conjunctions (<i>although, while, neither, nor</i>); ▪ adverbs of time, place, manner, and degree; and ▪ pronoun-antecedent agreement. ▪ Use revision strategies to improve the organization and development of content and the quality of voice in written works <p>Edit for the correct use of written Standard American English including</p> <ul style="list-style-type: none"> • capitalization <ul style="list-style-type: none"> – titles of works of art – titles of magazines and newspapers – brand names – proper adjectives – names of organizations

- punctuation
 - quotation marks to indicate direct quotations or dialogue
 - quotation marks to indicate titles of works (for example, articles, reports, chapters, and other short pieces) published within separately published works
 - between main clauses
 - underlining or italics to indicate titles of separately published works (for example, books and magazines)
- spelling
 - words with suffixes and prefixes
 - multisyllabic words

PRODUCING WRITTEN COMMUNICATIONS IN A VARIETY OF FORMS

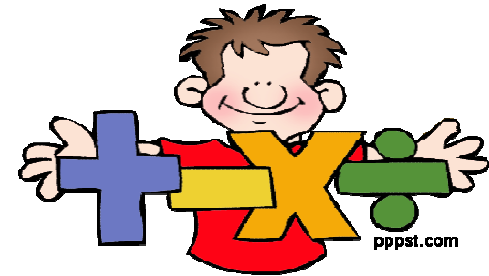
Standard 4-5 The student will write for a variety of purposes and audiences.

- Create informational pieces (for example, postcards, flyers, letters, and e-mails) that use language appropriate for the specific audience.
- Create narratives containing details and a sequence of events that develop a plot.
- Create written descriptions using language that appeals to the readers' senses.
- Create written pieces (for example, skits and plays) to entertain others.

RESEARCHING

Standard 4-6 The student will access and use information from a variety of sources.

- Clarify and refine a research topic.
- Use print sources (for example, books, magazines, charts, graphs, diagrams, dictionaries, encyclopedias, atlases, thesauri, newspapers, and almanacs) and nonprint sources to access information.
- Organize information by classifying or sequencing.
- Paraphrase research information accurately and meaningfully.
- Create a list of sources that contains information (including the author and title of a publication) necessary to properly credit and document the work of others.
- Use the Internet as a source of information.
- Use vocabulary (including Standard American English) that is appropriate for the particular audience or purpose.
- Select appropriate graphics, in print or electronic form, to support written works and oral and visual presentations.



Math

*The following mathematics standards will be taught and reviewed throughout the year using **Everyday Counts Calendar Math**:*

- Use estimation to determine the approximate number of objects in a set of 20 to 100 objects.
- Analyze numeric patterns in addition and subtraction to develop strategies for acquiring basic facts.
- Analyze numeric relationships to complete and extend simple patterns.
- Classify a number as odd or even.
- Classify change over time as quantitative or qualitative.
- Use a counting procedure to determine the value of a collection of pennies, nickels, dimes, and quarter, totaling less than a dollar.
- Represent a nickel, a dime, a quarter, a half dollar, and a dollar in combinations of coins.
- Represent money by using the cent and dollar notations.
- Use analog and digital clocks to tell and record time to the half-hour.
- Illustrate past and future dates on a calendar.
- Represent dates in standard form and numeric form.
- Analyze patterns by reasoning systematically.
- Use multiple informal representations to convey mathematical ideas.

TIMEFRAME	UNIT OF STUDY	STANDARDS
August - September	Unit One Place Value	(Standard 4-2.1) - Recognize the period in the place-value structure of whole numbers: units, thousands, millions, and billions. (Standard 4-2.6) - Analyze the magnitude of digits through hundredths on the basis of their place value. (Standard 4-2.7) - Compare decimals through hundredths by using the terms is less than, is greater than, and is equal to and the symbols $<$, $>$, and $=$. (Standard 4-2.12) - Generate strategies to add and subtract decimals through hundredths.
September -	Unit Two	(Standard 4-2.2) Apply divisibility rules for 2, 5, and 10.

November	Multiplication and Division	(Standard 4-2.3) Apply an algorithm to multiply whole number fluently. (Standard 4-2.4) Explain the effect on the product when one of the factors is changed. (Standard 4-2.5) Generate strategies to divide whole numbers by single-digit divisors.
November - January	Unit Three Decimals and Fractions	(Standard 4-2.8) Apply strategies and procedures to find equivalent forms of fractions. (Standard 4-2.9) Compare the relative size of fractions to the benchmarks 0, $\frac{1}{2}$, and 1. (Standard 4-2.10) Identify common the fraction/decimals equivalents $\frac{1}{2} = .5$, $\frac{1}{4} = .25$, $\frac{3}{4} = .75$, $\frac{1}{3} \approx .33$, $\frac{2}{3} \approx .67$, multiples of $\frac{1}{10}$, and multiples of $\frac{1}{100}$. (Standard 4-2.11) Represent improper fractions, mixed numbers, and decimals.
January - February	Unit Four Data Analysis and Probability	(Standard 4-6.1) Compare how data-collection methods impact survey results. (Standard 4-6.2) Interpret data in tables, line graphs, bar graphs, and double bar graphs whose scale increments are greater than or equal to 1. (Standard 4-6.3) Organize data in tables, line graphs, and bar graphs whose scale increments are greater than or equal to 1. (Standard 4-6.4) Distinguish between categorical and numerical data. (Standard 4-6.5) Match categorical and numerical data to appropriate graphs. (Standard 4-6.6) Predict on the basis of data whether events are likely, unlikely, certain, impossible, or equally likely to occur. (Standard 4-6.7) Analyze possible outcomes for a simple event.
February - March	Unit Five Algebra	(Standard 4-3.1) Complete patterns with numbers using all operations and decimal patterns through hundredths (Standard 4-3.2) Generalize rules for nonnumeric, numeric and repeating patterns involving all operations (Standard 4-3.3) Complete a sequence or a table (Standard 4-3.4) Translate among letters, symbols, and words to represent quantities in simple mathematical expressions or equations (Standard 4-3.5) Apply procedures to find the value of an unknown letter or symbol in a whole-number equation (Standard 4-3.6) Illustrate situations that show change over time as either increasing, decreasing, or varying
March - April	Unit Six Geometry	(Standard 4-4.1) Analyze the quadrilaterals squares, rectangles, trapezoids, rhombuses, and parallelograms according to their properties (Standard 4-4.2) Analyze the relationship between three-dimensional geometric shapes in the form of cubes, rectangular prisms, and cylinders and their two-dimensional nets. (Standard 4-4.3) Predict the results of multiple transformations of the same type -

		<p>translation, reflection, or rotation - on a two-dimensional geometric shape. ((Standard 4-4.4) Represent the two-dimensional shapes trapezoids, rhombuses, and parallelograms and the three-dimensional shapes cubes, rectangular prisms, and cylinders.</p> <p>(Standard 4-4.5) Use transformation(s) to prove congruency (4-4.5)</p> <p>(Standard 4-4.6) Represent points, lines, line segments, rays, angles, and polygons</p>
April - May	Unit 7 Measurement & Elapsed Time	<p>(Standard 4-5.1) Use appropriate tools to measure objects to the nearest unit: measuring length in quarter inches, centimeters, and millimeters; measuring liquid volume in cups, quarts, and liters; and measuring weight and mass in pounds, milligrams, and kilograms.</p> <p>(Standard 4-5.2) Compare angle measures with referent angles of 45 degrees, 90 degrees, and 180 degrees to estimate angle measures.</p> <p>(Standard 4-5.3) Use equivalences to convert units of measure within the U.S. Customary System; converting length in inches, feet, yards, and miles; converting weight in ounces, pounds, and tons; converting liquid volume in cups, pints, quarts, and gallons; and converting time in years, months, weeks, days, hours, minutes, and seconds.</p> <p>(Standard 4-5.4) Analyze the perimeter of a polygon</p> <p>(Standard 4-5.5) Generate strategies to determine the area of rectangles and triangles.</p> <p>(Standard 4-5.6) Apply strategies and procedures to determine the amount of elapsed time in hours and minutes within a 12-hour period, either a.m. or p.m.</p> <p>(Standard 4-5.7) Use Celsius and Fahrenheit thermometers to determine temperature changes during time intervals.</p> <p>(Standard 4-5.8) Recall equivalences associated with liquid volume, time, weight, and length: 8 liquid ounces = 1 cup, 2 cups = 1 pint, 2 pints = 1 quart, 4 quarts = 1 gallon; 365 days = 1 year, 52 weeks = 1 year; 16 ounces = 1 pound, 2,000 pounds = 1 ton; and 5,280 feet = 1 mile.</p> <p>(Standard 4-5.9) Exemplify situations in which highly accurate measurements are required.</p>
May	Unit 8 Graphing	<p>(Standard 4-4.7) Represent with ordered pairs of whole numbers the location of points in the first quadrant of a coordinate grid</p> <p>(Standard 4-4.8) Illustrate possible paths from one point to another along vertical and horizontal grid lines in the first quadrant of the coordinate plane</p>

Science



Science in grade four focuses on providing students with the opportunity to learn age-appropriate concepts and skills in the life, earth, and physical sciences and to acquire scientific attitudes and habits of mind. The skills of scientific inquiry, including a knowledge of the use of tools, will be assessed cumulatively on statewide tests. Students will therefore be responsible for the scientific inquiry indicators from all of their earlier grade levels.

Standard 4-1: The student will demonstrate an understanding of scientific inquiry, including the processes, skills, and mathematical thinking necessary to conduct a simple scientific investigation.

Indicators:

- 4-1.1 Classify observations as either quantitative or qualitative.
- 4-1.2 Use appropriate instruments and tools (including a compass, an anemometer, mirrors, and a prism) safely and accurately when conducting simple investigations.
- 4-1.3 Summarize the characteristics of a simple scientific investigation that represent a fair test (including a question that identifies the problem, a prediction that indicates a possible outcome, a process that tests one manipulated variable at a time, and results that are communicated and explained).
- 4-1.4 Distinguish among observations, predictions, and inferences.
- 4-1.5 Recognize the correct placement of variables on a line graph.
- 4-1.6 Construct and interpret diagrams, tables, and graphs made from recorded measurements and observations.
- 4-1.7 Use appropriate safety procedures when conducting investigations.

TIMEFRAME	UNIT OF STUDY	STANDARDS
August-September	Weather	<p>The student will demonstrate an understanding of weather pattern and phenomena.</p> <ul style="list-style-type: none"> ▪ Summarize the processes of the water cycle (including evaporation, condensation, precipitation, and runoff). ▪ Classify clouds according to their three basic types (cumulus, cirrus, and stratus) and summarize how clouds form. ▪ Compare daily and seasonal changes in weather conditions (including wind speed and direction, precipitation, and temperature) and patterns. ▪ Summarize the conditions and effects of severe weather phenomena (including thunderstorms, hurricanes, and tornadoes) and related safety concerns. ▪ Carry out the procedures for data collecting and measuring weather conditions (including wind speed and direction, precipitation, and temperature) by using appropriate tools and instruments. ▪ Predict weather from data collected through observation and measurements.
October	Magnets	<p>The student will demonstrate an understanding of the properties of light and electricity.</p> <ul style="list-style-type: none"> ▪ Summarize the properties of magnets and electromagnets (including polarity, attraction/repulsion, and strength). ▪ Summarize the factors that affect the strength of an electromagnet.
November-January	Light/Electricity	<p>The student will demonstrate an understanding of the properties of light and electricity.</p> <ul style="list-style-type: none"> ▪ Summarize the basic properties of light (including brightness and colors). ▪ Illustrate the fact that light, as a form of energy, is made up of many different colors. ▪ Summarize how light travels and explain what happens when it strikes an object (including reflection, refraction, and absorption). ▪ Compare how light behaves when it strikes transparent, translucent, and opaque materials. ▪ Explain how electricity, as a form of energy, can be transformed into other forms of energy (including light, heat, and sound). ▪ Explain how electricity, as a form of energy, can be transformed into other forms of energy (including light, heat, and sound). ▪ Summarize the functions of the components of complete circuits (including wire, switch, battery, and light bulb). ▪ Illustrate the path of electric current in series and parallel circuits. ▪ Classify materials as either conductors or insulators of electricity.
February-March	Solar System	<p>The student will demonstrate an understanding of the properties, movements, and locations of objects in the solar system.</p> <ul style="list-style-type: none"> ▪ Recall that Earth is one of many planets in the solar system that orbit the Sun. ▪ Compare the properties (including the type of surface and atmosphere) and the location of Earth to the Sun, which is a star, and the Moon.

		<ul style="list-style-type: none"> ▪ Explain how the Sun affects Earth. ▪ Explain how the tilt of Earth's axis and the revolution around the Sun results in the seasons of the year. ▪ Explain how the rotation of Earth results in day and night. ▪ Illustrate the phases of the Moon and the Moon's effect on ocean tides. ▪ Interpret the change in the length of shadows during the day in relation to the position of the Sun in the sky. ▪ Recognize the purpose of telescopes.
April-May	Organisms and Their Environments	<p>The student will demonstrate an understanding of the characteristics and patterns of behavior that allow organisms to survive in their own distinct environments.</p> <ul style="list-style-type: none"> ▪ Classify organisms into major groups (including plants or animals, flowering or nonflowering plants, and vertebrates [fish, amphibians, reptiles, birds, and mammals] or invertebrates) according to their physical characteristics. ▪ Explain how the characteristics of distinct environments (including swamps, rivers and streams, tropical rain forests, deserts, and the polar regions) influence the variety of organisms in each. ▪ Explain how humans and other animals use their senses and sensory organs to detect signals from the environment and how their behaviors are influenced by these signals. ▪ Distinguish between the characteristics of an organism that are inherited and those that are acquired over time. ▪ Explain how an organism's patterns of behavior are related to its environment (including the kinds and the number of other organisms present, the availability of food and other resources, and the physical characteristics of the environment). ▪ Explain how organisms cause changes in their environment.



Social Studies

TIMEFRAME	UNIT OF STUDY	STANDARDS
August	Life in the Western Hemisphere/ Native Americans of North America	<p>The student will demonstrate an understanding of the settlement of North America by Native Americans, Europeans, and African Americans and the interactions among these peoples.</p> <ul style="list-style-type: none"> ▪ Use the land bridge theory to summarize and illustrate the spread of Native American populations. ▪ Compare the everyday life, physical environment, and culture of the major Native American cultural groupings, including Eastern Woodlands, Southeastern, Plains, Southwestern, and Pacific Northwestern. ▪ Identify the English, Spanish, and French colonies in North America and summarize the motivations for the settlement of these colonies, including freedom of worship, and economic opportunity. ▪ Compare the European settlements in North America in terms of their economic activities, religious emphasis, government, and lifestyles. ▪ Summarize the introduction and establishment of slavery in the American colonies, including the role of the slave trade; the nature of the Middle Passage; and the types of goods—rice, indigo, sugar, tobacco, and rum, for example—that were exchanged among the West Indies, Europe, and the Americas. ▪ Explain the impact of indentured servitude and slavery on life in the New World and the contributions of African slaves to the development of the American colonies, including farming techniques, cooking styles, and languages. ▪ Explain how conflicts and cooperation among the Native Americans, Europeans, and Africans influenced colonial events including the French and Indian Wars, slave revolts, Native American wars, and trade.
September	Explorers	<p>The student will demonstrate an understanding of the exploration of the New World.</p> <ul style="list-style-type: none"> ▪ Explain the political, economic, and technological factors that led to the exploration of the New World by Spain, Portugal, and England, including the competition between nation-states, the expansion of international trade, and the technological advances in shipbuilding and navigation.

		<ul style="list-style-type: none"> ▪ Summarize the motivation and accomplishments of the Vikings and the Portuguese, Spanish, English, and French explorers, including Leif Eriksson, Christopher Columbus, Hernando de Soto, Ferdinand Magellan, Henry Hudson, John Cabot, and Robert LaSalle. ▪ Use a map to identify the routes of various sea and land expeditions to the New World and match these to the territories claimed by different nations—including the Spanish dominance in South America and the French, Dutch, and English exploration in North America—and summarize the discoveries associated with these expeditions. ▪ Explain the exchange of plant life, animal life, and disease that resulted from exploration of the New World, including the introduction of wheat, rice, coffee, horses, pigs, cows, and chickens to the Americas; the introduction of corn, potatoes, peanuts, and squash to Europe; and the effects of such diseases as diphtheria, measles, smallpox, and malaria on Native Americans.
October	American Revolutionary War	<p>The student will demonstrate an understanding of the conflict between the American colonies and England.</p> <ul style="list-style-type: none"> ▪ Explain the political and economic factors leading to the American Revolution, including the French and Indian War; British colonial policies such as the Stamp Act, the Tea Act, and the so-called Intolerable Acts; and the American colonists' early resistance through boycotts, congresses, and petitions. ▪ Summarize the roles of principal American, British, and European leaders involved in the conflict, including King George III, George Washington, Benjamin Franklin, Thomas Jefferson, John Adams, Thomas Paine, Patrick Henry, and the Marquis de Lafayette. ▪ Explain the major ideas and philosophies of government reflected in the Declaration of Independence. ▪ Summarize the events and key battles of the Revolutionary War, including Lexington and Concord, Bunker (Breed's) Hill, Charleston, Saratoga, Cowpens, and Yorktown. ▪ Explain how the aid received from France, the Netherlands, and the alliances with Native American nations contributed to the American victory in the Revolutionary War. ▪ Compare the daily life and roles of diverse groups of Americans during and after the Revolutionary War, including roles taken by women and African Americans such as Martha Washington, Mary Ludwig Hays McCauley (Molly Pitcher), Abigail Adams, Crispus Attucks, and Peter Salem. ▪ Explain the effects of the American Revolution on African Americans and Native Americans, including how the war affected attitudes about slavery and contributed to the inclusion of abolition in early state constitutions and how the Land Ordinance of 1785 and the Northwest Ordinance of 1787 that were developed by Congress influenced the future of Native Americans.

November	U.S. Constitution	<p>The student will demonstrate an understanding of the beginnings of America as a nation and the establishment of the new government.</p> <ul style="list-style-type: none"> ▪ Compare the ideas in the Articles of Confederation with those in the United States Constitution, including how powers are now shared between state and national government and how individuals and states are represented in the national congress. ▪ Classify government activities according to the three branches of government established by the United States Constitution and give examples of the checks and balances that the Constitution provides among the branches. ▪ Explain the role of the Bill of Rights in the ratification of the Constitution, including how the Constitution serves to guarantee the rights of the individual and protect the common good yet also to limit the powers of government. ▪ Compare the roles and accomplishments of early leaders in the development of the new nation, including George Washington, John Adams, Thomas Jefferson, Alexander Hamilton, John Marshall, and James Madison. ▪ Provide examples of how American constitutional democracy places important responsibilities on citizens to take an active role in the civil process. ▪ Illustrate how the ideals of equality as described in the Declaration of Independence were slow to take hold as evident in the Three-Fifths Compromise and the Fugitive Slave Acts. ▪ Compare the social and economic differences of the two political parties that began to form in the 1790s, led by Alexander Hamilton and Thomas Jefferson.
December	Westward Movement	<p>The student will demonstrate an understanding of the westward movement and its impact on the institution of slavery.</p> <ul style="list-style-type: none"> ▪ Summarize the major expeditions and explorations that played a role in westward expansion—including those of Daniel Boone, Lewis and Clark, and Zebulon Pike—and compare the geographic features of areas explored. ▪ Explain the motives for the exploration in the West and the push for westward expansion, including the concept of manifest destiny, economic opportunities in trade, and the availability of rich land. ▪ Summarize the events that led to key territorial acquisitions—including the Louisiana Purchase, the Florida Purchase, the Northwest Territory treaty, the annexation of Texas, and the Mexican Cession—as well as the motives for these acquisitions and the location and geographic features of the lands acquired. ▪ Explain how territorial expansion and related land policies affected Native Americans, including their resistance to Americans' taking over the land, breaking treaties, and massacring the Native American people; the Indian Removal Act of 1830; and the Seminole Wars.

		<ul style="list-style-type: none"> ▪ Use a map to illustrate patterns of migration and trade during the period of westward expansion, including the Santa Fe and the Oregon trails. ▪ Compare the experiences of different groups who migrated and settled in the West, including their reasons for migrating, their experiences on the trails and at their destinations, the cooperation and conflict between and among the different groups, and the nature of their daily lives. ▪ Explain how specific legislation and events affected the institution of slavery in the territories, including the Northwest Ordinance of 1787, the Missouri Compromise, the annexation of Texas, the Compromise of 1850, the Kansas-Nebraska Act, and the Dred Scott decision.
January/February	Civil War	<p>The student will demonstrate an understanding of the Civil War and its impact on America.</p> <ul style="list-style-type: none"> ▪ Compare the industrial North and the agricultural South prior to the Civil War, including the specific nature of the economy of each region, the geographic characteristics and boundaries of each region, and the basic way of life in each region. ▪ Summarize the roles and accomplishments of the leaders of the abolitionist movement and the Underground Railroad before and during the Civil War, including those of Harriet Tubman, John Brown, Frederick Douglass, Harriet Beecher Stowe, Sojourner Truth, and William Lloyd Garrison. ▪ Explain how specific events and issues led to the Civil War, including the sectionalism fueled by issues of slavery in the territories, states' rights, the election of 1860, and secession. ▪ Summarize significant key battles, strategies, and turning points of the Civil War—including the battles of Fort Sumter and Gettysburg, the Emancipation Proclamation, the significance of the Gettysburg Address, and the surrender at Appomattox—and the role of African Americans in the War. ▪ Compare the roles and accomplishments of key figures of the Civil War, including Abraham Lincoln, Ulysses S. Grant, Jefferson Davis, and Robert E. Lee ▪ Explain the impact of the Civil War on the nation, including its effects on the physical environment and on the people—soldiers, women, African Americans, and the civilian population of the nation as a whole.

