

Reading/Language Arts Curriculum Guide

Course Description: This class follows the Language Arts Next Generation Sunshine State Standards for fourth grade English. Students in this class are required to read at least 20 minutes every day and to turn in a reading log to show their time spent reading. They are also required to write six book reports (different text genres; biography, fiction, non-fiction) as part of our approach to further develop students' reading and writing skills. Students receive instruction in word analysis, vocabulary, practice fluency, learn about grammar, read different genres of literature, and learn how to become better writers. To improve their reading skills students learn how to link prior knowledge to what they are reading, how to determine if the information is a first or second hand account, practice reading nonfiction, and learn how to make predictions about what will happen next in a story. Through writing practice students improve their abilities to paraphrase, write essays, construct a story from idea to finished product, write a play, and write a persuasive essay. Students are encouraged to visualize what they are reading and writing about, to make connections between stories, and to ask questions about what they read.

Texts: *Wonders Literature Anthology*, *Fluency: The Reading Puzzle*, *Vocabulary: The Reading Puzzle*, *Word Analysis: The Reading Puzzle*, Lucy Calkins Writing Curriculum, Cursive Handwriting Workbook Series

Goals/Objectives: The goal of the course is to provide listening, speaking, reading, and writing instruction that allows students to communicate information, ideas, and concepts for academic success in the content area of Language Arts.

- Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the text;
- Determine a theme of a story, drama, or poem from details in the text; summarize the text;
- Describe in depth a character, setting, or event in a story;
- Determine the meaning of words and phrases as they are used in a text;
- Explain major differences between poems, drama, and prose, and refer to the structural elements of poems (e.g., verse, rhythm, meter) and drama (e.g., casts of characters, settings, descriptions, dialogue, stage directions) when writing or speaking about a text;
- Compare and contrast the point of view from which different stories are narrated, including the difference between first- and third-person narrations;
- Make connections between the text of a story or drama;
- Compare and contrast the treatment of similar themes;

- Know and apply grade-level phonics and word analysis skills in decoding words;
- Use combined knowledge of all letter-sound correspondences, syllabication patterns, and morphology (e.g., roots and affixes) to read accurately unfamiliar multi-syllabic words in context and out of context;
- Read with sufficient accuracy and fluency to support comprehension;
- Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears;
- Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a *grade 4 topic or subject area*;
- Describe the overall structure (e.g., chronology, comparison, cause/effect, problem/solution) of events, ideas, concepts, or information in a text or part of a text;
- Compare and contrast a firsthand and secondhand account of the same event or topic; describe the differences in focus and the information provided;
- Explain how an author uses reasons and evidence to support particular points in a text;
- Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably;
- Write opinion pieces on topics or texts, supporting a point of view with reasons and information;
 - a. Introduce a topic or text clearly, state an opinion, and create an organizational structure in which related ideas are grouped to support the writer's purpose;
 - b. Provide reasons that are supported by facts and details;
 - c. Link opinion and reasons using words and phrases (e.g., *for instance, in order to, in addition*);
 - d. Provide a concluding statement or section related to the opinion presented;
- Write informative/explanatory texts to examine a topic and convey ideas and information clearly;
 - a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension;

- b. Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic;
 - c. Link ideas within categories of information using words and phrases (e.g., *another, for example, also, because*);
 - d. Use precise language and domain-specific vocabulary to inform about or explain the topic;
 - e. Provide a concluding statement or section related to the information or explanation presented;
- Write narratives to develop real or imagined experiences or events using effective technique,
 - descriptive details, and clear event sequences;
 - a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally;
 - b. Use dialogue and description to develop experiences and events or show the responses of characters to situations;
 - c. Use a variety of transitional words and phrases to manage the sequence of events;
 - d. Use concrete words and phrases and sensory details to convey experiences and events precisely;
 - e. Provide a conclusion that follows from the narrated experiences or events;
- Produce clear and coherent writing in which the development and organization are appropriate to
 - task, purpose, and audience;
- With guidance and support from peers and adults, develop and strengthen writing as needed by
 - planning, revising, and editing;
- With some guidance and support from adults, use technology, including the Internet, to produce and
 - publish writing as well as to interact and collaborate with others; demonstrate sufficient command
 - of keyboarding skills to type a minimum of one page in a single sitting;
- Conduct short research projects that build knowledge through investigation of different aspects of a
 - topic;
- Recall relevant information from experiences or gather relevant information from print and digital
 - sources; take notes and categorize information, and provide a list of sources;
- Draw evidence from literary or informational texts to support analysis, reflection, and research;
- Engage effectively in a range of collaborative discussions;

- Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally;
- Identify the reasons and evidence a speaker provides to support particular points;
- Report on a topic or text, tell a story, or recount an experience in an organized manner, using appropriate facts and relevant, descriptive details to support main ideas or themes; speak clearly at an understandable pace;
- Add audio recordings and visual displays to presentations when appropriate to enhance the development of main ideas or themes;
- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking;
- Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing;
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies;
- Demonstrate understanding of word relationships, and nuances in word meanings;
- Acquire and use accurately general academic and domain-specific words and phrases as found in grade level appropriate texts, including those that signal precise actions, emotions, or states being.

Instructional Methods/Strategies:

Teaching from well-written, grade-level instructional materials enhances students' content area knowledge and also strengthens their ability to comprehend longer, complex reading passages on any topic for any reason. The following instructional practices are used:

1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.
2. Making close reading and rereading of texts central to lessons.
3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.
4. Requiring students to support answers with evidence from the text.
5. Providing extensive text-based research and writing opportunities (claims and evidence)

Math Curriculum Guide

Course Description: This class follows the Math Next Generation Sunshine State Standards for fourth grade mathematics. The fourth grade mathematics instructional time will focus on three critical areas: (1) developing understanding and fluency with multi-digit multiplication, and developing understanding of dividing to find quotients involving multi-digit dividends; (2) developing an understanding of fraction equivalence, addition and subtraction of fractions with like denominators, and multiplication of fractions by whole numbers; (3) understanding that geometric figures can be analyzed and classified based on their properties, such as having parallel sides, perpendicular sides, particular angle measures, and symmetry.

Texts: McGraw-Hill *My Math Vol. 1 and Vol. 2*

Goals/Objectives: Students will achieve higher levels of understanding and experience math concepts more deeply.

- Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations;
- Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison;
- Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding;
- Determine whether an equation is true or false by using comparative relational thinking;
- Determine the unknown whole number in an equation relating four whole numbers using comparative relational thinking;
- Investigate factors and multiples;
- Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself;
- Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right;

- Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons;
- Use place value understanding to round multi-digit whole numbers to any place;
- Fluently add and subtract multi-digit whole numbers using the standard algorithm;
- Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models;
- Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models;
- Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions;
- Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $1/2$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model;
- Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$;
- Apply and extend previous understandings of multiplication to multiply a fraction by a whole number;
- Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100;
- Use decimal notation for fractions with denominators 10 or 100;
- Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual model;
- Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table;

- Use the four operations to solve word problems involving distances, intervals of time, and money, including problems involving simple fractions or decimals². Represent fractional quantities of distance and intervals of time using linear models;
- Apply the area and perimeter formulas for rectangles in real world and mathematical problems;
- Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots;
- Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement;
- Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure;
- Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure;
- Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures;
- Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles;
- Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.

Instructional Methods/Strategies: Manipulatives, Vocabulary Cards, IXL, and Math Videos.

Science Curriculum Guide

Course Description: This class follows the Science Next Generation Sunshine State Standards for fourth grade science. In fourth grade, students will experience three science domains; physical science, life science, and Earth and space science. During the physical science unit, students learn about forms of energy, energy and transformation, motion of objects, and properties of/and changes in matter. For life science, students learn about heredity and reproduction, and interdependence. In Earth science, students learn Earth in space and time and Earth structures. Texts: *McGraw Hill Inspire Science*

Goals/Objectives: The goal of the course is to immerse students in the nature of science and inquiry and build scientific and content literacy in a research based program that brings science learning to life.

- Identify processes of sexual reproduction in flowering plants, including pollination, fertilization (seed production), seed dispersal, and germination;
- Explain that although characteristics of plants and animals are inherited, some characteristics can be affected by the environment;
- Recognize that animal behaviors may be shaped by heredity and learning;
- Compare and contrast the major stages in the life cycles of Florida plants and animals, such as those that undergo incomplete and complete metamorphosis, and flowering and nonflowering seed-bearing plants;
- Compare the seasonal changes in Florida plants and animals to those in other regions of the country;
- Explain that animals, including humans, cannot make their own food and that when animals eat plants or other animals, the energy stored in the food source is passed to them;
- Trace the flow of energy from the Sun as it is transferred along the food chain through the producers to the consumers;
- Recognize ways plants and animals, including humans, can impact the environment;
- Observe and describe some basic forms of energy, including light, heat, sound, electrical, and the energy of motion;
- Investigate and describe that energy has the ability to cause motion or create change;
- Investigate and explain that sound is produced by vibrating objects and that pitch depends on how fast or slow the object vibrates;

- Describe how moving water and air are sources of energy and can be used to move things;
- Recognize that heat flows from a hot object to a cold object and that heat flow may cause materials to change temperature;
- Identify common materials that conduct heat well or poorly;
- Recognize that an object in motion always changes its position and may change its direction;
- Investigate and describe that the speed of an object is determined by the distance it travels in a unit of time and that objects can move at different speeds;
- Measure and compare objects and materials based on their physical properties including: mass, shape, volume, color, hardness, texture, odor, taste, attraction to magnets;
- Identify properties and common uses of water in each of its states;
- Explore the Law of Conservation of Mass by demonstrating that the mass of a whole object is always the same as the sum of the masses of its parts;
- Investigate and describe that magnets can attract magnetic materials and attract and repel other magnets;
- Identify some familiar changes in materials that result in other materials with different characteristics, such as decaying animal or plant matter, burning, rusting, and cooking;
- Observe that the patterns of stars in the sky stay the same although they appear to shift across the sky nightly, and different stars can be seen in different seasons;
- Describe the changes in the observable shape of the moon over the course of about a month;
- Recognize that Earth revolves around the Sun in a year and rotates on its axis in a 24-hour day;
- Relate that the rotation of Earth (day and night) and apparent movements of the Sun, Moon, and stars are connected;
- Investigate and report the effects of space research and exploration on the economy and culture of Florida;
- Identify the three categories of rocks: igneous, (formed from molten rock); sedimentary (pieces of other rocks and fossilized organisms); and metamorphic (formed from heat and pressure);
- Identify the physical properties of common earth-forming minerals, including hardness, color, luster, cleavage, and streak color, and recognize the role of minerals in the formation of rocks;

- Recognize that humans need resources found on Earth and that these are either renewable or nonrenewable;
- Describe the basic differences between physical weathering (breaking down of rock by wind, water, ice, temperature change, and plants) and erosion (movement of rock by gravity, wind, water, and ice);
- Investigate how technology and tools help to extend the ability of humans to observe very small things and very large things;
- Identify resources available in Florida (water, phosphate, oil, limestone, silicon, wind, and solar energy);
- Raise questions about the natural world, use appropriate reference materials that support understanding to obtain information (identifying the source), conduct both individual and team investigations through free exploration and systematic investigations, and generate appropriate explanations based on those explorations;
- Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups;
- Explain that science does not always follow a rigidly defined method ("the scientific method") but that science does involve the use of observations and empirical evidence;
- Attempt reasonable answers to scientific questions and cite evidence in support;
- Compare the methods and results of investigations done by other classmates;
- Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations;
- Recognize and explain that scientists base their explanations on evidence;
- Recognize that science involves creativity in designing experiments;
- Explain that science focuses solely on the natural world;
- Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.

Instructional Methods/Strategies:

1. Hands-on activities
2. Instructional conversations

3. Scientific inquiry
4. Science academic vocabulary games

Social Studies Curriculum Guide

Course Description: This class follows the Social Studies Next Generation Sunshine State Standards for fourth grade Social Studies. The fourth grade Social Studies curriculum consists of the following content area strands: American History, Geography, Economics, and Civics. Fourth grade students learn about Florida history focusing on exploration and colonization, growth, and the 20th Century and beyond.

Text: McGraw-Hill *Impact Social Studies*

Goals/Objectives: Students study the important people, places, and events that helped shape Florida history.

- Analyze primary and secondary resources to identify significant individuals and events throughout Florida history;
- Synthesize information related to Florida history through print and electronic media;
- Compare Native American tribes in Florida;
- Identify explorers who came to Florida and the motivations for their expeditions;
- Describe causes and effects of European colonization on the Native American tribes of Florida;
- Identify the significance of St. Augustine as the oldest permanent European settlement in the United States;
- Explain the purpose of and daily life on missions (San Luis de Talimali in present-day Tallahassee);
- Identify the significance of Fort Mose as the first free African community in the United States;
- Identify the effects of Spanish rule in Florida;
- Identify nations (Spain, France, England) that controlled Florida before it became a United States territory;
- Explain how the Seminole tribe formed and the purpose for their migration;
- Explain how Florida (Adams-Onis Treaty) became a U.S. territory;
- Identify the causes and effects of the Seminole Wars;
- Explain the effects of technological advances on Florida;
- Describe pioneer life in Florida;

- Describe Florida's involvement (secession, blockades of ports, the battles of Ft. Pickens, Olustee, Ft. Brooke, Natural Bridge, food supply) in the Civil War;
- Summarize challenges Floridians faced during Reconstruction;
- Describe the economic development of Florida's major industries;
- Summarize contributions immigrant groups made to Florida;
- Describe the contributions of significant individuals to Florida;
- Describe the effects of the Spanish American War on Florida;
- Describe the causes and effects of the 1920's Florida land boom and bust;
- Summarize challenges Floridians faced during the Great Depression;
- Identify Florida's role in World War II;
- Identify Florida's role in the Civil Rights Movement;
- Describe how and why immigration impacts Florida today;
- Describe the effect of the United States space program on Florida's economy and growth;
- Explain how tourism affects Florida's economy and growth;
- Utilize timelines to sequence key events in Florida history;
- Identify physical features of Florida;
- Locate and label cultural features on a Florida map;
- Explain how weather impacts Florida;
- Interpret political and physical maps using map elements (title, compass rose, cardinal directions, intermediate directions, symbols, legend, scale, longitude, latitude);
- Identify entrepreneurs from various social and ethnic backgrounds who have influenced Florida and local economy;
- Explain Florida's role in the national and international economy and conditions that attract businesses to the state;

- Describe how Florida's constitution protects the rights of citizens and provides for the structure, function, and purposes of state government;
- Discuss public issues in Florida that impact the daily lives of its citizens;
- Identify ways citizens work together to influence government and help solve community and state problems;
- Explain the importance of public service, voting, and volunteerism;
- Identify the three branches (Legislative, Judicial, Executive) of government in Florida and the powers of each;
- Distinguish between state (governor, state representative, or senator) and local government (mayor, city commissioner);

Instructional Methods/Strategies:

1. Reading assignments from longer text passages as well as shorter ones when text is extremely complex.
2. Making close reading and rereading of texts central to lessons.
3. Asking high-level, text-specific questions and requiring high-level, complex tasks and assignments.
4. Requiring students to support answers with evidence from the text.
5. Providing extensive text-based research and writing opportunities (claims and evidence).