Reading and Language Arts Curriculum Guide

Course Description: This class follows the English Language Arts Next Generation Sunshine State Standards for fifth grade Reading/Language Arts. Students in this class are required to read at least 20 minutes every day and 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 a character, setting, or event in a story in depth;
- 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 5 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 5 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 of being.

Instructional Methods and 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 fifth grade mathematics. The fifth grade mathematics instructional time focuses on three critical areas: (1) developing fluency with addition and subtraction of fractions, and developing understanding of the multiplication of fractions and of division of fractions in limited cases (unit fractions divided by whole numbers and whole numbers divided by unit fractions); (2) extending division to 2-digit divisors, integrating decimal fractions into the place value system and developing understanding of operations with decimals to hundredths, and developing fluency with whole number and decimal operations; and (3) developing understanding of volume. Text: McGraw-Hill *My Math Vol. 1 and Vol. 2*

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

- Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols;
- Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them;
- Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane;
- Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left;
- Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10;
- Read, write, and compare decimals to thousandths;
- Use place value understanding to round decimals to any place;
- Fluently multiply multi-digit whole numbers using the standard algorithm;
- Find whole-number quotients of whole numbers with up to four-digit dividends and two-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;

- Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used;
- Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators;
- Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers;
- Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers;
- Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction;
- Interpret multiplication as scaling (resizing);
- Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem;
- Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions;
- Convert among different-sized standard measurement units (i.e., km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec) within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems;
- Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots;
- Recognize volume as an attribute of solid figures and understand concepts of volume measurement;
- Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units;
- Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume;

- Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate);
- Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation;
- Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category;
- Classify and organize two-dimensional figures into Venn diagrams based on the attributes of the figures.

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 fifth grade science. In fifth grade, students experience three science domains; physical science, life science, and Earth and space science. During the physical science unit, students learn about matter, mixtures, and solutions, and investigate forces of motion and mechanical energy. For life science, students learn that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction. In Earth science, students learn what makes up the solar system and how the weather and water cycle are related. Text: *National Geographic Science* Series

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 the organs in the human body and describe their functions, including the skin, brain, heart, lungs, stomach, liver, intestines, pancreas, muscles and skeleton, reproductive organs, kidneys, bladder, and sensory organs;
- Compare and contrast the function of organs and other physical structures of plants and animals, including humans, for example: some animals have skeletons for support -- some with internal skeletons others with exoskeletons -- while some plants have stems for support;
- Describe how, when the environment changes, differences between individuals allow some plants and animals to survive and reproduce while others die or move to new locations;
- Compare and contrast adaptations displayed by animals and plants that enable them to survive in different environments such as life cycles variations, animal behaviors and physical characteristics;
- Investigate and describe some basic forms of energy, including light, heat, sound, electrical, chemical, and mechanical;
- Investigate and explain that energy has the ability to cause motion or create change;
- Investigate and explain that an electrically-charged object can attract an uncharged object and can either attract or repel another charged object without any contact between the objects;
- Investigate and explain that electrical energy can be transformed into heat, light, and sound energy, as well as the energy of motion;
- Investigate and illustrate the fact that the flow of electricity requires a closed circuit (a complete loop);
- Identify and classify materials that conduct electricity and materials that do not;

- Identify familiar forces that cause objects to move, such as pushes or pulls, including gravity acting on falling objects;
- Investigate and describe that the greater the force applied to it, the greater the change in motion of a given object;
- Investigate and describe that the more mass an object has, the less effect a given force will have on the object's motion;
- Investigate and explain that when a force is applied to an object but it does not move, it is because another opposing force is being applied by something in the environment so that the forces are balanced;
- Compare and contrast the basic properties of solids, liquids, and gases, such as mass, volume, color, texture, and temperature;
- Investigate and identify materials that will dissolve in water and those that will not and identify the conditions that will speed up or slow down the dissolving process;
- Demonstrate and explain that mixtures of solids can be separated based on observable properties of their parts such as particle size, shape, color, and magnetic attraction;
- Explore the scientific theory of atoms (also called atomic theory) by recognizing that all matter is composed of parts that are too small to be seen without magnification;
- Investigate and describe that many physical and chemical changes are affected by temperature;
- Recognize that a galaxy consists of gas, dust, and many stars, including any objects orbiting the stars. Identify our home galaxy as the Milky Way;
- Recognize the major common characteristics of all planets and compare/contrast the properties of inner and outer planets;
- Distinguish among the following objects of the Solar System -- Sun, planets, moons, asteroids, comets -- and identify Earth's position in it;
- Create a model to explain the parts of the water cycle. Water can be a gas, a liquid, or a solid and can go back and forth from one state to another;
- Recognize that the ocean is an integral part of the water cycle and is connected to all of Earth's water reservoirs via evaporation and precipitation processes;
- Recognize how air temperature, barometric pressure, humidity, wind speed and direction, and precipitation determine the weather in a particular place and time;

- Distinguish among the various forms of precipitation (rain, snow, sleet, and hail), making connections to the weather in a particular place and time;
- Recognize that some of the weather-related differences, such as temperature and humidity, are found among different environments, such as swamps, deserts, and mountains;
- Describe characteristics (temperature and precipitation) of different climate zones as they relate to latitude, elevation, and proximity to bodies of water;
- Design a family preparedness plan for natural disasters and identify the reasons for having such a plan;
- Define a problem, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigations of various types such as: systematic observations, experiments requiring the identification of variables, collecting and organizing data, interpreting data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions;
- Explain the difference between an experiment and other types of scientific investigation;
- Recognize and explain the need for repeated experimental trials;
- Identify a control group and explain its importance in an experiment;
- Recognize and explain that authentic scientific investigation frequently does not parallel the steps of "the scientific method;"
- Recognize and explain the difference between personal opinion/interpretation and verified observation;
- Recognize and explain that science is grounded in empirical observations that are testable; explanation must always be linked with evidence;
- Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others.

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 fifth grade social studies. The fifth grade Social Studies curriculum consists of the following content area strands: American History, Geography, Economics, and Civics. Fifth grade students study the development of our nation with emphasis on the people, places and events up to approximately 1850. Students are exposed to the historical, geographic, political, economic, and sociological events which influenced the initial inhabitation, exploration, colonization, and early national periods of American History.

Text: National Geographic Macmillan McGraw-Hill U.S. History Impact Social Studies

Goals/Objectives: Students will clearly see the relationship between cause and effect in history, and also have the opportunity to understand how individuals and events of this period influenced later events in the development of our nation

- Use primary and secondary sources to understand history;
- Utilize timelines to identify and discuss American History time periods;
- Compare cultural aspects of ancient American civilizations (Aztecs/Mayas; Mound Builders/Anasazi/Inuit);
- Identify Native American tribes from different geographic regions of North America (cliff dwellers and Pueblo people of the desert Southwest, coastal tribes of the Pacific Northwest, nomadic nations of the Great Plains, woodland tribes east of the Mississippi River);
- Compare cultural aspects of Native American tribes from different geographic regions of North America including but not limited to clothing, shelter, food, major beliefs and practices, music, art, and interactions with the environment;
- Describe technological developments that shaped European exploration;
- Investigate (nationality, sponsoring country, motives, dates and routes of travel, accomplishments) the European explorers;
- Describe interactions among Native Americans, Africans, English, French, Dutch, and Spanish for control of North America;
- Identify the economic, political and socio-cultural motivation for colonial settlement;
- Compare characteristics of New England, Middle, and Southern colonies;

- Identify significant individuals responsible for the development of the New England, Middle, and Southern colonies;
- Demonstrate an understanding of political, economic, and social aspects of daily colonial life in the thirteen colonies;
- Explain the importance of Triangular Trade linking Africa, the West Indies, the British Colonies, and Europe;
- Describe the introduction, impact, and role of slavery in the colonies;
- Identify and explain significant events leading up to the American Revolution;
- Identify significant individuals and groups who played a role in the American Revolution;
- Explain the significance of historical documents including key political concepts, origins of these concepts, and their role in American independence;
- Examine and explain the changing roles and impact of significant women during the American Revolution;
- Examine and compare major battles and military campaigns of the American Revolution;
- Identify the contributions of foreign alliances and individuals to the outcome of the Revolution;
- Explain economic, military, and political factors which led to the end of the Revolutionary War;
- Evaluate the personal and political hardships resulting from the American Revolution;
- Discuss the impact and significance of land policies developed under the Confederation Congress (Northwest Ordinance of 1787);
- Examine the significance of the Constitution including its key political concepts, origins of those concepts, and their role in American democracy;
- Describe the causes and effects of the Louisiana Purchase;
- Identify roles and contributions of significant people during the period of westward expansion;
- Examine 19th century advancements (canals, roads, steamboats, flat boats, overland wagons, Pony Express, railroads) in transportation and communication;
- Explain the importance of the explorations west of the Mississippi River;
- Identify the causes and effects of the War of 1812;

- Explain how westward expansion affected Native Americans;
- Discuss the concept of Manifest Destiny;
- Describe the causes and effects of the Missouri Compromise;
- Describe the hardships of settlers along the overland trails to the west;
- Interpret current and historical information using a variety of geographic tools;
- Use latitude and longitude to locate places;
- Identify major United States physical features on a map of North America;
- Construct maps, charts, and graphs to display geographic information;
- Identify and locate the original thirteen colonies on a map of North America;
- Locate and identify states, capitals, and United States Territories on a map;
- Describe the push-pull factors (economy, natural hazards, tourism, climate, physical features) that influenced boundary changes within the United States;
- Describe the impact that past natural events have had on human and physical environments in the United States through 1850;
- Use geographic knowledge and skills when discussing current events;
- Use geography concepts and skills such as recognizing patterns, mapping, graphing to find solutions for local, state, or national problems;
- Identify how trade promoted economic growth in North America from pre-Columbian times to 1850;
- Describe a market economy, and give examples of how the colonial and early American economy exhibited these characteristics;
- Trace the development of technology and the impact of major inventions on business productivity during the early development of the United States;
- Recognize the positive and negative effects of voluntary trade among Native Americans, European explorers, and colonists;
- Explain how and why the United States government was created;

- Define a constitution, and discuss its purposes;
- Explain the definition and origin of rights;
- Identify the Declaration of Independence's grievances and Articles of Confederation's weaknesses;
- Describe how concerns about individual rights led to the inclusion of the Bill of Rights in the U.S. Constitution:
- Compare Federalist and Anti-Federalist views of government;
- Differentiate political ideas of Patriots, Loyalists, and "undecideds" during the American Revolution;
- Compare forms of political participation in the colonial period to today;
- Analyze how the Constitution has expanded voting rights from our nation's early history to today;
- Evaluate the importance of civic responsibilities in American democracy;
- Identify ways good citizens go beyond basic civic and political responsibilities to improve government and society;
- Describe the organizational structure (legislative, executive, judicial branches) and powers of the federal government as defined in Articles I, II, and III of the U.S. Constitution;
- Explain how popular sovereignty, rule of law, separation of powers, checks and balances, federalism, and individual rights limit the powers of the federal government as expressed in the Constitution and Bill of Rights;
- Give examples of powers granted to the federal government and those reserved for the states;
- Describe the amendment process as defined in Article V of the Constitution and give examples;
- Identify the fundamental rights of all citizens as enumerated in the Bill of Rights;
- Examine the foundations of the United States legal system by recognizing the role of the courts in interpreting law and settling conflicts.

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).