

Reading Curriculum Guide

Course Description: This course follows the seventh grade English Language Arts Next Generation Sunshine State Standards. The purpose of this course is to provide students with a highly stimulating program to develop into more mature readers as well as critical thinkers. Increased emphasis is placed on content reading, higher order thinking, comprehension, and critical reading. Students effectively evaluate, analyze, and discuss literary works from a variety of genres and time periods.

Goals/Objectives:

Students will be able to understand and apply their knowledge to the following state standards:

- Refer to details and examples in a text when explaining what the text says explicitly;
- Use two or more pieces of evidence to support inferences, conclusions, or summaries of text;
- Determine which piece(s) of evidence provide(s) the strongest support for inferences, conclusions, or summaries of text;
- Determine the theme or central idea of a text;
- Analyze the development of the theme or central idea over the course of the text, including its relationship to the characters, setting, and plot;
- Provide/create an objective summary of a text;
- Analyze how particular lines of dialogue or incidents in a story or drama propel the action, reveal aspects of a character, or provoke a decision;
- Identify the use of literary techniques within a text;
- Explain how the use of literary techniques within a text advances the plot or reveals aspects of a character;
- Identify and interpret an analogy within a text;
- Determine the meaning of words and phrases as they are used in a text, including figurative (i.e., metaphors, similes, and idioms) and connotative meanings;
- Compare and contrast the structure of two or more texts;
- Explain how language use contributes to the meaning of a texts;
- Analyze how differences in points of view create such effects as suspense or humor;
- Compare and contrast content presented in text, media and live performance;
- Compare modern works of literature to the texts from which they draw ideas;
- Read or listen to a variety of texts or adapted texts, including historical novels, periodicals, dramas, plays, poetry (including soliloquies and sonnets), periodicals, biographies, essays, speeches, journals, news articles, fiction, and nonfiction novels;
- Use a variety of strategies to derive meaning from a variety of texts;
- Determine two or more central ideas in a text;
- Use comparisons provided by the text to identify relationships between people or events;
- Determine how analogies in the text create relationships between people or events;
- Use signal words as a means of locating information;
- Outline the structure (i.e., sentence that identifies key concept(s), supporting details) within a paragraph;

- Determine the structure of a text (e.g., chronological order, compare/contrast, cause/effect, problem/solution);
- Determine how the information in each section contributes to the whole or to the development of ideas;
- Determine an author's purpose for writing the text;
- Identify and evaluate the advantages of different mediums;
- List and evaluate the disadvantages of different mediums;
- Evaluate the advantages of using different mediums (e.g., print or digital text, video, multimedia) to present a particular topic or idea;
- Identify an argument or claim that the author makes;
- Evaluate the claim or argument to determine if it is supported by evidence;
- Identify irrelevant evidence and claims;
- Analyze a case in which two or more texts provide conflicting information on the same topic;
- Identify where the texts disagree on matters of fact or interpretation.

Instructional Methods/Strategies: Students participate in daily lessons and activities according to the current unit. We utilize the Prentice Hall *Literature* textbook in addition to such texts as *Romeo and Juliet*, *Night*, and *Animal Farm* to study, analyze, and discuss the lessons. Each student receives additional practice via classwork and homework assignments. In addition, students are given assessments at the end of each unit to assess mastery of the skills previously taught. The following strategies are incorporated to enhance students' learning experiences: anticipatory guides, one pagers, EdHelper, Socratic seminars, KWL charts, graphic organizers, highlighting strategies, Quizlet, think-pair-share, story maps, IXL, Kahoot, Blooket, jigsaw, cooperative learning, and note taking strategies (Cornell Notes, square notes, annotating the text, sticky notes).

English Curriculum Guide

Course Description: This course follows the seventh grade English Language Arts Next Generation Sunshine State Standards. The purpose of this course is to provide students with a strong foundation for English writing. Students receive direct instruction in writing forms (persuasive, descriptive, point of view, research-based, expository, narrative, and informative writing), grammar, vocabulary expansion, Latin and Greek roots, and the research process. Students use effective speaking techniques for formal and informal presentations. An emphasis is placed on using a variety of writing strategies to improve all written texts and responses.

Goals/Objectives:

Students will be able to understand and apply their knowledge to the following state standards:

- Write arguments with clear and concise reasons and sufficient elaboration;
- Write informative/expository/narrative/persuasive/point of view/descriptive/research-based texts to examine a topic and convey ideas, concepts, and information through the selection, organization, and analysis of relevant content;
- Produce clear, cohesive, and coherent writing;
- Decode and appropriately address all writing prompts;
- Introduce a topic, organize ideas, concepts, and information using strategies such as definition, classification, comparison/contrast, and cause/effect;
- Develop the topic with relevant facts, definitions, concrete details, quotations, or other information and examples;
- Use appropriate transitions to clarify the relationships among ideas and concepts;
- Use precise language and domain-specific vocabulary to inform about or explain the topic;
- Establish and maintain a formal style of writing;
- Provide a concluding statement or section that follows from the information or explanation presented;
- Use technology, including the Internet, to produce and publish writing;
- Conduct research using the Internet and print sources that include magazines, periodicals, and textbooks;
- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline-specific tasks, purposes, and audiences;
- Demonstrate command of the conventions of standard English grammar and usage when writing or speaking;
- Demonstrate mastery of seventh grade grammar lessons;
- Acquire and utilize an extensive vocabulary through direct word study;
- Determine or clarify the meaning of unknown and multiple-meaning words and phrases; by using context clues and knowledge of Greek and Latin prefixes, suffixes, and root words;
- Consult print and media reference material (e.g., dictionaries, glossaries, thesauruses) to find pronunciations, meanings, and parts of speech of words;
- Speak with clarity for a variety of purposes, audiences, and contexts.

Instructional Methods/Strategies: Students participate in daily lessons and activities according to the current unit. We utilize the Prentice Hall's *Writing and Grammar* textbook and workbook to study, discuss, and review each grammar and writing lesson. In addition, we use *Wordly Wise Book 7* and *The Reading Teacher's Book of Lists* to study grade-level vocabulary and Greek and Latin roots. Each student receives additional practice via classwork and homework assignments. Moreover, students are given assessments at the end of each unit to assess mastery of the skills previously taught. Students focus on becoming skilled writers through the five step writing process that includes planning, drafting, revising, editing, and publishing. Particular attention is paid to expository, point of view, descriptive, persuasive, informative, and narrative writing through the creation of essays and formal APA or MLA style compositions. A special emphasis is placed on public speaking through formal lessons and oral presentations. The following strategies are incorporated to enhance students' learning experiences: Kansas University Paragraph Writing Strategy, COPS (Capitalization, Organization, Punctuation, Spelling), planning strategies, jigsaw, peer editing strategies, Quizlet, buddy study strategy, RAFT Strategy, flip charts, IXL, Kahoot, cooperative learning, Blooket, EdHelper, note cards, and foldables.

Math Curriculum Guide

Course Description: This pre-algebra course accelerates our middle school students through what is traditionally covered in seventh and eighth grades. This text series has proven to be strong and well-balanced. It maintains the quality content for which McGraw Hill is known, with the research-based approach students need. The program has experienced authorship, proven student success, and a wide range of built-in opportunities to assess students' understanding. It prepares the students for algebra and beyond by developing their problem solving skills, improving their conceptual understanding, and providing them with the tools they will need for ongoing success. This text enables the teacher to uncover the mathematician in every student through powerful explorations, rich mathematical discourse, and individualized learning opportunities. With purposefully integrated technology and plentiful opportunities for students to explore, collaborate, and reflect, *Reveal Math* increases both student engagement and students' confidence in their own math abilities. This class builds upon the fundamentals addressed in the students' previous years increasing both in complexity and depth of knowledge. This course prepares the students to continue into level Algebra I next year.

Goals/Objectives:

| Standards for Mathematical Content | |
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| Unit 1: Rational Numbers and Exponents | |
| Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers. (Major Cluster) | |
| 7.NS.A.1 | Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers; represent addition and subtraction on a horizontal or vertical number line diagram. |
| | 7.NS.A.1.A Describe situations in which opposite quantities combine to make 0. <i>For example, a hydrogen atom has 0 charge because its two constituents are oppositely charged.</i> |
| | 7.NS.A.1.B Understand $p + q$ as the number located a distance $ q $ from p , in the positive or negative direction depending on whether q is positive or negative. Show that a number and its opposite have a sum of 0 (are additive inverses). Interpret sums of rational numbers by describing real-world contexts. |
| | 7.NS.A.1.C Understand subtraction of rational numbers as adding the additive inverse, $p - q = p + (-q)$. Show that the distance between two rational numbers on the number line is the absolute value of their difference, and apply this principle in real-world contexts. |
| | 7.NS.A.1.D Apply properties of operations as strategies to add and subtract rational numbers. |
| 7.NS.A.2 | Apply and extend previous understandings of multiplication and division and of fractions to multiply and divide rational numbers. |

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| | <p>7.NS.A.2.A Understand that multiplication is extended from fractions to rational numbers by requiring that operations continue to satisfy the properties of operations, particularly the distributive property, leading to products such as $(-1)(-1) = 1$ and the rules for multiplying signed numbers. Interpret products of rational numbers by describing real-world contexts.</p> <p>7.NS.A.2.B Understand that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers, then $-(p/q) = (-p)/q = p/(-q)$. Interpret quotients of rational numbers by describing real-world contexts.</p> <p>7.NS.A.2.C Apply properties of operations as strategies to multiply and divide rational numbers.</p> <p>7.NS.A.2.D Convert a rational number to a decimal using long division; know that the decimal form of a rational number terminates in 0s or eventually repeats.</p> |
| 7.NS.A.3 | Solve real-world and mathematical problems involving the four operations with rational numbers. <i>Computations with rational numbers extend the rules for manipulating fractions to complex fractions.</i> |
| Know that there are numbers that are not rational, and approximate them by rational numbers. (Supporting Cluster) | |
| 8.NS.A.1 | Know that numbers that are not rational are called irrational. Understand informally that every number has a decimal expansion; for rational numbers show that the decimal expansion repeats eventually, and convert a decimal expansion which repeats eventually into a rational number. |
| 8.NS.A.2 | Use rational approximations of irrational numbers to compare the size of irrational numbers, locate them approximately on a number line diagram, and estimate the value of expressions (e.g., π^2). <i>For example, by truncating the decimal expansion of $\sqrt{2}$, show that $\sqrt{2}$ is between 1 and 2, then between 1.4 and 1.5, and explain how to continue on to get better approximations.</i> |
| Work with radicals and integer exponents. (Major Cluster) | |
| 8.EE.A.1 | Know and apply the properties of integer exponents to generate equivalent numerical expressions. <i>For example, $3^2 \times 3^{-3} = 3^{-3} = 1/3^3 = 1/27$.</i> |
| 8.EE.A.2 | Use square root and cube root symbols to represent solutions to equations of the form $x^2 = p$ and $x^3 = p$, where p is a positive rational number. Evaluate square roots of small perfect squares and cube roots of small perfect cubes. Know that $\sqrt{2}$ is irrational. |
| 8.EE.A.3 | Use numbers expressed in the form of a single digit times an integer power of 10 to estimate very large or very small quantities, and to express how many times as much one is than the other. <i>For example, estimate the population of the United States as 3 times 10^8 and the population of the world as 7 times 10^9, and determine that the world population is more than 20 times larger.</i> |
| 8.EE.A.4 | Perform operations with numbers expressed in scientific notation, including problems where both decimal and scientific notation are used. Use scientific notation and choose units of appropriate size for measurements of very large or very small quantities (e.g., use millimeters per year for seafloor spreading). Interpret scientific notation that has been generated by technology. |
| Unit 2: Proportionality and Linear Relationships | |

| Analyze proportional relationships and use them to solve real-world and mathematical problems. (Major Cluster) | |
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| 7.RP.A.1 | Compute unit rates associated with ratios of fractions, including ratios of lengths, areas and other quantities measured in like or different units. <i>For example, if a person walks 1/2 mile in each 1/4 hour, compute the unit rate as the complex fraction $\frac{1/2}{1/4}$ miles per hour, equivalently 2 miles per hour.</i> |
| 7.RP.A.2 | Recognize and represent proportional relationships between quantities. |
| | 7.RP.A.2.A Decide whether two quantities are in a proportional relationship, e.g., by testing for equivalent ratios in a table or graphing on a coordinate plane and observing whether the graph is a straight line through the origin. |
| | 7.RP.A.2.B Identify the constant of proportionality (unit rate) in tables, graphs, equations, diagrams, and verbal descriptions of proportional relationships. |
| | 7.RP.A.2.C Represent proportional relationships by equations. <i>For example, if total cost t is proportional to the number n of items purchased at a constant price p, the relationship between the total cost and the number of items can be expressed as $t = pn$.</i> |
| 7.RP.A.2.D Explain what a point (x, y) on the graph of a proportional relationship means in terms of the situation, with special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate. | |
| 7.RP.A.3 | Use proportional relationships to solve multistep ratio and percent problems. Examples: simple interest, tax, markups and markdowns, gratuities and commissions, fees, percent increase and decrease, percent error. |
| Use properties of operations to generate equivalent expressions. (Major Cluster) | |
| 7.EE.A.1 | Apply properties of operations as strategies to add, subtract, factor, and expand linear expressions with rational coefficients. |
| 7.EE.A.2 | Understand that rewriting an expression in different forms in a problem context can shed light on the problem and how the quantities in it are related. <i>For example, $a + 0.05a = 1.05a$ means that “increase by 5%” is the same as “multiply by 1.05.”</i> |
| Solve real-life and mathematical problems using numerical and algebraic expressions and equations. (Major Cluster) | |
| 7.EE.B.3 | Solve multi-step real-life and mathematical problems posed with positive and negative rational numbers in any form (whole numbers, fractions, and decimals), using tools strategically. Apply properties of operations to calculate with numbers in any form; convert between forms as appropriate; and assess the reasonableness of answers using mental computation and estimation strategies. <i>For example: If a woman making \$25 an hour gets a 10% raise, she will make an additional 1/10 of her salary an hour, or \$2.50, for a new salary of \$27.50. If you want to place a towel bar 9 3/4 inches long in the center of a door that is 27 1/2 inches wide, you will need to place the bar about 9 inches from each edge; this estimate can be used as a check on the exact computation.</i> |

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| 7.EE.B.4 | <p>Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities.</p> <p>7.EE.B.4.A Solve word problems leading to equations of the form $px + q = r$ and $p(x + q) = r$, where p, q, and r are specific rational numbers. Solve equations of these forms fluently. Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. <i>For example, the perimeter of a rectangle is 54 cm. Its length is 6 cm. What is its width?</i></p> <p>7.EE.B.4.B Solve word problems leading to inequalities of the form $px + q > r$ or $px + q < r$, where p, q, and r are specific rational numbers. Graph the solution set of the inequality and interpret it in the context of the problem. <i>For example: As a salesperson, you are paid \$50 per week plus \$3 per sale. This week you want your pay to be at least \$100. Write an inequality for the number of sales you need to make, and describe the solutions.</i></p> |
| Understand the connections between proportional relationships, lines, and linear equations. (Major Cluster) | |
| 8.EE.B.5 | Graph proportional relationships, interpreting the unit rate as the slope of the graph. Compare two different proportional relationships represented in different ways. <i>For example, compare a distance-time graph to a distance-time equation to determine which of two moving objects has greater speed.</i> |
| 8.EE.B.6 | Use similar triangles to explain why the slope m is the same between any two distinct points on a non-vertical line in the coordinate plane; derive the equation $y = mx$ for a line through the origin and the equation $y = mx + b$ for a line intercepting the vertical axis at b . |
| Analyze and solve linear equations and pairs of simultaneous linear equations. (Major Cluster) | |
| 8.EE.C.7 | <p>Solve linear equations in one variable.</p> <p>8.EE.C.7.A Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form $x = a$, $a = a$, or $a = b$ results (where a and b are different numbers).</p> <p>8.EE.C.7.B Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.</p> |
| Unit 3: Introduction to Sampling and Inference | |
| Use random sampling to draw inferences about a population. (Supporting Cluster) | |
| 7.SP.A.1 | Understand that statistics can be used to gain information about a population by examining a sample of the population; generalizations about a population from a sample are valid only if the sample is representative of that population. Understand that random sampling tends to produce representative samples and support valid inferences. |
| 7.SP.A.2 | Use data from a random sample to draw inferences about a population with an unknown characteristic of interest. Generate multiple samples (or simulated samples) of the same size to gauge the variation in estimates or predictions. <i>For example, estimate the mean word length in a book by randomly sampling words</i> |

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| | <i>from the book; predict the winner of a school election based on randomly sampled survey data. Gauge how far off the estimate or prediction might be.</i> |
| Draw informal comparative inferences about two populations. (Additional Cluster) | |
| 7.SP.B.3 | Informally assess the degree of visual overlap of two numerical data distributions with similar variabilities, measuring the difference between the centers by expressing it as a multiple of a measure of variability. <i>For example, the mean height of players on the basketball team is 10 cm greater than the mean height of players on the soccer team, about twice the variability (mean absolute deviation) on either team; on a dot plot, the separation between the two distributions of heights is noticeable.</i> |
| 7.SP.B.4 | Use measures of center and measures of variability for numerical data from random samples to draw informal comparative inferences about two populations. <i>For example, decide whether the words in a chapter of a seventh-grade science book are generally longer than the words in a chapter of a fourth-grade science book.</i> |
| Investigate chance processes and develop, use, and evaluate probability models. (Supporting Cluster) | |
| 7.SP.C.5 | Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring. Larger numbers indicate greater likelihood. A probability near 0 indicates an unlikely event, a probability around 1/2 indicates an event that is neither unlikely nor likely, and a probability near 1 indicates a likely event. |
| 7.SP.C.6 | Approximate the probability of a chance event by collecting data on the chance process that produces it and observing its long-run relative frequency, and predict the approximate relative frequency given the probability. <i>For example, when rolling a number cube 600 times, predict that a 3 or 6 would be rolled roughly 200 times, but probably not exactly 200 times.</i> |
| 7.SP.C.7 | Develop a probability model and use it to find probabilities of events. Compare probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy. |
| | 7.SP.C.7.A Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events. <i>For example, if a student is selected at random from a class, find the probability that Jane will be selected and the probability that a girl will be selected.</i> |
| | 7.SP.C.7.B Develop a probability model (which may not be uniform) by observing frequencies in data generated from a chance process. <i>For example, find the approximate probability that a spinning penny will land heads up or that a tossed paper cup will land open-end down. Do the outcomes for the spinning penny appear to be equally likely based on the observed frequencies?</i> |
| 7.SP.C.8 | Find probabilities of compound events using organized lists, tables, tree diagrams, and simulation. |
| | 7.SP.C.8.A Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs. |
| | 7.SP.C.8.B Represent sample spaces for compound events using methods such as organized lists, tables and tree diagrams. For an event described in everyday |

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| | language (e.g., “rolling double sixes”), identify the outcomes in the sample space which compose the event. |
| | 7.SP.C.8.C Design and use a simulation to generate frequencies for compound events. <i>For example, use random digits as a simulation tool to approximate the answer to the question: If 40% of donors have type A blood, what is the probability that it will take at least 4 donors to find one with type A blood?</i> |
| Unit 4: Creating, Comparing, and Analyzing Geometric Figures | |
| Draw, construct, and describe geometrical figures and describe the relationships between them. (Additional Cluster) | |
| 7.G.A.1 | Solve problems involving scale drawings of geometric figures, including computing actual lengths and areas from a scale drawing and reproducing a scale drawing at a different scale. |
| 7.G.A.2 | Draw (freehand, with ruler and protractor, and with technology) geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. |
| 7.G.A.3 | Describe the two-dimensional figures that result from slicing three-dimensional figures, as in plane sections of right rectangular prisms and right rectangular pyramids. |
| Solve real-life and mathematical problems involving angle measure, area, surface area, and volume. (Additional Cluster) | |
| 7.G.B.4 | Know the formulas for the area and circumference of a circle and use them to solve problems; give an informal derivation of the relationship between the circumference and area of a circle. |
| 7.G.B.5 | Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. |
| 7.G.B.6 | Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. |
| Understand congruence and similarity using physical models, transparencies, or geometry software. (Major Cluster) | |
| 8.G.A.1 | Verify experimentally the properties of rotations, reflections, and translations: |
| | 8.G.A.1.A Lines are taken to lines, and line segments to line segments of the same length. |
| | 8.G.A.1.B Angles are taken to angles of the same measure. |
| | 8.G.A.1.C Parallel lines are taken to parallel lines. |
| 8.G.A.2 | Understand that a two-dimensional figure is congruent to another if the second can be obtained from the first by a sequence of rotations, reflections, and translations; given two congruent figures, describe a sequence that exhibits the congruence between them. |
| 8.G.A.3 | Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. |
| 8.G.A.4 | Understand that a two-dimensional figure is similar to another if the second can be obtained from the first by a sequence of rotations, reflections, translations, and |

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| | dilations; given two similar two-dimensional figures, describe a sequence that exhibits the similarity between them. |
| 8.G.A.5 | Use informal arguments to establish facts about the angle sum and exterior angle of triangles, about the angles created when parallel lines are cut by a transversal, and the angle-angle criterion for similarity of triangles. <i>For example, arrange three copies of the same triangle so that the sum of the three angles appears to form a line, and give an argument in terms of transversals why this is so.</i> |
| Solve real-world and mathematical problems involving volume of cylinders, cones, and spheres. (Additional Cluster) | |
| 8.G.C.9 | Know the formulas for the volumes of cones, cylinders, and spheres and use them to solve real-world and mathematical problems. |

Instructional Methods: The teacher creates a rich and fun learning environment with a variety of opportunities for hands-on activities and games. Students engage in interactive activities that teach concepts and reinforce skills being learned. Children learn through the use of familiar materials and use manipulatives to explore concepts learned, and problem solve. Skills are learned and reinforced through note taking, practice, and application on student Chromebooks. The teacher also uses the Smart Board daily to teach lessons.

Specific resources include, but are not limited to:

- Interactive digital presentations for each lesson. These are also accessed by the students via their Chromebooks to maintain digital notebooks and notetaking.
- Hands-on manipulatives
- Topic specific math games (card games, board games, etc)
- Digital access for additional support and practice is available through McGraw Hill. This includes virtual tutor videos. Additional technology features are online tools to make math more meaningful and deepen student understanding.
- Khan Academy
- IXL
- Quizizz App
- Quizlet App
- Kahoot
- iTooch
- iMathematics
- Freckle
- 3 Act Tasks
- Brain Pop
- Gizmos
- Blooket
- Teacher created escape rooms using Google Forms
- Interactive online math games

Science Curriculum Guide

Course Description/Objectives: Houghton Mifflin Harcourt’s Science Fusion program provides the ultimate inquiry experience. Every click, page turn, virtual lab, or hands-on activity is an opportunity to learn through inquiry. It creates an exciting multi-modal learning environment fusing print, digital, and hands-on experiences. The students will continue their middle school study of science by building on their life science background to create a thorough understanding of the Earth and the world around them. This middle school Earth Science course covers all Next Generation Sunshine State Standards under this domain. The students develop an understanding of the Earth, its water, and atmosphere, and how they are related. They also understand space concepts from the Earth, Moon, Sun system extending to the universal level.

Goals/Objectives:

The students will demonstrate understanding of the following NGSSS.

| Benchmark | Description | Idea/ Standard |
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| SC.6.E.6.1 | Describe and give examples of ways in which Earth's surface is built up and torn down by physical and chemical weathering, erosion, and deposition. | Earth Structures |
| SC.6.E.6.2 | Recognize that there are a variety of different landforms on Earth's surface such as coastlines, dunes, rivers, mountains, glaciers, deltas, and lakes and relate these landforms as they apply to Florida. | Earth Structures |
| SC.6.E.7.1 | Differentiate among radiation, conduction, and convection, the three mechanisms by which heat is transferred through Earth's system. | Earth Systems and Patterns |
| SC.6.E.7.2 | Investigate and apply how the cycling of water between the atmosphere and hydrosphere has an effect on weather patterns and climate. | Earth Systems and Patterns |

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| SC.6.E.7.3 | Describe how global patterns such as the jet stream and ocean currents influence local weather in measurable terms such as temperature, air pressure, wind direction and speed, and humidity and precipitation. | Earth Systems and Patterns |
| SC.6.E.7.4 | Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere. | Earth Systems and Patterns |
| SC.6.E.7.5 | Explain how energy provided by the sun influences global patterns of atmospheric movement and the temperature differences between air, water, and land. | Earth Systems and Patterns |
| SC.6.E.7.6 | Differentiate between weather and climate. | Earth Systems and Patterns |
| SC.6.E.7.7 | Investigate how natural disasters have affected human life in Florida. | Earth Systems and Patterns |
| SC.6.E.7.8 | Describe ways human beings protect themselves from hazardous weather and sun exposure. | Earth Systems and Patterns |
| SC.6.E.7.9 | Describe how the composition and structure of the atmosphere protects life and insulates the planet. | Earth Systems and Patterns |
| SC.7.E.6.1 | Describe the layers of the solid Earth, including the lithosphere, the hot convecting mantle, and the dense metallic liquid and solid cores. | Earth Structures |
| SC.7.E.6.2 | Identify the patterns within the rock cycle and relate them to surface events (weathering and erosion) and sub-surface events (plate tectonics and mountain building). | Earth Structures |
| SC.7.E.6.3 | Identify current methods for measuring the age of Earth and its parts, including the law of superposition and radioactive dating. | Earth Structures |

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| SC.7.E.6.4 | Explain and give examples of how physical evidence supports scientific theories that Earth has evolved over geologic time due to natural processes. | Earth Structures |
| SC.7.E.6.5 | Explore the scientific theory of plate tectonics by describing how the movement of Earth's crustal plates causes both slow and rapid changes in Earth's surface, including volcanic eruptions, earthquakes, and mountain building. | Earth Structures |
| SC.7.E.6.6 | Identify the impact that humans have had on Earth, such as deforestation, urbanization, desertification, erosion, air and water quality, changing the flow of water. | Earth Structures |
| SC.7.E.6.7 | Recognize that heat flow and movement of material within Earth causes earthquakes and volcanic eruptions, and creates mountains and ocean basins. | Earth Structures |
| SC.7.N.1.1 | Define a problem from the seventh grade curriculum, use appropriate reference materials to support scientific understanding, plan and carry out scientific investigation of various types, such as systematic observations or experiments, identify variables, collect and organize data, interpret data in charts, tables, and graphics, analyze information, make predictions, and defend conclusions. | The Practice of Science |
| SC.7.N.1.2 | Differentiate replication (by others) from repetition (multiple trials). | The Practice of Science |
| SC.7.N.1.3 | Distinguish between an experiment (which must involve the identification and control of variables) and other forms of scientific investigation and explain that not all scientific knowledge is derived from experimentation. | The Practice of Science |
| SC.7.N.1.4 | Identify test variables (independent variables) and outcome variables (dependent variables) in an experiment. | The Practice of Science |

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| SC.7.N.1.5 | Describe the methods used in the pursuit of a scientific explanation as seen in different fields of science such as biology, geology, and physics. | The Practice of Science |
| SC.7.N.1.6 | Explain that empirical evidence is the cumulative body of observations of a natural phenomenon on which scientific explanations are based. | The Practice of Science |
| SC.7.N.1.7 | Explain that scientific knowledge is the result of a great deal of debate and confirmation within the science community. | The Practice of Science |
| SC.7.N.2.1 | Identify an instance from the history of science in which scientific knowledge has changed when new evidence or new interpretations are encountered. | The Characteristics of Scientific Knowledge |
| SC.7.N.3.1 | Recognize and explain the difference between theories and laws and give several examples of scientific theories and the evidence that supports them. | The Role of Theories, Laws, Hypotheses, and Models |
| SC.7.N.3.2 | Identify the benefits and limitations of the use of scientific models. | The Role of Theories, Laws, Hypotheses, and Models |
| SC.8.E.5.1 | Recognize that there are enormous distances between objects in space and apply our knowledge of light and space travel to understand this distance. | Earth in Space and Time |
| SC.8.E.5.2 | Recognize that the universe contains many billions of galaxies and that each galaxy contains many billions of stars. | Earth in Space and Time |

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| SC.8.E.5.3 | Distinguish the hierarchical relationships between planets and other astronomical bodies relative to solar system, galaxy, and universe, including distance, size, and composition. | Earth in Space and Time |
| SC.8.E.5.4 | Explore the Law of Universal Gravitation by explaining the role that gravity plays in the formation of planets, stars, and solar systems and in determining their motions. | Earth in Space and Time |
| SC.8.E.5.5 | Describe and classify specific physical properties of stars: apparent magnitude (brightness), temperature (color), size, and luminosity (absolute brightness). | Earth in Space and Time |
| SC.8.E.5.6 | Create models of solar properties including: rotation, structure of the Sun, convection, sunspots, solar flares, and prominences. | Earth in Space and Time |
| SC.8.E.5.7 | Compare and contrast the properties of objects in the Solar System including the Sun, planets, and moons to those of Earth, such as gravitational force, distance from the Sun, speed, movement, temperature, and atmospheric conditions. | Earth in Space and Time |
| SC.8.E.5.8 | Compare various historical models of the Solar System, including geocentric and heliocentric. | Earth in Space and Time |
| SC.8.E.5.9 | Explain the impact of objects in space on each other including: <ol style="list-style-type: none"> 1. the Sun on the Earth including seasons and gravitational attraction 2. the Moon on the Earth, including phases, tides, and eclipses, and the relative position of each body. | Earth in Space and Time |
| SC.8.E.5.10 | Assess how technology is essential to science for such purposes as access to outer space and other remote locations, sample collection, measurement, data collection and storage, computation, and communication of information. | Earth in Space and Time |

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| SC.8.E.5.11 | Identify and compare characteristics of the electromagnetic spectrum such as wavelength, frequency, use, and hazards and recognize its application to an understanding of planetary images and satellite photographs. | Earth in Space and Time |
| SC.8.E.5.12 | Summarize the effects of space exploration on the economy and culture of Florida. | Earth in Space and Time |

Instructional Methods/Strategies:

- Hands-on activities and labs that incorporate the scientific method
- The Smartboard is sometimes used to follow the course’s digital path while the teacher guides students to take notes in their interactive notebooks. These notebooks include foldables, charts, diagrams, and drawings to help the students make meaning within new concepts. They also incorporate the use of color with purpose.
- Review games to solidify concepts and practice test-taking strategies
- Gizmos
- Web quests
- Virtual labs
- BrainPOP
- Online interactives
- Flipgrid
- Newsela
- Dogo News
- Squid Books
- Quizizz
- Quizlet
- Kahoot
- GoFormative
- EdPuzzle
- Freckle

United States History Curriculum Guide

Course Description: The United States History program invites students to explore the history of the United States and includes the content area strands of Geography, Economics, Civics and Government. The primary content of this program leads students to build a background of understanding as they investigate and analyze the period from Prehistory through the Reconstruction period following the Civil War. This course is designed to help prepare students to succeed in high school as they engage with content that both activates critical thinking and inquiry skills, and helps develop primary and secondary source understanding. Print, digital, and blended program options make the program dynamic and accessible to students with diverse learning styles. Current events shared and discussed by students throughout this course promote critical thinking and civil discourse.

Goals/Objectives:

Students will be able to demonstrate their learning in the following ways:

- Use research and inquiry skills to analyze American History using primary and secondary sources.
- Examine the causes, course, and consequences of British settlement in the American colonies.
- Demonstrate an understanding of the causes, course, and consequences of the American Revolution and the founding principles of our nation.
- Demonstrate an understanding of the domestic and international causes, course, and consequences of westward expansion.
- Examine the causes, course, and consequences of the Civil War and Reconstruction, including its effects on American peoples.
- Understand how to use maps and other geographic representations, tools, and technology to report information.
- Understand physical and cultural characteristics of places.
- Understand the relationships between the Earth's ecosystems and the populations that dwell within them.
- Understand the characteristics, distribution, and migration of human populations.
- Understand how human actions can impact the environment.
- Understand how to apply geography to interpret the past and present and plan for the future.
- Understand the fundamental concepts relevant to the development of a market economy.
- Understand the fundamental concepts relevant to the institutions, structure, and functions of a national economy.
- Understand the fundamental concepts and interrelationships of the United States economy in the international marketplace.
- Evaluate the roles, rights, and responsibilities of United States citizens and determine methods of active participation in society, government, and the political system.
- The student will demonstrate an understanding of the principles, functions, and organization of government.

- Examine motivating economic factors that influenced the development of the United States economy over time including scarcity, supply and demand, opportunity costs, incentives, profits, and entrepreneurial aspects.
- Understand the fundamental concepts relevant to the institutions, structure, and functions of a national economy.
- Analyze contributions of entrepreneurs, inventors, and other key individuals from various gender, social, and ethnic backgrounds in the development of the United States economy.
- Explain the economic impact of government policies.
- Assess the role of Africans and other minority groups in the economic development of the United States.
- Understand the fundamental concepts and interrelationships of the United States economy in the international marketplace.
- Evaluate domestic and international interdependence.

Instructional Methods/Strategies: *U.S. History American Stories* student text provides narrative text, practice, and assessments in a readable, magazine-like design, with audio options. Inquiry-focused projects and document analysis activities deepen students' content and skills mastery. Essential questions and stories increase long-term understanding and retention of learning. Students connect with content and make learning personal through a story and activate their prior knowledge, personal experience, and perspective. Students actively learn, investigate, and acquire key content knowledge using print and digital media which feature resources for note-taking, highlighting, and reading support. Instructional strategies used in student-centered units include: scaffolding, modeling, guiding, direct and individualized instruction, collaboration, graphic organizers, sequencing, project-based learning, presentations, and active listening.