Lesson 1: Understand, Represent, and Evaluate Exponents		
MA.6.NSO.3.3 Evaluate positive rational numbers and integers with natural number exponents. **Clarification 1:** Within this benchmark, expectations include using natural number exponents up to 5.	• Write expressions using whole-number exponents to represent real-world and mathematical problems. • Evaluate expressions with whole-number exponents.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.4.2, MA.6.AR.1.3, MA.6.GR.2.3
Let's Investigate! Dance Numbers/ Lesson 2: Find the Greatest Common Factor and the Least Common Multiple		
MA.6.NSO.3.1 Given a mathematical or real-world context, find the greatest common factor and least common multiple of two whole numbers. **Clarification 1:** Within this benchmark, expectations include finding greatest common factor within 1,000 and least common multiple with factors to 25. **Clarification 2:** Instruction includes finding the greatest common factor of the numerator and denominator of a fraction to simplify the fraction.	• Find the prime factorization of a whole number. • Find the greatest common factor (GCF) and the least common multiple (LCM) of two whole numbers. • Use the GCF and the Distributive Property to add. • Use the GCF and the LCM to solve problems.	MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.1.4, MA.6.AR.3.2, MA.6.AR.3.3, MA.6.AR.3.4, MA.6.AR.3.5
MA.6.NSO.3.2 Rewrite the sum of two composite whole numbers having a common factor, as a common factor multiplied by the sum of two whole numbers. **Clarification 1:** Instruction includes using the distributive property to generate equivalent expressions.		MA.6.AR.1.4
MA.6.NSO.3.4 Express composite whole numbers as a product of prime factors with natural number exponents		Direct connections to benchmarks outside this standard were not found.
Lesson 3: Write and Evaluate Numerical Expressions		
MA.6.NSO.3.3 Evaluate positive rational numbers and integers with natural number exponents. **Clarification 1:** Within this benchmark, expectations include using natural number exponents up to 5.	• Evaluate expressions using the order of operations. • Insert grouping symbols in a numerical expression to affect the value of the expression.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.4.2, MA.6.AR.1.3, MA.6.GR.2.3
Lesson 4: Write Algebraic Expressions		
MA.6.AR.1.1 Given a mathematical or real-world context, translate written descriptions into algebraic expressions and translate algebraic expressions into written descriptions.	• Write an algebraic expression to model a pattern. • Write an algebraic expression from a word phrase. • Use precise mathematical language when identifying parts of an expression.	MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3, MA.6.AR.3.5, MA.6.GR.2.2, MA.6.GR.2.3
Lesson 5: Evaluate Algebraic Expressions		
MA.6.AR.1.1 Given a mathematical or real-world context, translate written descriptions into algebraic expressions and translate algebraic expressions into written descriptions.	• Evaluate algebraic expressions, including those with whole numbers, decimals, and fractions.	MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3, MA.6.AR.3.5, MA.6.GR.2.2, MA.6.GR.2.3
MA.6.AR.1.3 Evaluate algebraic expressions using substitution and order of operations.		MA.6.NSO.3.3, MA.6.NSO.4.1, MA.6.NSO.4.2, MA.6.AR.2.1

Clarification 1: Within this benchmark, the expectation is to perform all operations with integers **Clarification 2:** Refer to Properties of Operations, Equality and Inequality (Appendix D).		
Let's Investigate! Equali-tile/ Lesson 6: Apply Properties of Operations: Algebraic Expressions		
MA.6.AR.1.4 Apply the properties of operations to generate equivalent algebraic expressions with integer coefficients. **Clarification 1:** Properties include associative, commutative and distributive. **Clarification 2:** Refer to Properties of Operations, Equality and Inequality (Appendix D).	• Write equivalent algebraic expressions. • Identify equivalent algebraic expressions. • Justify whether two expressions are equivalent.	MA.6.NSO.3.1, MA.6.NSO.3.2
Lesson 7: Simplify Algebraic Expressions		
MA.6.AR.1.1 Given a mathematical or real-world context, translate written descriptions into algebraic expressions and translate algebraic expressions into written descriptions.	• Use properties of operations to simplify algebraic expressions by combining like terms.	MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3, MA.6.AR.3.5, MA.6.GR.2.2, MA.6.GR.2.3
MA.6.AR.1.4 Apply the properties of operations to generate equivalent algebraic expressions with integer coefficients. **Clarification 1:** Properties include associative, commutative and distributive. **Clarification 2:** Refer to Properties of Operations, Equality and Inequality (Appendix D).		MA.6.NSO.3.1, MA.6.NSO.3.2

Foundational Content [link to separate document]	**Content/Academic Language**
Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards. **The linked document contains supporting resources.**	• Base • Evaluate • Exponent • Power • Composite number • Factor tree • Greatest Common Factor (GCF) • Least Common Multiple (LCM) • Prime factorization • Prime number • Numerical expression • Algebraic expression • Coefficient • Term • Variable • Substitution • Equivalent expressions • Like terms • Simplify • Distributive Property • Associate Property • Commutative Property of Addition

	• Commutative Property of Multiplication

Common Misconceptions (this is not a complete list, just suggestions)	**Teacher Notes** (this is not a complete list, just suggestions)
• Some students may incorrectly apply or use incorrect notation when exponents are applied to negative integers. If a negative integer has an exponent, the negative number base must be in parentheses and the exponent is on the outside of the parentheses. (MTR.5.1) ○ For example, $(-12)^4 = (-12)(-12)(-12)(-12)$ is not the same as $-12^4 = -(12)(12)(12)(12)$. • Students build an incorrect misconception that variables only represent one value, Provide problems that motivate reasoning with different ranges of possible values for the variables. For example: which is greater 2x or x + 2? What if x=0; x < 0; x >0 ? • Students may not realize that the LCM of two numbers can be one of the numbers. • Students might think that if they subtract y from 2y they are left with 2, because they "took the y away." • Students may think that terms are always like terms if they have the same variable, not looking at the exponent.	• Use models or manipulatives, such as algebra tiles, bar graphs, or area models, to conceptualize expressions. • Practice different ways to describe expressions. • Use additive inverse property when subtracting expressions. • Focus on using mathematical properties to generate equivalent expressions. • Make sure students understand the reason for rewriting an expression in terms of a contextual situation. • For additional instructional strategies, instructional tasks and instructional items, see the FLDOE B.E.S.T. Instructional Guide (B1G-M) for Grade 6 Mathematics.

GR6_T4_FSQ_OL_FY24

SCOPE & SEQUENCE - QUARTER 2

Topic 6: Represent and Solve Equations and Inequalities		
Topic Goal: Students will be able to use procedures to write and solve equations and inequalities.	**Suggested Time Frame:**	19 days, 11/6/2023 to 12/07/2023
Text Resources: enVision Florida Mathematics: Grade 6 Accelerated Mathematics, pgs. 316-395	**Unit Plans:**	Unit Plans provided in Blender, Link to the FLDOE B1G-M

Benchmark (B.E.S.T. Standards for Mathematics)	Student Target	Possible Horizontal Alignment
Lesson 1: Understand Equations and Solutions		
MA.6.AR.2.1 Given an equation or inequality and a specified set of integer values, determine which values make the equation or inequality true or false. **Clarification 1:** Problems include the variable in multiple terms or on either side	• Identify equations and variables. • Use substitution to find solutions to equations.	MA.6.NSO.4.1, MA.6.NSO.4.2, MA.6.AR.1.2, MA.6.AR.1.3

of the equal sign or inequality symbol.		
Let's Investigate! Operation Equation/ Lesson 2: Apply Properties of Equality		
MA.6.AR.1.4 Apply the properties of operations to generate equivalent algebraic expressions with integer coefficients. **Clarification 1:** Properties include associative, commutative and distributive. **Clarification 2:** Refer to Properties of Operations, Equality and Inequality (Appendix D).	• Use the properties of equality to keep both sides of an equation equal. • Identify which properties of equality are used to write equivalent expressions	MA.6.NSO.3.1, MA.6.NSO.3.2
MA.6.AR.2.2 Write and solve one-step equations in one variable within a mathematical or real-world context using addition and subtraction, where all terms and solutions are integers. **Clarification 1:** Instruction includes using manipulatives, drawings, number lines and inverse operations. **Clarification 2:** Instruction includes equations in the forms $x + p = q$ and $p + x = q$, where x, p and q are any integer. **Clarification 3:** Problems include equations where the variable may be on either side of the equal sign.		MA.6.NSO.4.1, MA.6.AR.1.1
Lesson 3: Write and Solve Addition and Subtraction Equations		
MA.6.AR.1.1 Given a mathematical or real-world context, translate written descriptions into algebraic expressions and translate algebraic expressions into written descriptions.	• Write one-variable addition and subtraction equations. • Use inverse relationships and properties of equality to solve one-step addition and subtraction equations.	MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3, MA.6.AR.3.5, MA.6.GR.2.2, MA.6.GR.2.3
MA.6.AR.2.2 Write and solve one-step equations in one variable within a mathematical or real-world context using addition and subtraction, where all terms and solutions are integers. **Clarification 1:** Instruction includes using manipulatives, drawings, number lines and inverse operations. **Clarification 2:** Instruction includes equations in the forms $x + p = q$ and $p + x = q$, where x, p and q are any integer. **Clarification 3:** Problems include equations where the variable may be on either side of the equal sign.		MA.6.NSO.4.1, MA.6.AR.1.1
Lesson 4: Write and Solve Multiplication and Division Equations		
MA.6.AR.1.1 Given a mathematical or real-world context, translate written descriptions into algebraic expressions and translate algebraic expressions into written descriptions.	• Write one-variable multiplication and division equations. • Use inverse relationships and properties of equality to solve one-step multiplication and division equations.	MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3, MA.6.AR.3.5, MA.6.GR.2.2, MA.6.GR.2.3
MA.6.AR.2.3 Write and solve one-step equations in one variable within a mathematical or real-world context using multiplication and division, where all terms and solutions are integers. **Clarification 1:** Instruction includes using manipulatives, drawings, number lines and inverse operations. **Clarification 2:** Instruction includes equations in the forms $xp = q$, where $p \neq 0$, and $px = q$. **Clarification 3:** Problems include equations where the variable may be on		MA.6.NSO.4.2, MA.6.AR.1.1, MA.6.AR.3.4, MA.6.AR.3.5, MA.6.GR.2.1, MA.6.GR.2.3, MA.6.GR.2.4

either side of the equal sign.		
Let's Investigate! The Write Way/ Lesson 5: Write and Solve Equations with Rational Numbers		
MA.6.AR.1.1 Given a mathematical or real-world context, translate written descriptions into algebraic expressions and translate algebraic expressions into written descriptions.	• Write and solve equations that involve fractions, decimals, and mixed numbers.	MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3, MA.6.AR.3.5, MA.6.GR.2.2, MA.6.GR.2.3
MA.6.AR.2.4 Determine the unknown decimal or fraction in an equation involving any of the four operations, relating three numbers, with the unknown in any position. **Clarification 1:** Instruction focuses on using algebraic reasoning, drawings, and mental math to determine unknowns. **Clarification 2:** Problems include the unknown and different operations on either side of the equal sign. All terms and solutions are limited to positive rational numbers.		MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.GR.1.2, MA.6.GR.1.3
Lesson 6: Understand and Write Inequalities		
MA.6.AR.1.2 Translate a real-world written description into an algebraic inequality in the form of $x > a$, $x < a$, $x \geq a$ or $x \leq a$. Represent the inequality on a number line **Clarification 1:** Variables may be on the left or right side of the inequality symbol.	• Understand the symbols required to write an inequality. • Write inequalities to describe mathematical or real-world situations.	MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.AR.2.1, MA.6.DP.1.6
MA.6.AR.2.1 Given an equation or inequality and a specified set of integer values, determine which values make the equation or inequality true or false. **Clarification 1:** Problems include the variable in multiple terms or on either side of the equal sign or inequality symbol.		MA.6.NSO.4.1, MA.6.NSO.4.2, MA.6.AR.1.2, MA.6.AR.1.3
Lesson 7: Represent Solutions to Inequalities		
MA.6.AR.1.2 Translate a real-world written description into an algebraic inequality in the form of $x > a$, $x < a$, $x \geq a$ or $x \leq a$. Represent the inequality on a number line. **Clarification 1:** Problems include the variable in multiple terms or on either side of the equal sign or inequality symbol.	• Describe solutions to an inequality. • Represent solutions to an inequality on a number line.	MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.AR.2.1, MA.6.DP.1.6
MA.6.AR.2.1 Given an equation or inequality and a specified set of integer values, determine which values make the equation or inequality true or false. **Clarification 1:** Problems include the variable in multiple terms or on either side of the equal sign or inequality symbol.		MA.6.NSO.4.1, MA.6.NSO.4.2, MA.6.AR.1.2, MA.6.AR.1.3

Foundational Content [link to separate document]	**Content/Academic Language**
Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards. **The linked document contains supporting resources.**	• Number line • Associative Property • Coefficient

	• Commutative Property of Addition • Commutative Property of Multiplication • Equation • Solution of an equation • Inverse relationship • Addition Property of Equality • Subtraction Property of Equality • Multiplication Property of Equality • Division Property of Equality • Inequality • Integer • Distributive Property

Common Misconceptions (this is not a complete list, just suggestions)	**Teacher Notes** (this is not a complete list, just suggestions)
• Students may have difficulty solving for the variable when it is on the right side of the equation. • Students may think that they can use only > or < when an unknown is not equal to a given value. • Students view the equal sign as a symbol which separates the problem and its answer. Instead emphasize that the equal sign indicates that two quantities are equivalent. Once you start teaching inequalities, then students can relate to the quantities having unequal relationships. • Students build an incorrect misconception that variables only represent one value, Provide problems that motivate reasoning with different ranges of possible values for the variables. Inequalities are a great tool to emphasize this concept. • Students believe that equations are structured in such a way that variables always come before the constant term or that variables will appear on the left side of the equal sign. • Students assume that the direction the inequality symbol is pointing is always the direction they shade on the number line.	• Use models or manipulatives, such as algebra tiles, bar diagrams, diagrams, graphs or area models, to conceptualize equations and inequalities. • Emphasize the meaning of the equal and inequality signs. • Remind students that they should perform all calculations to determine whether the expressions on both sides of the equal sign have the same value. • Explain that even though the variable is on the right side of the equal sign, the same approach as for other equations should be used. • Use mathematical properties when solving equations and inequalities. • Encourage students to solve equations using different strategies, for example equations with the distributive property solved by distributing the common factor over each term and by dividing both sides by the common factor first. • For additional instructional strategies, instructional tasks and instructional items, see the FLDOE B.E.S.T. Instructional Guide (B1G-M) for Grade 6 Mathematics.

GR6_T4andT6_USA_OL_FY24

SCOPE & SEQUENCE - QUARTER 2 and 3

Topic 7: Understand and Use Ratio and Rate		
Topic Goal: Students will be able understand and use ratios and rates to describe quantities and solve problems.	**Suggested Time Frame:**	19 days, 12/08/2023 to 1/19/2024
Text Resources: enVision Florida Mathematics: Grade 6 Accelerated Mathematics, pgs. 396-473	**Unit Plans:**	Unit Plans provided in Blender, Link to the FLDOE B1G-M

Benchmark (B.E.S.T. Standards for Mathematics)	Student Target	Possible Horizontal Alignment
Lesson 1: Understand Ratios		
MA.6.AR.3.1 Given a real-world context, write and interpret ratios to show the relative sizes of two quantities using appropriate notation: ab, a to b, or $a:b$ where $b \neq 0$. **Clarification 1:** Instruction focuses on the understanding that a ratio can be described as a comparison of two quantities in either the same or different units. **Clarification 2:** Instruction includes using manipulatives, drawings, models and words to interpret part-to-part ratios and part-to-whole ratios. **Clarification 3:** The values of a and b are limited to whole numbers.	• Use ratios to describe the relationship between two quantities. • Use bar diagrams and double number line diagrams to model ratio relationships.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.3.5
Lesson 2: Generate Equivalent Ratios		
MA.6.AR.3.1 Given a real-world context, write and interpret ratios to show the relative sizes of two quantities using appropriate notation: ab, a to b, or $a:b$ where $b \neq 0$. **Clarification 1:** Instruction focuses on the understanding that a ratio can be described as a comparison of two quantities in either the same or different units. **Clarification 2:** Instruction includes using manipulatives, drawings, models and words to interpret part-to-part ratios and part-to-whole ratios. **Clarification 3:** The values of a and b are limited to whole numbers.	• Use multiplication and division to find equivalent ratios. • Solve problems by finding equivalent ratios.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.3.5
Lesson 3: Compare Ratios		
MA.6.AR.3.3 Extend previous understanding of fractions and numerical patterns to generate or complete a two- or three-column table to display equivalent part-to-part ratios and part-to-part-to-whole ratios. **Clarification 1:** Instruction includes using two-column tables (e.g., a relationship between two variables) and three-column tables (e.g., part-to-part-to-whole relationship) to generate conversion charts and mixture charts.	• Use ratio tables to compare ratios. • Compare ratios to solve problems.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3
Lesson 5: Understand Rates and Unit Rates		
MA.6.AR.3.2 Given a real-world context, determine a rate for a ratio of quantities with different units. Calculate and interpret the corresponding unit rate. **Clarification 1:** Instruction includes using manipulatives, drawings, models and words and making connections between ratios, rates and unit rates. **Clarification 2:** Problems will not include conversions between customary and metric systems.	• Use rates to describe ratios in which the terms have different units. • Use rates and unit rates to solve problems.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3
MA.6.AR.3.3 Extend previous understanding of fractions and numerical patterns to generate or complete a two- or three-column table to display equivalent part-to-part ratios and part-to-part-to-whole ratios.		MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3

Clarification 1: Instruction includes using two-column tables (e.g., a relationship between two variables) and three-column tables (e.g., part-to-part-to-whole relationship) to generate conversion charts and mixture charts.		
Let's Investigate! Rate that Scooter/ Lesson 6: Compare Unit Rates		
MA.6.AR.3.2 Given a real-world context, determine a rate for a ratio of quantities with different units. Calculate and interpret the corresponding unit rate. **Clarification 1:** Instruction includes using manipulatives, drawings, models and words and making connections between ratios, rates and unit rates. **Clarification 2:** Problems will not include conversions between customary and metric systems.	• Use ratio reasoning to compare rates and solve problems.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3
MA.6.AR.3.3 Extend previous understanding of fractions and numerical patterns to generate or complete a two- or three-column table to display equivalent part-to-part ratios and part-to-part-to-whole ratios. **Clarification 1:** Instruction includes using two-column tables (e.g., a relationship between two variables) and three-column tables (e.g., part-to-part-to-whole relationship) to generate conversion charts and mixture charts.		MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3
Lesson 7: Solve Unit Rate Problems		
MA.6.AR.3.2 Given a real-world context, determine a rate for a ratio of quantities with different units. Calculate and interpret the corresponding unit rate. **Clarification 1:** Instruction includes using manipulatives, drawings, models and words and making connections between ratios, rates and unit rates. **Clarification 2:** Problems will not include conversions between customary and metric systems.	• Use unit rates to solve problems involving constant speed. • Use unit rates to solve problems involving unit price. • Solve unit rate problems using an equation.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3
MA.6.AR.3.3 Extend previous understanding of fractions and numerical patterns to generate or complete a two- or three-column table to display equivalent part-to-part ratios and part-to-part-to-whole ratios. **Clarification 1:** Instruction includes using two-column tables (e.g., a relationship between two variables) and three-column tables (e.g., part-to-part-to-whole relationship) to generate conversion charts and mixture charts.		MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3
Lesson 8: Ratio Reasoning: Convert Customary Units		
MA.6.AR.3.5 Solve mathematical and real-world problems involving ratios, rates and unit rates, including comparisons, mixtures, ratios of lengths and conversions within the same measurement system. **Clarification 1:** Instruction includes the use of tables, tape diagrams and number lines.	• Use ratio reasoning and conversion factors to convert customary units of measure.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.1.1, MA.6.AR.2.3
Lesson 9: Ratio Reasoning: Convert Metric Units		
MA.6.AR.3.5 Solve mathematical and real-world problems involving ratios, rates and unit rates, including comparisons, mixtures, ratios of lengths and	• Use ratio reasoning and conversion factors to convert metric units of measure.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.1.1, MA.6.AR.2.3

conversions within the same measurement system. **Clarification 1:** Instruction includes the use of tables, tape diagrams and number lines.		

Foundational Content [link to separate document]	**Content/Academic Language**
Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards. **The linked document contains supporting resources.**	• Ratio • Equivalent ratios • Rate • Unit rate • Unit price • Constant speed • Conversion factor • Dimensional analysis • Customary units • Metric units

Common Misconceptions (this is not a complete list, just suggestions)	**Teacher Notes** (this is not a complete list, just suggestions)
• Students may not recognize simplified forms of ratios. It is not required that students determine the simplified version of a ratio, but when comparing the ratios with other students and seeing different numbers, students should become more adept at seeing both ratios as representing the same relationship. The student should be reminded of the connection to equivalent fractions. • Students may incorrectly identify what is being compared or the order of quantities being compared by the rate. • Using cross products as a strategy to test for equivalent ratios may lead to errors and misconceptions on solving more complex equations in the future. Instead focus on testing for equivalent ratios using tables, graphs or ratio tables.. • Students may have difficulty connecting a unit rate, which is represented by a single number, to a ratio or non-unit rate, which may be represented by two numbers. • Students may not understand the difference between an additive relationship and a multiplicative relationship.	• Help students understand how to show the ratio on a graph without first making a table. • Use models including bar diagrams to represent ratios. • Use ratio tables to describe the relationship between the quantities. • Fractions and ratios may represent different comparisons. Fractions can express a part-to-whole, while ratios can express a part-to-whole or part-to-part comparison. • Conversions can occur both between and across the Metric and Customary systems. • For additional instructional strategies, instructional tasks and instructional items, see the FLDOE B.E.S.T. Instructional Guide (B1G-M) for Grade 6 Mathematics.

GR6_T7_FSQ_OL_FY24

SCOPE & SEQUENCE - QUARTER 3

Topic 8: Understand and Use Percent

Topic Goal: Students will understand the meaning of percent and how percentages can be estimated and calculated.	**Suggested Time Frame:**	19 days, 1/22/2024 to 2/15/2024
Text Resources: enVision Florida Mathematics: Grade 6 Accelerated Mathematics, pgs. 474-531	**Unit Plans:**	Unit Plans provided in Blender, Link to the FLDOE B1G-M

Benchmark (B.E.S.T. Standards for Mathematics)	Student Target
MA.6.AR.3.4 Apply ratio relationships to solve mathematical and real-world problems involving percentages using the relationship between two quantities. **Clarification 1:** Instruction includes the comparison of $\frac{part}{whole}$ to $\frac{percent}{100}$ in order to determine the percent, the part or the whole.	• Represent the percent of a whole. • Find the percent of a whole. • Write equivalent values as fractions, decimals, and percents. • Write fractions as decimals and percents when the denominator of the fraction is not 100. • Write percents that are greater than 100. • Write percents that are less than 1. • Estimate the percent of a number. • Use the decimal form of a percent to find the percent of a number. • Write an equation to solve a percent problem. • Find the whole amount when given a part and the percent.
MA.6.AR.3.5 Solve mathematical and real-world problems involving ratios, rates and unit rates, including comparisons, mixtures, ratios of lengths and conversions within the same measurement system. **Clarification 1:** Instruction includes the use of tables, tape diagrams and number lines.	
MA.6.NSO.3.5 Rewrite positive rational numbers in different but equivalent forms including fractions, terminating decimals and percentages. **Clarification 1:** Rational numbers include decimal equivalence up to the thousandths place.	

Foundational Content [link to separate document]	Content/Academic Language
Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards. **The linked document contains supporting resources.**	• Percent • Rate

Common Misconceptions (this is not a complete list, just suggestions)	Teacher Notes (this is not a complete list, just suggestions)
• Students may not understand the difference between an additive relationship and a multiplicative relationship. • Students may incorrectly set up ratios because of a misunderstanding of the part and the whole addressed in the situation. • Students may not recognize simplified forms of ratios in order to find equivalent ratios to determine the percentage, the whole or the part. • Students may confuse the part and the whole in the percent problem.	• Use Ratio tables, number lines, and bar graphs during instruction. • Use Problem strings to bring out relationships between 100, 50 and 10 percents. • Students may use the shortcut of "move the decimal point two places to the right" to find the percent. However, be sure that students understand how a percent relates to fractions and decimals. • Apply ratio reasoning to solve percent problems. • Make sure to include percentages over 100% and those less than 1%. • For additional instructional strategies, instructional tasks and instructional items, see the FLDOE B.E.S.T. Instructional Guide (B1G-M) for Grade 6 Mathematics.

GR6_T7-T8_USA_OL_FY24

Topic 10: Model and Solve Problems Involving Geometry

Topic Goal: Students will learn how the areas of certain shapes can be calculated. Students will differentiate between surface area and volume and how each can be found.	**Suggested Time Frame:**	19 days, 2/16/2024 to 3/14/24
Text Resources: enVision Florida Mathematics: Grade 6 Accelerated Mathematics, pgs. 590-679	**Unit Plans:**	Unit Plans provided in Blender, Link to the FLDOE B1G-M

Benchmark (B.E.S.T. Standards for Mathematics)	Student Target	Possible Horizontal Alignment
Lesson 1: Represent Rational Numbers on the Coordinate Plane		
MA.6.GR.1.1 Extend previous understanding of the coordinate plane to plot rational number ordered pairs in all four quadrants and on both axes. Identify the x- or y-axis as the line of reflection when two ordered pairs have an opposite x- or y- coordinate.	• Identify and graph points with rational coordinates on the coordinate plane. • Reflect points with rational coordinates across both axes.	MA.6.NSO.1.1, MA.6.NSO.1.2, MA.6.NSO.1.4
Lesson 2: Solve Problems on the Coordinate Plane		
MA.6.GR.1.2 Find distances between ordered pairs, limited to the same x-coordinate or the same y-coordinate, represented on the coordinate plane.	• Use absolute value to find the distance between two points that lie on the same horizontal or vertical line on a coordinate plane. • Solve real-world and mathematical problems involving distances on the coordinate plane.	MA.6.NSO.1.1, MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.NSO.1.4, MA.6.NSO.4.1, MA.6.AR.2.4
MA.6.GR.1.3 Solve mathematical and real-world problems by plotting points on a coordinate plane, including finding the perimeter or area of a rectangle. **Clarification 1:** Instruction includes finding distances between points, computing dimensions of a rectangle or determining a fourth vertex of a rectangle. **Clarification 2:** Problems involving rectangles are limited to cases where the sides are parallel to the axes.		MA.6.NSO.1.1, MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.NSO.1.4, MA.6.NSO.4.1, MA.6.AR.2.4
Lesson 3: Derive and Apply the Triangle Area Formula		
MA.6.GR.2.1 Derive a formula for the area of a right triangle using a rectangle. Apply a formula to find the area of a triangle. **Clarification 1:** Instruction focuses on the relationship between the area of a rectangle and the area of a right triangle. **Clarification 2:** Within this benchmark, the expectation is to know from memory a formula for the area of a triangle	• Find the areas of triangles, including right triangles. • Find the corresponding height given a particular base of a triangle.	MA.6.NSO.2.1, MA.6.AR.2.3
Lesson 4: Decompose Polygons into Triangles and Rectangles		
MA.6.GR.2.2 Solve mathematical and real-world problems involving the area of quadrilaterals and composite figures by decomposing them into triangles or rectangles. **Clarification 1:** Problem types include finding area of composite shapes and determining missing dimensions. **Clarification 2:** Within this benchmark, the expectation is to know from memory	• Find the areas of polygons by composing and decomposing shapes, including polygons on the coordinate plane.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.1.1

a formula for the area of a rectangle and triangle. **Clarification 3:** Dimensions are limited to positive rational numbers.		
MA.6.AR.1.3 Evaluate algebraic expressions using substitution and order of operations. **Clarification 1:** Clarification 1: Within this benchmark, the expectation is to perform all operations with integers. **Clarification 2:** Clarification 2: Refer to Properties of Operations, Equality and Inequality (Appendix D).		MA.6.NSO.3.3, MA.6.NSO.4.1, MA.6.NSO.4.2, MA.6.AR.2.1
Let's Investigate! Nothing but Net!/ Lesson 7: Represent Solid Figures Using Nets		
MA.6.GR.2.4 Given a mathematical or real-world context, find the surface area of right rectangular prisms and right rectangular pyramids using the figure's net. **Clarification 1:** Instruction focuses on representing a right rectangular prism and right rectangular pyramid with its net and on the connection between the surface area of a figure and its net. **Clarification 2:** Within this benchmark, the expectation is to find the surface area when given a net or when given a three-dimensional figure. **Clarification 3:** Problems involving right rectangular pyramids are limited to cases where the heights of triangles are given. **Clarification 4:** Dimensions are limited to positive rational numbers.	• Classify solid figures. • Identify solid figures from nets. • Draw nets of solid figures.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.2.3
Let's Investigate! On the Surface/ Lesson 8: Find Surface Areas of Prisms		
MA.6.GR.2.4 Given a mathematical or real-world context, find the surface area of right rectangular prisms and right rectangular pyramids using the figure's net. **Clarification 1:** Instruction focuses on representing a right rectangular prism and right rectangular pyramid with its net and on the connection between the surface area of a figure and its net. **Clarification 2:** Within this benchmark, the expectation is to find the surface area when given a net or when given a three-dimensional figure. **Clarification 3:** Problems involving right rectangular pyramids are limited to cases where the heights of triangles are given. **Clarification 4:** Dimensions are limited to positive rational numbers.	• Find the area of rectangular prisms, including cubes.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.2.3
MA.6.AR.1.3 Evaluate algebraic expressions using substitution and order of operations. **Clarification 1:** Within this benchmark, the expectation is to perform all operations with integers. **Clarification 2:** Refer to Properties of Operations, Equality and Inequality (Appendix D).		MA.6.NSO.3.3, MA.6.NSO.4.1, MA.6.NSO.4.2, MA.6.AR.2.1
Lesson 9: Find Surface Areas of Pyramids		
MA.6.GR.2.4 Given a mathematical or real-world context, find the surface area of right rectangular prisms and right rectangular pyramids using the figure's net. **Clarification 1:** Instruction focuses on representing a right rectangular prism	• Find the surface areas of square and rectangular pyramids.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.2.3

and right rectangular pyramid with its net and on the connection between the surface area of a figure and its net. **Clarification 2:** Within this benchmark, the expectation is to find the surface area when given a net or when given a three-dimensional figure. **Clarification 3:** Problems involving right rectangular pyramids are limited to cases where the heights of triangles are given. **Clarification 4:** Dimensions are limited to positive rational numbers.		
MA.6.AR.1.3 Evaluate algebraic expressions using substitution and order of operations. **Clarification 1:** Within this benchmark, the expectation is to perform all operations with integers. **Clarification 2:** Refer to Properties of Operations, Equality and Inequality (Appendix D).		MA.6.NSO.3.3, MA.6.NSO.4.1, MA.6.NSO.4.2, MA.6.AR.2.1
Lesson 10: Find Volume with Fractional Edge Lengths		
MA.6.GR.2.4 Given a mathematical or real-world context, find the surface area of right rectangular prisms and right rectangular pyramids using the figure's net.	• Use cubes and a formula to find the volume of a rectangular prism or a cube with fractional edge lengths.	MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.2.3
MA.6.AR.1.1 Given a mathematical or real-world context, translate written descriptions into algebraic expressions and translate algebraic expressions into written descriptions.		MA.6.NSO.1.2, MA.6.NSO.1.3, MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.AR.2.2, MA.6.AR.2.3, MA.6.AR.3.5, MA.6.GR.2.2, MA.6.GR.2.3
MA.6.AR.1.3 Evaluate algebraic expressions using substitution and order of operations. **Clarification 1:** Within this benchmark, the expectation is to perform all operations with integers. **Clarification 2:** Refer to Properties of Operations, Equality and Inequality (Appendix D).		MA.6.NSO.3.3, MA.6.NSO.4.1, MA.6.NSO.4.2, MA.6.AR.2.1
MA.6.GR.2.3 Solve mathematical and real-world problems involving the volume of right triangular prisms with positive rational number edge lengths using a visual model and a formula. **Clarification 1:** Problem types include finding the volume or a missing dimension of a rectangular prism		MA.6.NSO.2.1, MA.6.NSO.2.2, MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.1.1, MA.6.AR.2.3

Foundational Content [link to separate document]	**Content/Academic Language**
Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards. **The linked document contains supporting resources.**	• Axes • Coordinate plane • Coordinate • Origin • Quadrant • Area • Parallelogram • Rectangle

	• Rhombus • Triangle • Composite figure • Polygon • Quadrilateral • Trapezoid • Net • Rectangular prism • Rectangular pyramid

Common Misconceptions (this is not a complete list, just suggestions)	**Teacher Notes** (this is not a complete list, just suggestions)
• Students may have trouble finding the distance across either of the axes. o For example, find the distance between (–4, 3) and (5, 3). It may appear that the "difference" between –4 and 5 is 1. However, the distance from –4 to 0 is 4 units and from 0 to 5 is 5 units. Therefore, the distance between the two points is 9 units. • Students may not be able to determine the difference in the two-dimensional figures that compose three-dimensional figures. • Students may invert the formulas for surface area and volume.	• Have students work in pairs. Have each student use grid paper to draw a polygon that is composed of triangles and quadrilaterals. Encourage students to use three different shapes to compose their polygon. • Have students draw multiple nets for the same object. • Have students cut out their nets and fold them to form a solid figure. • Have students use a net for a rectangular prism to construct a model. Have students label the length and width of each face of the model with the dimensions shown for the prism. Then have students unfold the model and lay it flat to see each face labeled with the correct dimensions. • If students have difficulty finding the surface area of the triangular prism, provide them with a net for the triangular prism and have them label it with the dimensions of the prism's faces. • "Knowing the formula" does not mean memorization of the formula. To "know" means to have an understanding of why the formula works and how the formula relates to the measure (area) and the figure. • Instruction should focus on the composition and decomposition of polygons into rectangles and triangles and not on memorization of formulas • Have students make connections between areas of different polygons and area to volume. • For additional instructional strategies, instructional tasks and instructional items, see the FLDOE B.E.S.T. Instructional Guide (B1G-M) for Grade 6 Mathematics.

GR6_T10_FSQ_OL_FY24

SCOPE & SEQUENCE - QUARTER 4

Topic 11: Display, Describe, and Summarize Data		
Topic Goal: Students will learn how data can be described by a single number and how tables and graphs can be used to represent and answer questions about data.	**Suggested Time Frame:**	20 days, 3/15/24 to 4/23/24

Text Resources: enVision Florida Mathematics: Grade 6 Accelerated Mathematics, pgs. 680- 739	**Unit Plans:**	Unit Plans provided in Blender, Link to the FLDOE B1G-M

Benchmark (B.E.S.T. Standards for Mathematics)	Student Target	Possible Horizontal Alignment
Let's Investigate! Let's Chat about Data/ Lesson 1: Recognize Statistical Questions		
MA.6.DP.1.1 Recognize and formulate a statistical question that would generate numerical data.	• Identify statistical questions. • Write statistical questions and display the collected data.	MA.6.AR.1.1
Lesson 2: Summarize Data Using Mean, Median, Mode, and Range		
MA.6.DP.1.2 Given a numerical data set within a real-world context, find and interpret mean, median, mode and range. **Clarification 1:** Numerical data is limited to positive rational numbers.	• Determine the mean, median, mode, and range of a data set.	MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.2.2, MA.6.AR.2.3
MA.6.NSO.2.1 Multiply and divide positive multi-digit numbers with decimals to the thousandths, including using a standard algorithm with procedural fluency. **Clarification 1:** Multi-digit decimals are limited to no more than 5 total digits.		MA.6.NSO.3.3, MA.6.AR.1.1, MA.6.AR.2.4, MA.6.AR.3, MA.6.GR.2, MA.6.DP.1.2, MA.6.DP.1.3, MA.6.DP.1.4
MA.6.NSO.2.3 Solve multi-step real-world problems involving any of the four operations with positive multi-digit decimals or positive fractions, including mixed numbers. **Clarification 1:** Within this benchmark, it is not the expectation to include both decimals and fractions within a single problem.		MA.6.AR.1.1, MA.6.AR.2.4, MA.6.AR.3.2, MA.6.AR.3.3, MA.6.AR.3.4, MA.6.AR.3.5, MA.6.GR.2, MA.6.DP.1.2, MA.6.DP.1.3, MA.6.DP.1.4, MA.6.DP.1.6
Let's Investigate! Describe That Data/ Lesson 3: Describe and Interpret Line Plots		
MA.6.DP.1.2 Given a numerical data set within a real-world context, find and interpret mean, median, mode and range. **Clarification 1:** Numerical data is limited to positive rational numbers.	• Describe how a line plot displays a data set. • Interpret data presented in a line plot.	MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.2.2, MA.6.AR.2.3
MA.6.DP.1.4 Given a histogram or line plot within a real-world context, qualitatively describe and interpret the spread and distribution of the data, including any symmetry, skewness, gaps, clusters, outliers and the range. **Clarification 1:** Refer to K-12 Mathematics Glossary (Appendix C).		MA.6.NSO.2.3, MA.6.NSO.3.5
Lesson 4: Display Data in Frequency Tables and Histograms		
MA.6.DP.1.2 Given a numerical data set within a real-world context, find and interpret mean, median, mode and range. **Clarification 1:** Numerical data is limited to positive rational numbers.	• Organize data into equal intervals and displaydata in a frequency table or histogram. • Interpret and analyze a histogram.	MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.2.2, MA.6.AR.2.3
MA.6.DP.1.4 Given a histogram or line plot within a real-world context, qualitatively describe and interpret the spread and distribution of the data, including any symmetry, skewness, gaps, clusters, outliers and the range.		MA.6.NSO.2.3, MA.6.NSO.3.5

Clarification 1: Refer to K-12 Mathematics Glossary (Appendix C).		
MA.6.DP.1.5 Create box plots and histograms to represent sets of numerical data within real-world contexts. **Clarification 1:** Instruction includes collecting data and discussing ways to collect truthful data to construct graphical representations. **Clarification 2:** Within this benchmark, it is the expectation to use appropriate titles, labels, scales and units when constructing graphical representations. **Clarification 3:** Numerical data is limited to positive rational numbers.		MA.6.NSO.2.3, MA.6.NSO.3.5
Lesson 5: Display Data in Box Plots		
MA.6.DP.1.5 Create box plots and histograms to represent sets of numerical data within real-world contexts. **Clarification 1:** Instruction includes collecting data and discussing ways to collect truthful data to construct graphical representations. **Clarification 2:** Within this benchmark, it is the expectation to use appropriate titles, labels, scales and units when constructing graphical representations. **Clarification 3:** Numerical data is limited to positive rational numbers.	• Display data in a box plot. • Interpret and analyze a box plot.	MA.6.NSO.2.3, MA.6.NSO.3.5
MA.6.DP.1.3 Given a box plot within a real-world context, determine the minimum, the lower quartile, the median, the upper quartile and the maximum. Use this summary of the data to describe the spread and distribution of the data. **Clarification 1:** Instruction includes describing range, interquartile range, halves and quarters of the data.		MA.6.NSO.2.3, MA.6.NSO.3.5
Lesson 6: Determine How Data Changes Impact Statistical Measures		
MA.6.DP.1.2 Given a numerical data set within a real-world context, find and interpret mean, median, mode and range. **Clarification 1:** Numerical data is limited to positive rational numbers.	• Use measures to describe data sets. • Determine how measures of center or variability change when data is added to or removed from a data set.	MA.6.NSO.2.3, MA.6.NSO.3.5, MA.6.AR.2.2, MA.6.AR.2.3
MA.6.DP.1.6 Given a real-world scenario, determine and describe how changes in data values impact measures of center and variation. **Clarification 1:** Instruction includes choosing the measure of center or measure of variation depending on the scenario. **Clarification 2:** The measures of center are limited to mean and median. The measures of variation are limited to range and interquartile range. **Clarification 3:** Numerical data is limited to positive rational numbers.		MA.6.NSO.2.3, MA.6.AR.1.2, MA.6.AR.2.3

Foundational Content [link to separate document]	**Content/Academic Language**
Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards. **The linked document contains supporting resources.**	• Statistical question • Outlier • Quartiles • Interquartile range • Box plot

	• Line plot • Histogram • Frequency table • Data • Mode • Range • Mean • Measures of center • Measures of variability • Median

Common Misconceptions (this is not a complete list, just suggestions)	**Teacher Notes** (this is not a complete list, just suggestions)
• Students may believe that all the questions that they write are statistical questions. Students need to understand that a statistical question must have a range of numerical answers. They will need to have sample questions and practice writing their own. • Students may think that a survey question is a statistical question, since a survey question can be used to answer a statistical question. A statistical question concerns a population. A survey question is asked of individuals in a population to help answer a statistical question. • Students may incorrectly believe that "average" only represents the mean of a data set. Average may be any of the following: average as mode, average as something reasonable, average as the mean and average as the median. • Students may confuse mean and median. • Students may neglect to order the numbers in the data set from least to greatest when finding the median or range. • Students may incorrectly calculate the median given a data set with an even number of values. Students may incorrectly believe more data will create a larger box in a box plot. • Students may neglect to order values from least to greatest when creating a box plot. • Students may neglect to include titles and labels in the graphical representations. • Students may incorrectly categorize the data measures (mean, median, range, interquartile range) as measures of center or measures of variability. It can be helpful to frequently refer back to the purpose of a type of measure and how it relates to the center of the data or the variation of the data. • Students may incorrectly try to determine the change by calculating the mean, median, range or interquartile range for the changed data set instead of calculating for both the initial and the changed sets before comparing.	• Instruction focuses on statistical questions that generate numerical data. Once the data is gathered, it can be organized in a table or displayed in a graph. • Explain that a question is statistical if a variety of responses are possible. So when evaluating the given questions, students must consider not only how many answers a question could have, but also how the information is being collected. Make sure instruction addresses survey questions and how they are used to collect data to gather information for a statistical question. • Suggest some questions that students could ask their classmates and categorize as statistical or not statistical on a chart. • Explain that the distance between each measure marked on a box plot contains about one-quarter of the data. It may help to have students label the quarters on a box plot. • Include activities that require students to match graphs and explanations, or measures of center and explanations prior to interpreting graphs based upon the computation measures of center or spread. • Remind students that they should look to see whether a distribution is roughly symmetrical, not perfectly symmetrical. • Students need to understand what measure of center and variability to use depending on the distribution of the data and if it contains an outlier, and most importantly why use those measures. • For additional instructional strategies, instructional tasks and instructional items, see the FLDOE B.E.S.T. Instructional Guide (B1G-M) for Grade 6 Mathematics.

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SCOPE & SEQUENCE

Grade 6 Science (Reg & Advanced)

2023-2024 Year-at-a-Glance

Unit	Title	Dates
1	Nature of Science	08/16 - 09/06 (15 days)
2	Energy, Force, & Motion	09/07 - 10/11 (24 days)
3	Shaping Earth's Surface	10/16 - 11/17 (24 days)
4	Earth15's Systems	11/27 - 12/15 (15 days)
5	Weather & Climate	01/09 - 02/09 (23 days)
6	Cells	02/12 - 03/15 (24 days)
7	Classification of Living Things	03/26 - 04/16 (14 days)
8	Human Body Systems	04/17 - 05/17 (23 days)
9	Human Growth & Development	05/20- 05/24 (5 days)
Grade 6 End of Year Assessment		05/28 - 05/29

KEY COMPONENTS OF THE SCOPE & SEQUENCE

Unit 1: Title		
Unit Goal: the overarching learning goal for the unit; the desired results	**Suggested Time Frame:**	Recommended time frame, including assessment and review
Text Resources: the portions of the adopted text related to the Unit. NOTE: not all pages in each section are closely aligned to the benchmarks/targets. Teachers should be strategic and focused when deciding which pages to include in lessons.	**Lesson Plans:**	Publisher provided lesson plans in Blender Florida Statute 1003.42: alignment, if applicable

Content/Academic Language	
FLDOE	content -specific vocabulary identified by the Florida Department of Education
Other	Additional content-specific vocabulary and/or academic language to help achieve mastery of the standards.

Florida State Academic Standards	Complexity Level	Student Target
Topic 1: Recommended chunking of targets (aligns with FSQs, as applicable)		
The required standards according to the course description posted on CPALMS by the Florida Department of education. Benchmarks designated for honors or advanced courses are indicated with two asterisks (**)	The level of cognitive complexity a learning activity or assessment item associated with the standard might entail.	The essential knowledge, specific skills, and/or concepts students should acquire to master the benchmark.

Access Points Standards			
Standard	**Independent**	**Supported**	**Participatory**
FSAS Standard	These access points are written for students with significant cognitive disabilities to facilitate access to the general education curriculum. Embedded in the Florida State Academic Standards, access points reflect the core intent of the standards, with reduced levels of complexity.		

Foundational Content
Foundational content includes skills & knowledge from earlier grades that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

Common Misconceptions	Teacher Notes
Predictable misconceptions commonly held by students that could undermine their efforts to learn. These erroneous understandings/ideas should be addressed in order to achieve conceptual change.	Things to consider when planning your instruction. This is not a complete list, just suggestions.

Sample Literacy Strategies	Prefixes, Suffixes, Roots
Suggested literacy strategies to help students achieve the learning goals.	Common prefixes, suffixes, and roots to help students understand scientific terminology.

Sample Assessment Questions	
A sample assessment question aligned to a content benchmark in the unit.	A sample assessment question aligned to a Nature of Science benchmark in the unit.

The title of the corresponding USA, if provided

Every one of the Florida State Academic Standards (FSAS) in the Scope & Sequence is accompanied by one of the three statements found below. The following descriptions and examples illustrate the distinctions between each type of benchmark listed.

Statement	Description	Example
Parent benchmark on the Statewide Science Assessment	Each of these benchmarks are specific statements of expected student achievement presented in the FSAS; they describe the overarching concept for a benchmark group of related benchmarks.	SC.6.P.13.3 Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both **(parent benchmark on the Statewide Science Assessment).** *Please see the FCAT 2.0 Test Item Specifications and note the bolded benchmark at the top of page 79.*
Assessed as (parent benchmark) on the Statewide Science Assessment	These benchmarks are closely related to the parent benchmark, which follows "assessed as." They are grouped together due to the relationship of the concepts in the benchmarks. Each item on the Statewide Science Assessment will be written primarily to one of these benchmarks or the parent benchmark.	SC.6.P.12.1 Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship **(assessed as SC.6.P.13.3 on the Statewide Science Assessment).** *An object's speed and/or direction of motion changes as a result of an unbalanced force, thus the concepts in this benchmark are related to those in SC.6.P.13.3. Please see page 79 of the FCAT 2.0 Test Item Specifications and note the benchmark next to the words "Also Assesses."*
Not assessed on the Statewide Science Assessment	While these benchmarks will not be assessed on the Statewide Science Assessment, they are included in the course description, thus they should be taught to help your students gain a better understanding of all concepts presented in the unit of study. These benchmarks are more appropriately assessed through classroom instruction.	SC.6.N.3.4 Identify the role of models in the context of the sixth grade science benchmarks **(not assessed on the Statewide Science Assessment).** *While this specific benchmark may not be assessed on the Statewide Science Assessment, other benchmarks related to models (SC.7.N.1.5, SC.7.N.3.2, SC.8.N.1.5, and SC.8.E.5.10) are assessed, as well as concepts, such as the water cycle or the structure of a cell, where a model would be of great use.*

Each Nature of Science benchmark is listed in at least one unit, during which it should be especially emphasized; however, **all Nature of Science benchmarks should be infused into all areas of the middle school curriculum.** The following benchmarks are found in multiple units throughout the Scope & Sequence. Please note that although the benchmark is repeated in subsequent units, the student targets associated with the benchmark are specific to that unit.

Benchmark	Initial Unit	Subsequent Units
SC.6.N.1.1	Unit 1: Nature of Science	Unit 2: Energy, Force, & Motion Unit 4: Earth's Systems Unit 5: Weather & Climate Unit 8: Human Body Systems
SC.6.N.1.2	Unit 1: Nature of Science	Unit 8: Human Body Systems
SC.6.N.1.5	Unit 1: Nature of Science	Unit 5: Weather & Climate
SC.6.N.2.2	Unit 4: Earth's Systems	Unit 7: Cells
SC.6.N.2.3	Unit 1: Nature of Science	Unit 6: Classification of Living Thing Unit 7: Cells

Every one of the Florida State Academic Standards (FSAS) has been assigned a Cognitive Complexity Level by the FLDOE. The Depth of Knowledge (DOK) model was designed to align content standards and assessments. The DOK level for a benchmark represents the typical level of cognitive complexity of a learning activity or assessment item associated with that benchmark. The following table illustrates the distinctions between each level and provides examples at each level.

Complexity	Test Items...	Students will...	Examples
Low	• rely heavily on the recall and recognition of previously learned concepts and principles • typically specify what the student is to do, which is often to carry out some procedure that can be performed mechanically	• not be required to come up with an original method or solution • retrieve information from a chart, table, diagram, or graph • recognize a standard scientific representation of a simple phenomenon or identify common examples • complete a familiar single-step procedure or solve a problem using a known formula	• Recall or recognize a fact, term, or property. • Represent in words or diagrams a scientific concept or relationship. • Provide or recognize a standard scientific representation for simple phenomena. • Perform a routine procedure such as measuring length. • Identify familiar forces (e.g. pushes, pulls, gravitation, friction, etc.) • Identify objects and materials as solids, liquids, or gases.
Moderate	• involve more flexible thinking than low-complexity test items do • require a response that goes beyond the habitual, is not specified, and ordinarily involves more than a single step or thought process	• be expected to decide what to do—using informal methods of reasoning and problem-solving strategies—and to bring together skill and knowledge from various domains • interpret data from a chart, table, or simple graph • determine the best way to organize or present data from observations, an investigation, or experiments • describe or explain examples and non-examples of scientific processes or concepts • specify or explain relationships among different groups, facts, properties, or variables • differentiate structure and functions of different organisms or systems • predict or determine the next logical step or outcome • apply and use concepts from a standard scientific model or theory	• Specify and explain the relationship among facts, terms, properties, and variables. • Identify variables, including controls, in simple experiments. • Distinguish between experiments and systematic observations. • Describe and explain examples and non-examples of science concepts. • Select a procedure according to specified criteria and perform it. • Formulate a routine problem given data and conditions. • Organize, represent, and interpret data.
High	• make heavy demands on student thinking • require that the student think in an aBstract and sophisticated way, often involving multiple steps	• engage in abstract reasoning, planning, analysis, using evidence, judgment, and creative thought • analyze data from an investigation or experiment and formulate a conclusion • develop a generalization from multiple data sources • analyze and evaluate an experiment with multiple variables • analyze an investigation or experiment to identify a flaw and propose a method for correcting it • analyze a problem, situation, or system and make long-term predictions • interpret, explain, or solve a problem involving complex spatial relationships	• Identify research questions and design investigations for a scientific problem. • Design and execute an experiment or systematic observation to test a hypothesis or research question. • Develop a scientific model for a complex situation. • Form conclusions from experimental data. • Cite evidence that living systems follow the Laws of Conservation of Mass and Energy. • Explain how political, social, and economic concerns can affect science, and vice versa. • Create a conceptual or mathematical model to explain the key elements of a scientific theory or concept. • Explain the physical properties of the Sun and its dynamic nature and connect them to conditions and events on Earth. • Analyze past, present, and potential future consequences to the environment resulting from various energy production technologies.

The following Mathematics and ELA standards are also included in the Grade 6 Science (Reg & Adv) course description and should be implemented on a routine basis.

English Language Development/Proficiency Standards for English Language Learners - ELD.K12.ELL.	
SC.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.
SI.1	English language learners communicate for social and instructional purposes within the school setting.

B.E.S.T Standards for Mathematics

Benchmark	Student expectations	Teacher clarifications
MA.K12.MTR.1.1 Participate in effortful learning both individually and with others.	Mathematicians who participate in effortful learning both individually and with others: • Analyze the problem in a way that makes sense given the task. • Ask questions that will help with solving the task. • Build perseverance by modifying methods as needed while solving a challenging task. • Stay engaged and maintain a positive mindset when working to solve tasks. • Help and support each other when attempting a new method or approach.	Teachers who encourage students to participate actively in effortful learning both individually and with others: • Cultivate a community of growth mindset learners. • Foster perseverance in students by choosing tasks that are challenging. • Develop students' ability to analyze and problem solve. • Recognize students' effort when solving challenging problems.
MA.K12.MTR.2.1 Demonstrate understanding by representing problems in multiple ways.	Mathematicians who demonstrate understanding by representing problems in multiple ways: • Build understanding through modeling and using manipulatives. • Represent solutions to problems in multiple ways using objects, drawings, tables, graphs and equations. • Progress from modeling problems with objects and drawings to using algorithms and equations. • Express connections between concepts and representations. • Choose a representation based on the given context or purpose.	Teachers who encourage students to demonstrate understanding by representing problems in multiple ways: • Help students make connections between concepts and representations. • Provide opportunities for students to use manipulatives when investigating concepts. • Guide students from concrete to pictorial to abstract representations as understanding progresses. • Show students that various representations can have different purposes and can be useful in different situations.
MA.K12.MTR.3.1 Complete tasks with mathematical fluency.	Mathematicians who complete tasks with mathematical fluency: • Select efficient and appropriate methods for solving problems within the given context. • Maintain flexibility and accuracy while performing procedures and mental calculations. • Complete tasks accurately and with confidence. • Adapt procedures to apply them to a new context. • Use feedback to improve efficiency when performing calculations.	Teachers who encourage students to complete tasks with mathematical fluency: • Provide students with the flexibility to solve problems by selecting a procedure that allows them to solve efficiently and accurately. • Offer multiple opportunities for students to practice efficient and generalizable methods. • Provide opportunities for students to reflect on the method they used and determine if a more efficient method could have been used.
MA.K12.MTR.4.1 Engage in discussions that reflect on the mathematical thinking of self and others.	Mathematicians who engage in discussions that reflect on the mathematical thinking of self and others: • Communicate mathematical ideas, vocabulary and methods effectively. • Analyze the mathematical thinking of others. • Compare the efficiency of a method to those expressed by others. • Recognize errors and suggest how to correctly solve the task. • Justify results by explaining methods and processes. • Construct possible arguments based on evidence.	Teachers who encourage students to engage in discussions that reflect on the mathematical thinking of self and others: • Establish a culture in which students ask questions of the teacher and their peers, and error is an opportunity for learning. • Create opportunities for students to discuss their thinking with peers. • Select, sequence and present student work to advance and deepen understanding of correct and increasingly efficient methods. • Develop students' ability to justify methods and compare their responses to the responses of their peers.
MA.K12.MTR.5.1 Use patterns and structure to help understand and connect mathematical concepts.	Mathematicians who use patterns and structure to help understand and connect mathematical concepts: • Focus on relevant details within a problem. • Create plans and procedures to logically order events, steps or ideas to solve problems. • Decompose a complex problem into manageable parts. • Relate previously learned concepts to new concepts. • Look for similarities among problems. • Connect solutions of problems to more complicated large-scale situations.	Teachers who encourage students to use patterns and structure to help understand and connect mathematical concepts: • Help students recognize the patterns in the world around them and connect these patterns to mathematical concepts. • Support students to develop generalizations based on the similarities found among problems. • Provide opportunities for students to create plans and procedures to solve problems. • Develop students' ability to construct relationships between their current understanding and more sophisticated ways of thinking.

Benchmark	Student expectations	Teacher clarifications
MA.K12.MTR.6.1 Assess the reasonableness of solutions.	Mathematicians who assess the reasonableness of solutions: • Estimate to discover possible solutions. • Use benchmark quantities to determine if a solution makes sense. • Check calculations when solving problems. • Verify possible solutions by explaining the methods used. • Evaluate results based on the given context.	Teachers who encourage students to assess the reasonableness of solutions: • Have students estimate or predict solutions prior to solving. • Prompt students to continually ask, "Does this solution make sense? How do you know?" • Reinforce that students check their work as they progress within and after a task. • Strengthen students' ability to verify solutions through justifications.
MA.K12.MTR.7.1 Apply mathematics to real-world contexts.	Mathematicians who apply mathematics to real-world contexts: • Connect mathematical concepts to everyday experiences. • Use models and methods to understand, represent and solve problems. • Perform investigations to gather data or determine if a method is appropriate. • Redesign models and methods to improve accuracy or efficiency.	Teachers who encourage students to apply mathematics to real-world contexts: • Provide opportunities for students to create models, both concrete and abstract, and perform investigations. • Challenge students to question the accuracy of their models and methods. • Support students as they validate conclusions by comparing them to the given situation. • Indicate how various concepts can be applied to other disciplines.

B.E.S.T Standards for English Language Arts

Benchmark	Student expectations
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning. K-1 Students include textual evidence in their oral communication with guidance and support from adults. The evidence can consist of details from the text without naming the text. During 1st grade, students learn how to incorporate the evidence in their writing. 2-3 Students include relevant textual evidence in their written and oral communication. Students should name the text when they refer to it. In 3rd grade, students should use a combination of direct and indirect citations. 4-5 Students continue with previous skills and reference comments made by speakers and peers. Students cite texts that they've directly quoted, paraphrased, or used for information. When writing, students will use the form of citation dictated by the instructor or the style guide referenced by the instructor. 6-8 Students continue with previous skills and use a style guide to create a proper citation. 9-12 Students continue with previous skills and should be aware of existing style guides and the ways in which they differ.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently See Appendix B for reference
ELA.K12.EE.3.1	Make inferences to support comprehension. Students will make inferences before the words infer or inference are introduced. Kindergarten students will answer questions like "Why is the girl smiling?" or make predictions about what will happen based on the title page. Students will use the terms and apply them in 2nd grade and beyond.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations. In kindergarten, students learn to listen to one another respectfully. In grades 1-2, students build upon these skills by justifying what they are thinking. For example: "I think _____ because _____." The collaborative conversations are becoming academic conversations. In grades 3-12, students engage in academic conversations discussing claims and justifying their reasoning, refining and applying skills. Students build on ideas, propel the conversation, and support claims and counterclaims with evidence.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work. Students will incorporate skills learned into work products to produce quality work. For students to incorporate these skills appropriately, they must receive instruction. A 3rd grade student creating a poster board display must have instruction in how to effectively present information to do quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing. In kindergarten and 1st grade, students learn the difference between formal and informal language. For example, the way we talk to our friends differs from the way we speak to adults. In 2nd grade and beyond, students practice appropriate social and academic language to discuss texts.

Unit 1: Nature of Science		Back to Top
Unit Goal: Students will understand that scientific inquiry is a multifaceted activity; the processes of science include the formulation of scientifically investigable questions, construction of investigations into those questions, the collection of appropriate data, the evaluation of the meaning of those data, and the communication of this evaluation.	**Suggested Time Frame:**	08/16 - 09/06 (15 days)
Text Resources: Please see the "Nature of Science" tab in "Teacher Toolbox: Secondary"	**Lesson Plans:**	See Lesson Plan Link in Blender

Content/Academic Language						
FLDOE	analyze classify conclusion control group	controlled variables (constants) data experiment	hypothesis inference investigation observation	outcome variable (dependent) predict repetition	replication scientific method scientist test variable (independent)	testable trials valid variable
Other	bias compare conduct	credibility defend evidence	interpret qualitative observation quantitative observation	reference trend science		

Florida State Academic Standards	Complexity Level	Student Target
Topic 1: Practice of Science		
SC.6.N.1.1 - Define a problem from the sixth 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 (assessed as SC.8.N.1.1 on the Statewide Science Assessment).	High	• make predictions • distinguish an observation from an inference • identify a test variable (independent), an outcome variable (dependent) & controlled variables (constants) • establish a control group & experimental groups • develop a scientifically-appropriate hypothesis • differentiate between qualitative & quantitative observations • gather & arrange data utilizing an appropriate method • interpret & analyze data in tables, graphs, & graphics • come to a reasonable conclusion based on evidence and justify said conclusion
SC.6.N.1.2 - Explain why scientific investigations should be replicable (assessed as SC.7.N.1.2 on the Statewide Science Assessment).	High	• differentiate between replication and repetition • describe the importance of replication (to establish credibility) and repetition (to reduce experimental bias) in valid experimentation
SC.6.N.1.3 - Explain the difference between an experiment and other types of scientific investigation, and explain the relative benefits and limitations of each (assessed as SC.8.N.1.1 on the Statewide Science Assessment).	High	• explain that an investigation is observing or studying the natural world without interference or manipulation • describe an experiment as an investigation involving variables & establishes cause-and-effect relationships • recognize the qualities that distinguish a controlled experiment from other scientific investigations (i.e. observational study, sample surveys, etc.) • identify strengths and weaknesses of experiments and scientific investigations

SC.6.N.1.4 - Discuss, compare, and negotiate methods used, results obtained, and explanations among groups of students conducting the same investigation (assessed as SC.7.N.1.2 on the Statewide Science Assessment).	High	• conduct experimentation in class • recognize differences in results & procedures among groups • identify reasonable justifications for similarities & differences
SC.6.N.1.5 - Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence (not assessed on the Statewide Science Assessment).	Moderate	• describe the role of innovation and original thinking in developing questions about the world, planning and conducting an experiment, and coming to reasonable conclusions based on findings
Topic 2: Scientific Knowledge		
SC.6.N.2.1 - Distinguish science from other activities involving thought (not assessed on the Statewide Science Assessment).	Moderate	• describe science as a systematic process that pursues, builds and organizes knowledge in the form of testable explanations and predictions about the natural world • identify the characteristics that define science and scientific investigations • characterize activities as scientific or not scientific
SC.6.N.2.3 - Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals (not assessed on the Statewide Science Assessment).	Low	• acknowledge the importance of scientists having a broad range of skills & circumstances in the development & advancement of scientific knowledge

Access Points Standards

Standard	Independent	Supported	Participatory
SC.6.N.1.1	Identify a problem from the sixth grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results.	Recognize a problem from the sixth grade curriculum, use materials to gather information, carry out a simple experiment, and record and share results.	Recognize a problem related to the sixth grade curriculum, observe and explore objects or activities, and recognize a solution.
SC.6.N.1.2	Identify that scientific investigations can be repeated the same way by others	Recognize that experiments involve procedures that can be repeated the same way by others.	Recognize that when a common activity is repeated, it has the same result.
SC.6.N.1.3	Identify that scientists can use different kinds of experiments, methods, and explanations to find answers to scientific questions.	Recognize that scientists perform experiments, make observations, and gather evidence to answer scientific questions.	Recognize that people conduct activities and share information about science.
SC.6.N.1.4	Compare results of observations and experiments of self and others.	Identify information based on observations and experiments of self and others.	Recognize that people conduct activities and share information about science.
SC.6.N.1.5	Compare results of observations and experiments of self and others.	Identify information based on observations and experiments of self and others.	Recognize that people conduct activities and share information about science.
SC.6.N.2.1	Identify familiar topics included in the study of science.	Recognize familiar topics in the study of science.	Recognize objects and pictures related to science.
SC.6.N.2.3	Identify that scientists can use different kinds of experiments, methods, and explanations to find answers to scientific questions.	Recognize contributions of well-known scientists.	Recognize a scientist as a person who works with science.

Foundational Content

Foundational content includes skills & knowledge from earlier grades that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.3.N.1.1 Raise questions about the natural world, investigate them individually and in teams through free exploration and systematic investigations, and generate appropriate explanations based on those explorations.
SC.4.N.1.1 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.
SC.5.N.1.1 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.
SC.3.N.1.2 Compare the observations made by different groups using the same tools and seek reasons to explain the differences across groups.
SC.4.N.1.2 Compare the observations made by different groups using multiple tools and seek reasons to explain the differences across groups.
SC.5.N.1.2 Explain the difference between an experiment and other types of scientific investigation.
SC.3.N.1.3 Keep records as appropriate, such as pictorial, written, or simple charts and graphs, of investigations conducted.
SC.5.N.1.4 Identify a control group and explain its importance in an experiment.
SC.3.N.1.5 Recognize that scientists question, discuss, and check each others' evidence and explanations.
SC.4.N.1.5 Compare the methods and results of investigations done by other classmates.
SC.4.N.1.6 Keep records that describe observations made, carefully distinguishing actual observations from ideas and inferences about the observations.
SC.5.N.2.2 Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others.

Common Misconceptions

- The scientific method is a universal set of steps that occur in exactly the same order that all scientists use at all times.
- Experimentation is the only type of scientific investigation.
- Data shows a hypothesis to be correct or incorrect.
- Published results indicate true findings, never shown to be false.
- An observation is the same as an inference.

Teacher Notes

- Throughout the year, these and other Nature of Science benchmarks should be infused into the content as appropriate.
- Focus on scientific thinking and skills scientists use to conduct scientific inquiry.
- Make sure the students understand that there is no single, linear scientific method, but rather methods scientists use to engage in scientific inquiry
- Students should be familiar with the interchangeable nature of the terms "test variable," "independent variable," and "manipulated variable."
- Students should be familiar with the interchangeable nature of the terms "outcome variable," "dependent variable," and "responding variable."
- Students should understand that, in a scientific investigation, constants are controlled variables.
- Students are not required to memorize scientists' names and their accomplishments.

Sample Literacy Strategies

- Complete a Concept of Definition Map for the term "science."
- Complete a Venn Diagram for the terms "test variable (independent variable)" and "outcome variable (dependent variable)."
- Complete a Frayer Model for the term "hypothesis."
- Complete a Venn Diagram for the terms "replication" and "repetition."

Prefixes, Suffixes, Roots

- in- not
- -ion, -tion, -ation act, process
- -ist person
- -ology/-logy study of, science of
- pseudo- fake, false
- quant- how much
- re- back, again
- sci- knowledge
- -scope look, observe
- var- change

Sample Assessment Questions

Sample FCAT Explorer Question SC.6.N.1.2

If a scientist conducts an experiment on plants and uses 1,000 plants in the control group and 1,000 plants in the test group, why is it still important that someone else be able to replicate the experiment and get similar results?

A. to help the experiment get published
B. to study the original methods and design new experiments
C. to confirm the original data and methods
D. to allow beginning scientists to practice designing experiments

Correct Answer: C

Sample FCAT Explorer Question SC.6.N.1.1

A student conducts an experiment in which she drops objects, each with a different mass, all from the same height. She uses a stopwatch and records the time it takes for each object to hit the ground. Which of the following is the independent variable in her experiment?

A. time the object travels
B. height at which object is dropped
C. mass of the object
D. stopwatch used

Correct Answer: C

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Unit 2: Energy, Force, & Motion		Back to Top
Unit Goal: Students will understand that energy is not only conserved as it transfers from one object to another and from one form to another, but it is also required to alter an object's motion, which can be changed by forces.	**Suggested Time Frame:**	09/07 - 10/11 (24 days)
Text Resources: Pages 423-538; for specific resources related to Nature of Science Benchmarks, please see the "Nature of Science" tab in "Teacher Toolbox: Secondary"	**Lesson Plans:**	See Lesson Plan Link in Blender

Content/Academic Language						
FLDOE	acceleration balanced force conduct** energy	force friction gravity kinetic energy	law magnetic mass matter	momentum motion net force potential energy	radiation** speed temperature** unbalanced force	weight
Other	applied force buoyancy conduction**	conservation contact force convection**	elastic potential electrical gravitational potential	inertia mechanical energy normal force	tension thermal energy** velocity	work

Florida State Academic Standards	Complexity Level	Student Target
Topic 1: Energy		
SC.6.P.11.1 Explore the Law of Conservation of Energy by differentiating between potential and kinetic energy. Identify situations where kinetic energy is transformed into potential energy and vice versa (assessed as SC.7.P.11.2 on the Statewide Science Assessment).	Moderate	• describe energy as the ability to do work or cause change • differentiate between potential & kinetic energy • identify energy transformations from kinetic to potential energy & vice versa • explain the relationship between kinetic energy, potential energy, and mechanical energy • describe & cite examples of the Law of Conservation of Energy
**SC.912.P.10.4 Describe heat as the energy transferred by convection, conduction, and radiation, and explain the connection of heat to change in temperature or states of matter (not assessed on the Statewide Science Assessment).	High	• differentiate among the methods by which thermal energy is transferred • describe the relationship between heat and temperature
SC.6.N.3.2 Recognize and explain that a scientific law is a description of a specific relationship under given conditions in the natural world. Thus, scientific laws are different from societal laws (not assessed on the Statewide Science Assessment).	Moderate	• identify characteristics that distinguish a scientific law from a societal law • describe a scientific law as a statement or equation that describes a pattern in nature • recognize that the Law of Conservation of Energy describes how energy is transformed from one form to another
Topic 2: Forces		
SC.6.P.13.1 Investigate and describe types of forces including contact forces and forces acting at a distance, such as electrical, magnetic, and gravitational (parent benchmark on the Statewide Science Assessment).	Moderate	• recognize that a force is a push or pull exerted on an object • explain the relationship between force & energy • classify forces as either contact or non-contact forces (forces that act a distance) • explain how each type of force behaves (i.e., the force between the north and south poles of

		magnets pulls the magnets towards each other)
SC.6.P.13.2 Explore the Law of Gravity by recognizing that every object exerts gravitational force on every other object and that the force depends on how much mass the objects have and how far apart they are (assessed as SC.6.P.13.1 on the Statewide Science Assessment).	Low	• recognize that gravity is an attractive force between all objects with mass • explain the relationship among mass, distance, and gravitational force • identify weight as the force of gravity acting on an object with mass

SC.6.P.13.3 Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both (parent benchmark on the Statewide Science Assessment).	Moderate	• describe the effects of balanced & unbalanced forces on an object's motion
		• calculate net force
		• apply the concept of net force to determine the direction of motion
		• explain Newton's three Laws of Motion
		  ○ recognize that inertia is a tendency to resist change in motion
		  ○ describe the relationship among force, mass, and acceleration
		  ○ discuss how the interaction of force pairs affects the motion of an object

SC.6.N.3.3 Give several examples of scientific laws (not assessed on the Statewide Science Assessment).	Low	• list examples of scientific laws, such as the Law of Universal Gravitation & the Laws of Motion
Topic 3: Motion		
SC.6.P.12.1 Measure and graph distance versus time for an object moving at a constant speed. Interpret this relationship (assessed as SC.6.P.13.3 on the Statewide Science Assessment).	High	• describe motion as a change in position over time • measure the distance and time of an object traveling at a constant speed • solve for speed, distance, or time (given the equation) • graph distance versus time • interpret a distance-time graph to determine an object's speed • analyze the relationship between speed and the slope of a line
SC.6.N.1.1 Define a problem from the sixth 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 (assessed as SC.8.N.1.1 on the Statewide Science Assessment).	High	• identify test variables, outcome variables, and controlled variables (constants) • collect, organize, and analyze data • predict outcomes based on prior knowledge, observations, and/or research • defend conclusions

Access Points Standards			
Standard	**Independent**	**Supported**	**Participatory**
SC.6.P.11.1	Identify energy as stored (potential) or expressed in motion (kinetic).	Recognize examples of stored energy, such as in a roller coaster.	Distinguish between objects in motion (kinetic energy) and at rest.
**SC.912.P.10.4	Relate the transfer of heat to the states of matter, including gases result from heating, liquids result from cooling a gas, and solids result from further cooling a liquid.	Observe and recognize ways that heat travels, such as through space (radiation), through solids (conduction), and through liquids and gases (convection).	Recognize the source and recipient of heat transfer.
SC.6.N.3.2	Identify examples of scientific laws (proven descriptions of nature), such as the law of gravity.	Recognize events that are based on scientific laws, such as the law of gravity.	Observe and recognize a predictable cause-effect relationship related to a science topic.
SC.6.P.13.1	Identify examples of gravitational and contact forces, such as falling objects or push and pull.	Distinguish between pushing and pulling forces (contact) and falling (gravitational force) of an object.	Recognize that pushing or pulling makes an object move (contact force).
SC.6.P.13.2	Identify examples of gravitational and contact forces, such as falling objects or push and pull.	Distinguish between pushing and pulling forces (contact) and falling (gravitational force) of an object.	Recognize that pushing or pulling makes an object move (contact force). Recognize that objects fall unless supported by something.
SC.6.P.13.3	Demonstrate and describe how forces can change the speed and direction of objects in motion.	Recognize that force can change the speed and direction of an object in motion.	Recognize the speed (fast or slow) of a moving object.
SC.6.N.3.3	Identify examples of scientific laws (proven descriptions of nature), such as the law of gravity.	Recognize events that are based on scientific laws, such as the law of gravity.	Observe and recognize a predictable cause-effect relationship related to a science topic.
SC.6.P.12.1	Identify that speed describes the distance and time in which an object is moving, such as miles per hour.	Recognize that speed describes how far an object travels in a given amount of time	Recognize that traveling longer distances takes more time, such as going to the cafeteria takes longer than going across the classroom.
SC.6.N.1.1	Identify a problem from the sixth grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results.	Recognize a problem from the sixth grade curriculum, use materials to gather information, carry out a simple experiment, and record and share results.	Recognize a problem related to the sixth grade curriculum, observe and explore objects or activities, and recognize a solution.

Foundational Content

Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.3.P.11.2 Investigate, observe, and explain that heat is produced when one object rubs against another, such as rubbing one's hands together.
SC.5.P.10.3 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.
SC.5.P.13.1 Identify familiar forces that cause objects to move, such as pushes or pulls, including gravity acting on falling objects.
SC.5.P.13.3 Investigate and describe that the more mass an object has, the less effect a given force will have on the object's motion.
SC.5.P.13.4 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.
SC.5.P.10.2 Investigate and explain that energy has the ability to cause motion or create change.
SC.4.P.10.4 Describe how moving water and air are sources of energy and can be used to move things.
SC.4.P.12.1 Recognize that an object in motion always changes its position and may change its direction.
SC.4.P.12.2 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.
SC.3.P.10.2 Recognize that energy has the ability to cause motion or create change.
SC.4.P.10.2 Investigate and describe that energy has the ability to cause motion or create change.
SC.5.P.13.2 Investigate and describe that the greater the force applied to it, the greater the change in motion of a given object.
Please reference Unit 1 for the benchmarks associated with SC.6.N.1.1.

Common Misconceptions

- Energy can be created.
- Energy can be destroyed.
- Energy only comes in the forms of kinetic and potential.
- During an energy transformation, energy disappears.
- 100% of the potential energy of an object transforms into 100% of the kinetic energy (energy can be changed completely from one form to another without energy loss).
- Energy is recycled.
- Energy is a force.
- Energy can be transformed into a force.
- Energy is only associated with movement.
- An object at rest has no energy.
- The only type of potential energy is gravitational.
- Weight and mass are interchangeable terms.
- Gravitational pull is affected by weight.
- Humans and other objects on the Earth are too small to exert gravitational pull.
- Acceleration is limited to an increase in speed.
- Balanced forces acting on an object means the object is not moving.
- Velocity is another word for speed.

Teacher Notes

- Students need to be able to calculate and determine the direction of net force.
- The terms positive acceleration, negative acceleration, and constant acceleration should be used to describe speed.
- Though students need not memorize the formula for speed, they must be able to manipulate the formula to solve for speed, distance, or time.
- Students should understand the many forms of energy which can be classified as either potential or kinetic, including gravitational potential, elastic potential, mechanical, chemical, light, heat, sound, etc.
- This unit is intentionally long, as it's particularly conducive to teaching and expounding upon the Nature of Science concepts. Please adhere to the timing set forth for Unit 1 and embed the Nature of Science benchmarks in this unit (and subsequent units) rather than teach them in isolation.

Sample Literacy Strategies

- Complete a Venn Diagram for potential energy and kinetic energy.
- Complete a Semantic Feature Analysis for the different types of forces.
- Complete a Compare and Contrast Chart with a written summary of weight versus mass.
- Develop picture notes of the types of forces and how they act.

Prefixes, Suffixes, Roots

- un – not
- non – not
- -duct lead
- -kin move, activate
- -radi ray
- -therm heat
- trans – across, beyond, through
- vect – carry

Sample Assessment Questions

Sample FLDOE Question SC.6.P.13.1

Luis rubbed a balloon on his hair and held the balloon next to the wall. He observed the balloon stick to the wall. Which of the following is responsible for the balloon sticking to the wall?

A. gravity
B. friction
C. electric force
D. magnetic force

Correct Answer: C

Sample FCAT Explorer Question SC.6.N.3.2

After many years of conducting experiments, Newton described the unbalanced forces acting on an object as being equal to the object's mass times its acceleration. The formula is F = ma. This is an example of which of the following?

A. a scientific theory
B. a scientific law
C. an experimental result
D. a hypothesis

Correct Answer: B

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Unit 3: Shaping Earth's Surface		Back to Top
Unit Goal: Students will understand how weathering, erosion, and deposition affect Earth's surface.	**Suggested Time Frame:**	10/16 - 11/17 (24 days)
Text Resources: Pages. 1-42; for specific resources related to Nature of Science Benchmarks, please see the "Nature of Science" tab in "Teacher Toolbox: Secondary"	**Lesson Plans:**	See Lesson Plan Link in Blender

Content/Academic Language						
FLDOE	delta deposition	dune erosion	glacier gravity	model weathering		
Other	aquifer cavern chemical weathering	coastline constructive force destructive force	ice wedging lake landform	mountain physical weathering river	sinkhole volcano	

Florida State Academic Standards	Complexity Level	Student Target
Topic 1: Weathering, Erosion, Deposition, & Landforms		
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 (assessed as SC.7.E.6.2 on the Statewide Science Assessment).	Moderate	• recognize that weathering is the process by which rocks & other surfaces are broken down • identify agents of physical & chemical weathering • analyze the effects & cite examples of physical & chemical weathering on Earth's surface • describe erosion as the process by which rock, soil, & other weathered earth materials are moved from one place to another • identify deposition as the process by which eroded material is dropped • identify moving water, wind, ice, and gravity as agents of erosion and deposition

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 (assessed as SC.7.E.6.2 on the Statewide Science Assessment).	Moderate	• describe the formation of various landforms due to…
		  ○ erosion (ex. caverns, cliffs) & deposition (ex. deltas, beaches) by water
		  ○ erosion (ex. desert pavement) & deposition (ex. dunes) by wind
		  ○ erosion (ex. cirque) & deposition (ex. moraine) by ice
		• identify different types of landforms found on Earth's surface
		• compare and contrast landforms found in Florida, such as coastlines, dunes, aquifers, caverns, lakes, sinkholes, etc. from those not found in Florida (mountains, glaciers, volcanoes, etc.)

SC.6.N.3.4 Identify the role of models in the context of the sixth grade science benchmarks (not assessed on the Statewide Science Assessment).	Moderate	• recognize the value of models in science • explain how the use of a model would help scientists understand the landforms resulting from Earth's surface events, such as weathering, erosion, and deposition

Access Points Standards			
Standard	**Independent**	**Supported**	**Participatory**
SC.6.E.6.1	Describe how weathering and erosion reshape the Earth's surface.	Recognize that wind and water cause physical weathering and erosion.	Recognize that water can move soil.
SC.6.E.6.2	Identify various landforms in Florida, including coastlines, rivers, lakes, and dunes.	Recognize different landforms in Florida, including beaches (coastlines), rivers, and lakes.	Recognize a landform in Florida, such as a beach (coastline), river, or lake.
SC.6.N.3.4	Identify models used in the context of sixth grade science access points.	Recognize models used in the context of sixth grade science access points.	Associate a model with an activity used in the context of sixth grade science access points.

Foundational Content

Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.4.E.6.4 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).
SC.4.N.3.1 Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.
SC.3.N.3.2 Recognize that scientists use models to help understand and explain how things work.
SC.3.N.3.3 Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.

Common Misconceptions

- Weathering and erosion are interchangeable terms.
- Earth's surface is broken down, but not built up.
- Weathering has to do with atmospheric conditions (weather).
- Glaciers do not move.
- Chemical weathering must involve acid.
- Erosion is always bad.
- Erosion happens quickly.
- Landforms look similar today as they did many millions of years ago.
- Wind and water cannot wear away solid rock.

Teacher Notes

- Please keep in mind that landforms should not be taught in isolation, but rather how they are built up and torn down through the processes of physical & chemical weathering, erosion, and deposition.
- Students should be able to compare and contrast landforms both inside and outside of Florida.
- Students should understand the formation of aquifers, caverns and sinkholes and their relationship to limestone.
- Students may think that when rock or soil is worn away, it "disappears." This would be a good time to mention the law of conservation of matter, which states that matter can neither be created nor destroyed, just as energy cannot be created nor destroyed (which was addressed in the previous unit).

Sample Literacy Strategies

- Complete a Triple Venn Diagram for weathering, erosion, and deposition.
- Use a Cause and Effect graphic organizer showing the causes of erosion, deposition, and weathering as well as the resulting landforms (effect).

Prefixes, Suffixes, Roots

- depo – to put down or settle
- aqu – water
- sed – to sit
- de – removal or separation
- con – together or with

Sample Assessment Questions

Sample FCAT Explorer Question SC.6.E.6.1

Look at the pictures below.

Which of the following correctly identifies and explains the picture that shows the oldest mountains?

A. Picture A, because they have been flattened by millions of years of erosion.
B. Picture A, because rows indicate geologically older mountains.
C. Picture B, because they are jagged at the top due to years of weathering.
D. Picture B, because they are taller and have been growing for more years.

Correct Answer: A

Sample FCAT Explorer Question SC.6.N.3.4

In which of the following experiments would a model be most practical?

A. an experiment to study the amounts of rainfall in two small sections of desert
B. a comparison of growth rates in two species of lizard
C. a study of the effects of weathering on concrete
D. a study comparing reaction rates of teenage girls and boys to loud music

Correct Answer: C

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Unit 4: Earth's Systems		Back to Top
Unit Goal: Students will understand how changes in our planet are driven by the flow of energy and cycling of matter through dynamic interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere.	**Suggested Time Frame:**	11/27 - 12/15 (15 days)
Text Resources: Pages 43-100, 139-164; for specific resources related to Nature of Science Benchmarks, please see the "Nature of Science" tab in "Teacher Toolbox: Secondary"	**Lesson Plans:**	See Lesson Plan Link in Blender **Resources fulfill Florida Statute 1003.42.2n**

Content/Academic Language						
FLDOE	absorb atmosphere biosphere	conduction convection density	energy geosphere heat	hydrosphere matter model	radiation reflect sun	temperature
Other	air pressure altitude composition	cryosphere exosphere global warming	greenhouse effect insulate interaction	mesosphere ozone layer sphere	stratosphere thermosphere troposphere	wind

Florida State Academic Standards	Complexity Level	Student Target
Topic 1: Earth's Spheres		
SC.6.E.7.4 Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere (parent benchmark on the Statewide Science Assessment).	High	• recognize that Earth is a system of interrelated parts called spheres, which act both independently & in relation to each other • differentiate among the Earth's geosphere, hydrosphere, cryosphere, atmosphere, & biosphere • describe how matter & energy can be exchanged between spheres • provide examples of interaction between each of the spheres
**SC.912.E.7.3 Differentiate and describe the various interactions among Earth systems, including: atmosphere, hydrosphere, cryosphere, geosphere, and biosphere (not assessed on the Statewide Science Assessment).	High	• describe the interactions among Earth systems (transfer of energy (biogeochemical cycles, water cycle, ground & surface waters, photosynthesis, radiation, plate tectonics, conduction, & convection), storms, winds, waves, erosion, currents, deforestation, wildfires, hurricanes, tsunamis, & volcanoes)
SC.6.N.3.4 Identify the role of models in the context of the sixth grade science benchmarks (not assessed on the Statewide Science Assessment).	Moderate	• recognize the value of models in science • explain how the use of a model would help scientists understand the interactions between Earth's spheres
Topic 2: The Atmosphere		

SC.6.E.7.9 Describe how the composition and structure of the atmosphere protects life and insulates the planet (assessed as SC.6.E.7.4 on the Statewide Science Assessment).	Moderate	• describe the main components of Earth's atmosphere
		• compare the properties and functions of the four main layers of the atmosphere
		• describe how temperature and air pressure change through the layers of the atmosphere
		• recognize that Earth's atmosphere protects life and insulates the planet by:
		  ○ reflecting or absorbing most of the sun's radiation (ozone layer)
		  ○ maintaining the right temperature range (greenhouse effect)

		• discuss the effects of global warming, such as rising sea levels, melting glaciers, and droughts
HE.6.C.1.3 Identify environmental factors that affect personal health (not assessed on the Statewide Science Assessment).	N/A	• identify environmental factors, such as air quality, that affect personal health
SC.6.N.2.2 Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations are encountered (parent benchmark on the Statewide Science Assessment).	Moderate	• describe the adaptable nature of science in that it is able to change in light of new information, technology, findings, or understandings • explain how our understanding of global warming has changed over time
Topic 3: Energy Transfer & Atmospheric Circulation		
SC.6.E.7.1 Differentiate among radiation, conduction, and convection, the three mechanisms by which heat is transferred through Earth's system (assessed as SC.6.E.7.5 on the Statewide Science Assessment).	Moderate	• describe how energy & temperature are related • recognize that heat moves from objects at higher temperatures to objects at lower temperatures • identify the Sun as Earth's main source of energy • differentiate among the processes of radiation, convection, and conduction • identify examples of energy transfer on Earth: ○ **radiation** (ex. electromagnetic radiation from the Sun is absorbed by the hydrosphere & transformed into thermal energy) ○ **convection** (ex. convection currents occur in the hydrosphere due to differences in temperature & density of ocean water) ○ **conduction** (ex. energy is transferred between the geosphere & atmosphere when cooler air molecules come in contact with the warm ground)
**SC.912.P.10.4 Describe heat as the energy transferred by convection, conduction, and radiation, and explain the connection of heat to change in temperature or states of matter (not assessed on the Statewide Science Assessment).	High	• explain the three methods by which thermal energy is transferred • explain the connection of heat to change in temperature or states of matter
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 (parent benchmark on the Statewide Science Assessment).	High	• identify the Sun as the cause of air movement • recognize that the uneven heating of Earth's surface causes differences in air temperature & density, which forms areas of different air pressure • describe wind as air movement from an area of higher pressure to one of lower pressure • explain how Earth's rotation affects wind • explain the global patterns of air circulation that result from pressure differences in Earth's atmosphere • distinguish global wind patterns from local wind patterns
SC.6.N.1.1 Define a problem from the sixth 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 (assessed as SC.8.N.1.1 on the Statewide Science Assessment).	High	• identify test variables, outcome variables, and controlled variables (constants) • collect, organize, and analyze data • predict outcomes based on prior knowledge, observations, and/or research • defend conclusions

Access Points Standards			
Standard	**Independent**	**Supported**	**Participatory**
SC.6.E.7.4	Recognize that Earth consists of different parts, including air that is over the Earth (atmosphere), water that covers much of the Earth (hydrosphere), and the parts that support all living things on Earth (biosphere).	Recognize where living things are found (biosphere) and where the air is found (atmosphere) on Earth.	Recognize that air covers Earth (atmosphere).
**SC.912.E.7.3	Describe the interactions among the atmosphere, hydrosphere, and biosphere, including how air, water, and land support living things and how air temperature affects water and land temperatures.	Recognize components of the atmosphere, the hydrosphere, and the biosphere.	Recognize that humans, plants, and animals live on the Earth (biosphere).
SC.6.N.3.4	Identify models used in the context of sixth grade science access points.	Recognize models used in the context of sixth grade science access points.	Associate a model with an activity used in the context of sixth grade science access points.
SC.6.E.7.9	Identify that the atmosphere protects Earth from radiation from the Sun and regulates the temperature.	Recognize that the air that surrounds Earth (atmosphere) protects living things from the intense heat of the Sun.	Recognize that air covers Earth (atmosphere).
HE.6.C.1.3	Recognize environmental factors that affect personal health, such as air quality, availability of sidewalks, or spoiled food.	Recognize an environmental factor that affects personal health, such as air quality, availability of sidewalks, or spoiled food.	Recognize a factor in the school environment that promotes personal health, such as having adequate lighting or a clean environment.
SC.6.N.2.2	Identify that scientific knowledge changes with new evidence or new interpretations.	Recognize that scientific knowledge changes when new things are discovered.	Recognize objects and pictures related to science.
SC.6.E.7.1	Recognize that heat is a flow of energy that moves through Earth's land, air, and water in different ways, including conduction, convection, and radiation.	Recognize that heat can transfer from the Sun to the water, land, and air. Recognize that heat can transfer from the Sun to the water, land, and air.	Recognize that the Sun is a source of heat.
**SC.912.P.10.4	Relate the transfer of heat to the states of matter, including gases result from heating, liquids result from cooling a gas, and solids result from further cooling a liquid.	Observe and recognize ways that heat travels, such as through space (radiation), through solids (conduction), and through liquids and gases (convection).	Recognize the source and recipient of heat transfer.
SC.6.E.7.5	Recognize that there are general patterns of weather that move around Earth, and in North America the patterns typically move from west to east.	Recognize that there are patterns of weather that move.	Recognize different types of weather conditions, including hot/cold, raining/not raining, and windy/calm.
SC.6.N.1.1	Identify a problem from the sixth grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results.	Recognize a problem from the sixth grade curriculum, use materials to gather information, carry out a simple experiment, and record and share results.	Recognize a problem related to the sixth grade curriculum, observe and explore objects or activities, and recognize a solution.

Foundational Content

Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.5.E.7.2 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.
SC.5.E.7.3 Recognize how air temperature, barometric pressure, humidity, wind speed and direction, and precipitation determine the weather in a particular place and time.
SC.5.E.7.5 Recognize that some of the weather-related differences, such as temperature and humidity, are found among different environments, such as swamps, deserts, and mountains.
SC.3.E.6.1 Demonstrate that radiant energy from the Sun can heat objects and when the Sun is not present, heat may be lost.
SC.4.N.1.7 Recognize and explain that scientists base their explanations on evidence.
SC.4.N.3.1 Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.
SC.3.N.3.2 Recognize that scientists use models to help understand and explain how things work.
SC.3.N.3.3 Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.
Please reference Unit 1 for the benchmarks associated with SC.6.N.1.1.

Common Misconceptions

- The ozone layer is a layer of the atmosphere.
- Interactions among the spheres are limited to one-on-one interactions.
- The layers of the atmosphere have distinct, visible lines that separate layers.
- The Moon and other planets have atmospheres similar to that of Earth.
- Air and oxygen are the same thing.
- Global warming and the greenhouse effect are the same thing.
- The ozone hole is a hole in the sky.

Teacher Notes

- Students should understand the causes of global and local wind patterns.
- It is important that students be able to explain the three methods of heat transfer among the spheres of Earth.
- It is suggested that the teacher use illustrative maps when teaching about ocean currents and global wind patterns.
- This is a good unit to practice graphing data, as well as recognizing patterns within data charts/tables/graphs.

Sample Literacy Strategies

- Complete a Concept of Definition Map for the term "atmosphere."
- Create a concept map for the interactions among spheres.
- Complete a Triple Venn Diagram for conduction, convection, and radiation.
- Complete a Cause and Effect chart to describe how temperature and pressure affect air flow.

Prefixes, Suffixes, Roots

- hydro – water
- atmo – air, vapor
- geo – the Earth
- bio – life, living
- cryo – icy, frost
- exo – outer, external

Sample Assessment Questions

Sample FCAT Explorer Question SC.6.E.7.1
If you walk barefoot on hot asphalt, energy is transferred by which process?

A. convection
B. radiation
C. conduction
D. reflection

Correct Answer: C

Sample FLDOE Question SC.6.N.2.2
Scientific knowledge may change as new evidence or information is discovered. Which of the following would not be a result of new scientific research and information?

A. Binomial nomenclature is assigned to a recently identified plant species.
B. An endangered monkey species is put in a reserve for protection from extinction.
C. A newly discovered chemical element will be added to the periodic table of the elements.
D. A nonnative plant species will begin to reproduce rapidly after being introduced into a swamp ecosystem.

Correct Answer: D

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End of 2nd Nine Weeks

Unit 5: Weather & Climate		Back to Top
Unit Goal: Students will understand how the Sun's interaction with Earth produces weather and climate.	**Suggested Time Frame:**	01/09 - 02/09 (23 days)
Text Resources: Pages 73-242; for specific resources related to Nature of Science Benchmarks, please see the "Nature of Science" tab in "Teacher Toolbox: Secondary"	**Lesson Plans:**	See Lesson Plan Link in Blender **Resources fulfill Florida Statute 1003.42.2n**

Content/Academic Language						
FLDOE	atmosphere biosphere climate condensation	conduction convection evaporation geosphere	heat humidity hydrosphere infiltration	percolation planet polar zone precipitation	radiation sun temperate zone temperature	tropical zone water cycle water vapor weather
Other	air mass cryosphere front	hazardous weather hydrologic cycle insulate	interaction jet stream natural disaster	ozone layer stratosphere wind		

Florida State Academic Standards	Complexity Level	Student Target
Topic 1: The Water Cycle		
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 (assessed as SC.6.E.7.4 on the Statewide Science Assessment).	High	• identify the 3 ways in which water reaches the atmosphere as water vapor • explain what happens to water in the atmosphere • describe how water moves on land & in the oceans • explain how the water cycle affects weather
SC.6.E.7.4 Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere (parent benchmark on the Statewide Science Assessment).	High	• discuss how the water cycle transports matter & energy between spheres • provide examples of matter and energy being transported by the water cycle
SC.6.N.3.4 Identify the role of models in the context of the sixth grade science benchmarks (not assessed on the Statewide Science Assessment).	Moderate	• recognize the value of models in science • distinguish limitations and advantages of models of the water cycle
Topic 2: Weather		
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 (assessed as SC.6.E.7.4 on the Statewide Science Assessment).	High	• describe weather as the short-term changes in atmospheric conditions • explain the relationship of following elements to weather: temperature, air pressure, wind direction & speed, humidity, and precipitation • describe the effect that jet streams have on temperature & precipitation • explain how ocean currents impact the temperature & humidity of the air masses above them • describe how ocean currents influence weather • discuss factors that affect local wind patterns

SC.6.E.7.4 Differentiate and show interactions among the geosphere, hydrosphere, cryosphere, atmosphere, and biosphere (parent benchmark on the Statewide Science Assessment).	High	• describe how matter & energy can be exchanged between the hydrosphere & atmosphere with respect to weather patterns • provide examples of interaction between the hydrosphere & atmosphere
**SC.912.E.7.5 Predict future weather conditions based on present observations and conceptual models and recognize limitations and uncertainties of such predictions (not assessed on the Statewide Science Assessment).	High	• read and interpret a weather map • identify weaknesses of current weather prediction instruments/technology in relation to short and long-term predictions
SC.6.E.7.8 Describe ways human beings protect themselves from hazardous weather and sun exposure (not assessed on the Statewide Science Assessment).	Moderate	• describe the major types of hazardous weather, such as hurricanes, tornadoes, thunderstorms, wildfires & prolonged sun exposure • discuss ways people can protect themselves from hazardous weather & sun exposure
SC.6.E.7.7 Investigate how natural disasters have affected human life in Florida (not assessed on the Statewide Science Assessment).	High	• explain why Florida is susceptible to thunderstorms, tornadoes, hurricanes, & floods • describe the impact of natural disasters on Florida's economy, environment, & citizens
HE.6.C.1.3 Identify environmental factors that affect personal health (not assessed on the Statewide Science Assessment).	N/A	• describe possible health issues due to over-exposure to the sun's UV rays
**SC.912.E.7.6 Relate the formation of severe weather to the various physical factors (not assessed on the Statewide Science Assessment).	Moderate	• identify causes of severe weather • compare and contrast the factors which affect the development of severe weather
SC.6.N.1.5 Recognize that science involves creativity, not just in designing experiments, but also in creating explanations that fit evidence (not assessed on the Statewide Science Assessment).	Moderate	• describe the role of innovation and original thinking in developing questions about the world, planning & conducting an experiment, & coming to reasonable conclusions based on findings • explain how creativity played a role in recognizing and describing patterns in severe storms and natural disasters
Topic 3: Climate		
SC.6.E.7.6 Differentiate between weather and climate (assessed as SC.6.E.7.4 on the Statewide Science Assessment).	Moderate	• recognize that climate is mostly determined by average temperature & precipitation • identify the variety of climates on Earth • explain how the following factors affect climate: latitude, elevation, winds, proximity to large bodies of water, surface ocean currents, and topography • discuss how weather varies from day to day whereas climate describes conditions over a longer period of time
SC.6.N.1.1 Define a problem from the sixth 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 (assessed as SC.8.N.1.1 on the Statewide Science Assessment).	High	• distinguish an observation from an inference in the context of global patterns • make predictions about global climate based on previously observed patterns • differentiate between qualitative and quantitative observations • develop a graph based on climate patterns • analyze data from NOAA

Access Points Standards			
Standard	**Independent**	**Supported**	**Participatory**
SC.6.E.7.2	Identify components in the water cycle, including evaporation, condensation, precipitation, groundwater, and runoff.	Recognize parts of the water cycle such as clouds (condensation), rain (precipitation), and evaporation.	Recognize that rain comes from clouds.
SC.6.E.7.4	Recognize that Earth consists of different parts, including air that is over the Earth (atmosphere), water that covers much of the Earth (hydrosphere), and the parts that support all living things on Earth (biosphere).	Recognize where living things are found (biosphere) and where the air is found (atmosphere) on Earth.	Recognize that air covers Earth (atmosphere).
SC.6.N.3.4	Identify models used in the context of sixth grade science access points.	Recognize models used in the context of sixth grade science access points.	Associate a model with an activity used in the context of sixth grade science access points.
SC.6.E.7.3	Identify the way elements of weather are measured, including temperature, humidity, wind speed and direction, and precipitation.	Recognize the way temperature and wind speed are measured.	Recognize different types of weather conditions, including hot/cold, raining/not raining, and windy/calm.
**SC.912.E.7.5	Identify weather conditions using weather data and weather maps.	Identify weather conditions, including temperature, wind speed, and humidity.	Recognize the weather conditions, including severe weather, in Florida.
SC.6.E.7.8	Identify ways humans get ready for severe storms and protect themselves from sun exposure.	Recognize ways people prepare for severe storms and protect themselves from sun exposure.	Recognize where to go in severe weather situations or drills at school and at home.
SC.6.E.7.7	Identify possible effects of hurricanes and other natural disasters on humans in Florida.	Recognize possible effects of severe storms, hurricanes, or other natural disasters in Florida.	Recognize where to go in severe weather situations or drills at school and at home.
HE.6.C.1.3	Recognize environmental factors that affect personal health, such as air quality, availability of sidewalks, or spoiled food.	Recognize an environmental factor that affects personal health, such as air quality, availability of sidewalks, or spoiled food.	Recognize a factor in the school environment that promotes personal health, such as having adequate lighting or a clean environment.
**SC.912.E.7.6	Compare weather conditions in different types of severe storms, including hurricanes, tornadoes, and thunderstorms.	Recognize conditions in severe storms, such as hurricanes, tornadoes, and thunderstorms.	Recognize the weather conditions, including severe weather, in Florida.
SC.6.N.1.5	Compare results of observations and experiments of self and others.	Identify information based on observations and experiments of self and others.	Recognize that people conduct activities and share information about science.
SC.6.E.7.6	Identify climate as the expected weather patterns in a region.	Identify the major characteristics of climate in Florida, including temperature and precipitation.	Recognize different types of weather conditions, including hot/cold, raining/not raining, and windy/calm.
SC.6.N.1.1	Identify a problem from the sixth grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results.	Recognize a problem from the sixth grade curriculum, use materials to gather information, carry out a simple experiment, and record and share results.	Recognize a problem related to the sixth grade curriculum, observe and explore objects or activities, and recognize a solution.

Foundational Content

Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.5.E.7.4 Distinguish among the various forms of precipitation (rain, snow, sleet, and hail), making connections to the weather in a particular place and time.
SC.5.E.7.1 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.
SC.5.E.7.2 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.
SC.5.E.7.3 Recognize how air temperature, barometric pressure, humidity, wind speed and direction, and precipitation determine the weather in a particular place and time.
SC.5.E.7.4 Distinguish among the various forms of precipitation (rain, snow, sleet, and hail), making connections to the weather in a particular place and time.
SC.5.E.7.5 Recognize that some of the weather-related differences, such as temperature and humidity, are found among different environments, such as swamps, deserts, and mountains.
SC.5.E.7.6 Describe characteristics (temperature and precipitation) of different climate zones as they relate to latitude, elevation, and proximity to bodies of water.
SC.4.N.3.1 Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.
SC.3.N.3.2 Recognize that scientists use models to help understand and explain how things work.
SC.3.N.3.3 Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.
Please reference Unit 1 for the benchmarks associated with SC.6.N.1.1.

Common Misconceptions

- The water cycle always happens in a specific order, beginning and ending with the same processes.
- The water cycle occurs just one process at a time.
- Meteorologists' tools and technology are always accurate.
- Tornadoes only occur in the midwest.
- Precipitation only includes rain.
- Humidity is how wet the air is.
- Condensation appears through osmosis (movement of water through a membrane).
- Weather and climate both refer to the daily condition of the atmosphere.
- The seasons cause the weather to change.
- Rain falls when clouds become too heavy.
- Raindrops look like tear drops.
- Rain falls because we need it.

Teacher Notes

- As you transition from discussing heat transfer to the water cycle, ensure that students understand the role heat and heat transfer play within the cycling of water.
- Students should understand the water cycle in relation to climate and weather.
- This is a good unit to practice organizing and analyzing data, as well as distinguishing between qualitative and quantitative observations.
- Students should be able to describe how severe weather develops through specific atmospheric conditions.

Sample Literacy Strategies

- Create a concept map for "weather."
- Engage students in a Philosophical Chair regarding global climate change.
- Complete a Venn diagram for weather and climate.

Prefixes, Suffixes, Roots

- therm – heat, hot
- -meter – measure
- atmo – air, vapor
- bio – life
- con – together, with
- hydro – water
- cryo – ice, frost baro – pressure
- -duct lead
- -radi ray
- vect – carry
- geo – earth

Sample Assessment Questions

Sample FLDOE Question SC.6.E.7.6

The climate of an area can be different from its weather. Which of the following statements describes the climate of an area?

A. There should be heavy rains tomorrow morning.
B. The rains next week are expected to cause some flooding.
C. The average temperature from 1930–1996 was 23°C (74°F).
D. The high temperature on September 4, 2009, was 32°C (89°F).

Correct Answer: C

Sample FCAT Explorer Question SC.6.N.3.4

Which of the following is **true** of a scientific model?

A. It must be a computer simulation.
B. It involves electricity.
C. It helps scientists visualize concepts.
D. It is always accurate.

Correct Answer: C

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Unit 6: Cells

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Unit Goal: Students will understand that all living organisms are made of cells, which undergo various physiological functions essential for growth, reproduction, and homeostasis.	**Suggested Time Frame:**	02/12 - 03/15 (24 days)
Text Resources: Pages 243-342; for specific resources related to Nature of Science Benchmarks, please see the "Nature of Science" tab in "Teacher Toolbox: Secondary"	**Lesson Plans:**	See Lesson Plan Link in Blender

Content/Academic Language

FLDOE	atom cell chloroplast	cytoplasm eukaryote homeostasis	membrane mitochondrion molecule	nucleus organ organelle	organism prokaryote reproduction	theory tissue vacuole	
Other	active transport** cell cycle**	cell theory cell wall	cellular respiration DNA	hierarchical mitosis**	multicellular organ system	passive transport** photosynthesis	protein unicellular

Florida State Academic Standards	Complexity Level	Student Target
Topic 1: Hierarchal Organization		
SC.6.L.14.1 Describe and identify patterns in the hierarchical organization of organisms from atoms to molecules and cells to tissues to organs to organ systems to organisms (parent benchmark on the Statewide Science Assessment).	Low	• recognize & explain the structure of complex organisms, from atoms to organism • explain how each level builds upon the other in that cells with a similar structure & function group to create tissue, tissues with a similar structure & function combine to make organs, etc.
SC.6.N.2.2 Explain that scientific knowledge is durable because it is open to change as new evidence or interpretations	Moderate	• describe the adaptable nature of science in that it is able to change in light of new information, technology, findings, or understandings in relation to how living things are structured
Topic 2: The Cell Theory		
SC.6.L.14.2 Investigate and explain the components of the scientific theory of cells (cell theory): all organisms are composed of cells (single-celled or multi-cellular), all cells come from pre-existing cells, and cells are the basic unit of life (parent benchmark on the Statewide Science Assessment).	Moderate	• describe the three parts of the cell theory • explain how the components of the cell theory relate to the overall study of biology • recognize that the scientific theory of cells (cell theory) is a fundamental organizing principle of life on Earth
SC.6.N.2.3 Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals (not assessed on the Statewide Science Assessment).	Low	• acknowledge the importance of scientists such as Hooke, Schwann, Leeuwenhoek, Schleiden, and Virchow having a broad range of skills and circumstances in the development and advancement of scientific knowledge
SC.6.N.3.1 Recognize and explain that a scientific theory is a well-supported and widely accepted explanation of nature and is not simply a claim posed by an individual. Thus, the use of the term theory in science is very different than how it is used in everyday life (assessed as SC.7.N.3.1 on the Statewide Science Assessment).	Moderate	• describe a scientific theory as an explanation for why a pattern in nature occurs • recognize the differences in the colloquial use of the term "theory" versus the scientific use • explain how the cell theory meets the qualifications of a scientific theory

Topic 3: Cell Structure & Function		
SC.6.L.14.4 Compare and contrast the structure and function of major organelles of plant and animal cells, including cell wall, cell membrane, nucleus, cytoplasm, chloroplasts, mitochondria, and vacuoles (parent benchmark on the Statewide Science Assessment).	Moderate	• distinguish prokaryotic from eukaryotic cells • identify organelles on a diagram • explain the function of each organelle • differentiate between plant and animal cells in structures and functions
**SC.912.L.14.3 Compare and contrast the general structures of plant and animal cells. Compare and contrast the general structures of prokaryotic and eukaryotic cells (not assessed on the Statewide Science Assessment).	Moderate	• recognize organelles located within plant cells, animal cells, and both • identify similarities and differences between prokaryotic and eukaryotic cells
**SC.912.L.14.2 Relate structure to function for the components of plant and animal cells. Explain the role of cell membranes as a highly selective barrier (passive and active transport) (not assessed on the Statewide Science Assessment).	Moderate	• describe the importance of the cell membrane in relation to passive and active transport • explain the link between each organelle's job and its structure
Topic 4: Cell Processes		
SC.6.L.14.3 Recognize and explore how cells of all organisms undergo similar processes to maintain homeostasis, including extracting energy from food, getting rid of waste, and reproducing (assessed as SC.6.L.14.2 on the Statewide Science Assessment).	Moderate	• identify the needs of cells • explain why homeostasis is important for a cell's survival • discuss the processes involved in obtaining energy (photosynthesis & cellular respiration) • recognize that cellular respiration occurs in both plant and animal cells • describe the importance of exchanging materials • explain why cells divide
**SC.912.L.16.14 Describe the cell cycle, including the process of mitosis. Explain the role of mitosis in the formation of new cells and its importance in maintaining chromosome number during asexual reproduction (not assessed on the Statewide Science Assessment).	Moderate	• recognize the significance of cell reproduction • explain the steps involved in mitosis as part of asexual reproduction
SC.6.N.3.4 Identify the role of models in the context of the sixth grade science benchmarks (not assessed on the Statewide Science Assessment).	Moderate	• recognize the value of models in science • distinguish limitations and advantages of models of cells and organelles

Access Points Standards

Standard	Independent	Supported	Participatory
SC.6.L.14.1	Identify how the major structures of plants and organs of animals work as parts of larger systems, such as the heart is part of the circulatory system that pumps blood.	Identify the major internal organs of animals and external structures of plants and their functions.	Recognize that the human body is made up of various parts.
SC.6.N.2.2	Identify that scientific knowledge changes with new evidence or new interpretations.	Recognize that scientific knowledge changes when new things are discovered.	Recognize objects and pictures related to science.

SC.6.L.14.2	Identify that the cell is the smallest basic unit of life and most living things are composed of many cells.	Recognize that there are smaller parts in all living things, too small to be seen without magnification, called cells.	Recognize that the human body is made up of various parts.
SC.6.N.2.3	Identify that scientists can use different kinds of experiments, methods, and explanations to find answers to scientific questions.	Recognize contributions of well-known scientists.	Recognize a scientist as a person who works with science.
SC.6.N.3.1	Identify that a scientific theory is an explanation of nature supported by evidence.	Recognize that a scientific theory is an explanation of nature.	Observe and recognize a predictable cause-effect relationship related to a science topic.
SC.6.L.14.4	Recognize that plant and animal cells have different parts and each part has a function.	Recognize that there are smaller parts in all living things, too small to be seen without magnification, called cells.	Identify basic needs of plants and animals.
**SC.912.L.14.3	Identify the major parts of plant and animal cells, including the cell membrane, nucleus, and cytoplasm, and their basic functions.	Recognize that cells have different parts and each has a function.	Match parts of common living things to their functions.
**SC.912.L.14.2	Identify the major parts of plant and animal cells, including the cell membrane, nucleus, and cytoplasm, and their basic functions.	Recognize that cells have different parts and each has a function.	Match parts of common living things to their functions.
SC.6.L.14.3	Identify that cells carry out important functions within an organism, such as using energy from food.	Recognize that animals, including humans, use energy from food.	Identify basic needs of plants and animals.
**SC.912.L.16.14	Recognize that cells reproduce by dividing to produce new cells that are identical (mitosis) or new cells that are different (meiosis).	Recognize that cells reproduce by dividing.	Recognize that living things produce offspring (reproduce).
SC.6.N.3.4	Identify models used in the context of sixth grade science access points.	Recognize models used in the context of sixth grade science access points.	Associate a model with an activity used in the context of sixth grade science access points.

Foundational Content

Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.4.N.1.7 Recognize and explain that scientists base their explanations on evidence.
SC.4.N.3.1 Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.
SC.3.N.3.2 Recognize that scientists use models to help understand and explain how things work.
SC.3.N.3.3 Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.

Common Misconceptions

- All unicellular organisms are microscopic & all multicellular organisms are visible to the unaided eye.
- The cell is a two-dimensional object.
- Cells are only found inside living things (meaning the skin is not composed of cells because it's on the surface of the body)

Teacher Notes

- Students should be able to explain the interrelated nature of the components of the cell theory; however, they need not memorize the historical figures and development of the theory.
- Students should be able to recognize the four types of body tissue, but it is not necessary that students memorize the structure/function of each.

• Vacuoles are only located in plant cells. • Cellular respiration means a cell is breathing. • The term "organelle" refers to an organ. • All cells are the same size and shape – there is a generic "cell." • Some living parts of organisms are not made of cells.	• Students should have a definitional understanding of cellular respiration and photosynthesis and where each takes place in the cell. Further, students should know that both plant and animal cells must go through the process of cellular respiration in order to release energy, whereas photosynthesis only occurs in plant cells.

Sample Literacy Strategies	Prefixes, Suffixes, Roots
• Use a Semantic Feature Analysis to compare & contrast organelles found in plant & animal cells. • Use a card sort to match the structure and function of organelles found in cells. • Complete a Frayer model for the term "homeostasis." • Complete a pyramid graphic organizer to show the hierarchal organization of complex organisms.	• uni – single, one • multi – many • -plasm – living substance • chlor – green homeo – like, similar • lyso – dissolve • eu – true • pro- before -kary- nucleus • mito- thread • photo- light

Sample Assessment Questions

Sample FLDOE Question SC.6.L.14.2

The cell theory applies to all organisms, including the five shown below.

Which of the following statements describes how these organisms are an example of the cell theory?

A. The organisms have cells that lack a nucleus.
B. The organisms are made of one or more cells.
C. The cells of the organisms undergo photosynthesis.
D. The cells of the organisms are identical to each other.

Correct Answer: B

Sample FCAT Explorer Question SC.6.N.3.1

Cell theory states that all living things are composed of cells, and that cells are the basic units of life. Why do scientists refer to it as cell theory instead of the cell hypothesis?

A. Since we haven't checked every organism for cells, we cannot call it a hypothesis.
B. It explains what happens in cells, so it cannot be a hypothesis.
C. All of the evidence collected supports the idea of why we believe this.
D. It is an idea that is held by more than just one scientist.

Correct Answer: C

Unit 7: Classification of Living Things		Back to Top
Unit Goal: Students will understand how living things are sorted into groups based on shared characteristics.	**Suggested Time Frame:**	03/26 - 04/16 (14 days)
Text Resources: Pages 393-422; for specific resources related to Nature of Science Benchmarks, please see the "Nature of Science" tab in "Teacher Toolbox: Secondary"	**Lesson Plans:**	See Lesson Plan Link in Blender

Content/Academic Language						
FLDOE	autotroph Bacteria binomial nomenclature	characteristic classify Fungus (Fungi)	heterotroph kingdom nucleus	scientist species		
Other	Animalia Archaea broad class	common name dichotomous key domain	Eukarya family genus	Multicellular narrow order phylogeny	phylum Plantae Protista	taxonomy trait

Florida State Academic Standards	Complexity Level	Student Target
Topic 1: Diversity of Living Organisms		
SC.6.L.15.1 Analyze and describe how and why organisms are classified according to shared characteristics with emphasis on the Linnaean system combined with the concept of Domains (parent benchmark on the Statewide Science Assessment).	High	• discuss the importance of a classification system • explain how scientists examine physical & chemical characteristics to identify relationships among living things • recognize the usefulness of binomial nomenclature • describe taxonomy as the science of describing, classifying, and naming living things • list the levels of classification (domain, kingdom, phylum, class, order, family, genus, species) • identify the domains of living things as Bacteria, Archaea, and Eukarya • describe the four kingdoms of domain Eukarya • explain the purpose of branching diagrams (shows relationships among species) & dichotomous keys (identify unknown organisms)
SC.6.N.2.3 Recognize that scientists who make contributions to scientific knowledge come from all kinds of backgrounds and possess varied talents, interests, and goals (not assessed on the Statewide Science Assessment).	Low	• acknowledge the importance of scientists having a broad range of skills & circumstances in the development & advancement of scientific knowledge • identify Carolus Linnaeus's contribution to classification

Access Points Standards			
Standard	**Independent**	**Supported**	**Participatory**
SC.6.L.15.1	Classify animals into major groups, such as insects, fish, reptiles, mammals, and birds.	Sort common animals by their physical characteristics.	Match animals based on a given shared characteristic.
SC.6.N.2.3	Identify that scientists can use different kinds of experiments, methods, and explanations to find answers to scientific questions.	Recognize contributions of well-known scientists.	Recognize a scientist as a person who works with science.

Foundational Content

Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.3.L.15.1 Classify animals into major groups (mammals, birds, reptiles, amphibians, fish, arthropods, vertebrates and invertebrates, those having live births and those which lay eggs) according to their physical characteristics and behaviors.
SC.3.L.15.2 Classify flowering and nonflowering plants into major groups such as those that produce seeds, or those like ferns and mosses that produce spores, according to their physical characteristics.
SC.5.L.14.2 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.

Common Misconceptions	Teacher Notes
• Organisms that are not of the same species can breed and produce viable offspring. • Organisms that share physical traits (such as sharks and whales) are closely related. • Humans evolved from monkeys. • To be classified as part of the same family, organisms must be blood relatives. • Organisms that have more than one common name are of a different species. • Humans are not animals.	• It is not necessary that students memorize phylogeny or specific traits of organisms. • Students should understand the differences between a common and scientific name. • Though students should be familiar with the levels of classification, they need not memorize the characteristics per phyla, class, order, etc. • This unit begins before the end of the 3rd Nine Weeks and ends in the 4th Nine Weeks. Please consider this when developing your Nine Week Exam.

Sample Literacy Strategies	Prefixes, Suffixes, Roots
• Complete a Triple Venn Diagram for the three domains. • Complete a Classification Organizer for the four kingdoms of domain Eukarya. • Create a mnemonic device for the levels of classification.	• hetero – different, other of two • auto – self, same • -troph – nutrient matter • multi – many • eu – true • pro – before • -kary- nucleus

Sample Assessment Questions

Sample FLDOE Question SC.6.L.15.1

Mushrooms, bread molds, and yeasts are classified together in the fungi kingdom. Specific characteristics are used to classify these organisms. Which of the following is a characteristic used to classify these organisms as fungi?

A. They are parasites.
B. They are unicellular.
C. They are prokaryotes.
D. They are heterotrophs.

Correct Answer: D

Sample FCAT Explorer Question SC.6.N.2.2

A famous scientist has a hypothesis that is different from the current scientific theory. What should happen to this scientist's hypothesis?

A. If the scientist is famous, then the hypothesis should be accepted and the theory should be changed.
B. The hypothesis should be tested and the results should be used to determine if the theory should change.
C. The hypothesis should be rejected if it does not agree with the current theory.
D. People can accept the hypothesis if they want, but others can choose to reject it.

Correct Answer: B

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Unit 8: Human Body Systems		Back to Top
Unit Goal: Students will understand the functions of the major body systems and each system's role in maintaining homeostasis.	**Suggested Time Frame:**	04/17 - 05/17 (23 days)
Text Resources: Pages 343-392; for specific resources related to Nature of Science Benchmarks, please see the "Nature of Science" tab in "Teacher Toolbox: Secondary"	**Lesson Plans**	See Lesson Plan Link in Blender **Resources fulfill Florida Statute 1003.42.(j) & 2(n)**

Content/Academic Language							
FLDOE	bacteria cell circulatory system	fungus homeostasis model	organism ovary parasite	repetition replication reproduction	virus		
Other	alveoli antibiotic anus artery bladder blood bone bone marrow brain	bronchi capillary cardiovascular system colon diaphragm digestive system disease disorder egg	esophagus excretory system fallopian tube fertilization fever heart hereditary immune system infectious agent	infectious disease joint kidney large intestine larynx ligament liver lungs muscle	musculoskeletal system nerves nervous system neuron noninfectious disease pancreas pathogen penis	pharynx rectum reproductive system respiratory system small intestine sperm spinal cord stomach tendon	testes trachea urethra uterus vagina vein villi white blood cell

Florida State Academic Standards	Complexity Level	Student Target
Topic 1: Human Body Systems		
SC.6.L.14.5 Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis (parent benchmark on the Statewide Science Assessment).	High	• recognize the importance of homeostasis to the vitality of each body system & the body as a whole • identify major structures of each organ system • summarize the functions of each organ system of the human body • explain how the body maintains homeostasis and how each body system contributes
SC.6.N.1.1 Define a problem from the sixth 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 (assessed as SC.8.N.1.1 on the Statewide Science Assessment).	High	• make predictions about the function of human body systems based on known information • identify appropriate tools for use in collecting and organizing data • come to a reasonable conclusion about the body based on evidence and justify said conclusion
SC.6.N.3.4 Identify the role of models in the context of the sixth grade science benchmarks (not assessed on the SSA).	Moderate	• recognize the value of models in science • distinguish limitations and advantages of models of the human body systems

Topic 2: Immunity & Disease [addresses FL 1003.42 (j)]		
SC.6.L.14.5 Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis (parent benchmark on the Statewide Science Assessment).	High	• compare the external and internal defenses of the human body against pathogens • identify and describe the functions of macrophages, T cells, and B cells • summarize the immune system response to pathogens invading the human body • describe how the human body can build immunity • identify disorders that challenge the immune system • discuss the impact of alcohol & narcotics on the nervous and cardiovascular systems
SC.6.L.14.6 Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites (assessed as SC.6.L.14.5 on the Statewide Science Assessment).	Moderate	• describe the four main types of pathogens • explain how each pathogen affects the body and is treated differently • distinguish between noninfectious & infectious (contagious) diseases & their causes
HE.6.C.1.3 Identify environmental factors that affect personal health (not assessed on the Statewide Science Assessment).	N/A	• discuss lifestyle choices, such as diet, exercise & sun exposure, that can affect a person's well-being • recognize that animals or insects, as well as contaminated food or water can spread disease
HE.6.C.1.4 Recognize how heredity can affect personal health (not assessed on the Statewide Science Assessment – supporting benchmark not in course description).	N/A	• identify a person's increased susceptibility to diseases based on specific inherited traits
HE.6.C.1.5 Explain how body systems are impacted by hereditary factors and infectious agents (not assessed on the Statewide Science Assessment).	N/A	• explain the effect of genetic predisposition • describe the effect pathogens have on the body • cite examples of how body systems are impacted (ex. cystic fibrosis affects the respiratory & digestive systems, sickle-cell anemia affects the circulatory system, and influenza affects the respiratory system)
SC.6.N.1.2 Explain why scientific investigations should be replicable (assessed as SC.7.N.1.2 on the Statewide Science Assessment).	High	• differentiate between replication & repetition • describe the importance of replication and repetition in the understanding and development of disease treatments

Access Points Standards			
Standard	**Independent**	**Supported**	**Participatory**
SC.6.L.14.5	Identify how the major structures of plants and organs of animals work as parts of larger systems, such as the heart is part of the circulatory system that pumps blood.	Identify the major internal organs of animals and external structures of plants and their functions.	Recognize body parts related to basic needs, such as mouth for eating.
SC.6.N.1.1	Identify a problem from the sixth grade curriculum, use reference materials to gather information, carry out an experiment, collect and record data, and report results.	Recognize a problem from the sixth grade curriculum, use materials to gather information, carry out a simple experiment, and record and share results.	Recognize a problem related to the sixth grade curriculum, observe and explore objects or activities, and recognize a solution.
SC.6.N.3.4	Identify models used in the context of sixth grade science access points.	Recognize models used in the context of sixth grade science access points.	Associate a model with an activity used in the context of sixth grade science access points.

SC.6.L.14.6	Recognize that bacteria and viruses can infect the human body.	Identify ways to prevent infection from bacteria and viruses, such as hand washing.	Recognize practices that keep the body free from infection, such as hand washing.
HE.6.C.1.3	Recognize environmental factors that affect personal health, such as air quality, availability of sidewalks, or spoiled food.	Recognize an environmental factor that affects personal health, such as air quality, availability of sidewalks, or spoiled food.	Recognize a factor in the school environment that promotes personal health, such as having adequate lighting or a clean environment.
HE.6.C.1.4	Recognize health problems and concerns common to adolescents, including reproductive development, acne, eating disorders, suicide/depression, and changes related to puberty.	Recognize a health problem and concern that is common to adolescents, including reproductive development, acne, eating disorders, suicide/depression, or changes related to puberty.	Associate a common personal-health problem or issue with adolescents, such as acne or changes related to puberty.
HE.6.C.1.5	Identify likely injuries or illnesses resulting from engaging in unhealthy/risky behaviors, such as obesity related to poor nutrition and inactivity, cancer and chronic lung disease related to tobacco use, injuries caused from failure to use seat restraint, and sexually transmitted diseases.	Recognize likely injuries or illnesses resulting from engaging in an unhealthy behavior, such as obesity related to poor nutrition and inactivity, cancer and chronic lung disease related to tobacco use, injuries caused from failure to use seat restraint, and sexually transmitted diseases.	Recognize a likely injury or illness from engaging in an unhealthy behavior, such as obesity related to poor nutrition and inactivity or injuries caused from failure to use seat restraint.
SC.6.N.1.2	Identify that scientific investigations can be repeated the same way by others.	Recognize that experiments involve procedures that can be repeated the same way by others.	Recognize that when a common activity is repeated, it has the same result.

Foundational Content

Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.5.L.14.1 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.
SC.5.L.14.2 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.
SC.4.N.3.1 Explain that models can be three dimensional, two dimensional, an explanation in your mind, or a computer model.
SC.3.N.3.2 Recognize that scientists use models to help understand and explain how things work.
SC.3.N.3.3 Recognize that all models are approximations of natural phenomena; as such, they do not perfectly account for all observations.
SC.3.N.1.5 Recognize that scientists question, discuss, and check each others' evidence and explanations.
SC.5.N.2.2 Recognize and explain that when scientific investigations are carried out, the evidence produced by those investigations should be replicable by others.
Please reference Unit 1 for the benchmarks associated with SC.6.N.1.1.

Common Misconceptions

- Oxygen-depleted (oxygen-poor) blood is blue.
- Carbon dioxide is old oxygen.
- Air we breathe in is entirely composed of oxygen and air we breathe out is entirely composed of carbon dioxide.
- All organs have only one function in the body and belong to only one organ system.
- The function of the digestive system is to excrete waste.
- All diseases are serious, terminal conditions.
- All diseases are contagious.
- Antibiotics can help cure colds and the flu.
- Viruses are living organisms.

Teacher Notes

- **This unit will segue nicely into the HG&D curriculum, thus it is suggested to address the reproductive system last. In addition, it would help students to gain greater understanding of concepts related to "Immunity & Disease" if the material was taught along with the immune system.**
- Students should be familiar with the interchangeable nature of the terms "cardiovascular system" and "circulatory system."
- Students should be able to identify diagrams of the following systems: circulatory, respiratory, digestive, musculoskeletal, excretory, immune, and nervous and the function of each system.
- Students should understand that pathogens are infectious agents and include viruses, bacteria and fungi.
- It is not necessary that students memorize specific diseases of the body.

Sample Literacy Strategies	Prefixes, Suffixes, Roots
• Use a Tarsia puzzle to match body systems to their functions. • Create a concept map showing the relationships of the various body systems as they contribute to homeostasis.	• cardio – heart • -vascular – vessel • anti – against, opposite of • para – alongside, beside

Sample Assessment Questions

Sample FLDOE Question SC.6.L.14.5

In order to maintain homeostasis, the systems of the human body work together to keep a constant internal temperature. Which of the following best describes how the human body responds in a cold environment?

A. The digestive system produces more hormones to warm the body.
B. The nervous system signals the muscles of the muscular system to contract and warm the body.
C. The circulatory system delivers less carbon dioxide to the muscular system, resulting in stiffening of the muscles.
D. The skeletal system produces more blood cells that circulate through the blood vessels, increasing the warmth of the body.

Correct Answer: B

Sample FCAT Explorer Question SC.6.N.1.1

Malaria is a disease that is carried by mosquitoes and injected into a person's bloodstream when they are bitten by the infected mosquito. At first people thought malaria was caused by breathing in the air around swamps. This seemed like a logical conclusion, since people who lived near swamps were more likely to contract malaria than people in drier places. What tool could have provided evidence for a more accurate conclusion about the cause of malaria?

A. pumps to drain the swamps
B. air purifiers to clean the air
C. antibiotics to kill the parasites
D. microscopes to look for parasites

Correct Answer: D

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Unit 9: Human Growth & Development Curriculum		Back to Top
Unit Goal: Students will comprehend concepts related to health promotion and disease prevention to enhance health, analyze internal and external influences on health behaviors, and demonstrate the ability to practice health-enhancing behaviors.	**Suggested Time Frame:**	5 days (05/20- 05/24) or throughout the school year, pending annual approval form Florida DOE
Text Resources: Materials provided on Blender (resources fulfill Florida Statute 1003.42(2)(n)		

Content/Academic Language						
FLDOE	bacteria cell fungus	organism ovary parasite	reproduction virus			
Other	abstinence aggressive AIDS anus assertive cervix chlamydia coercion	cognitive changes condom consent egg ejaculation emotional changes epididymis erection	fallopian tubes fertilization genital herpes gonorrhea HIV hormones human papillomavirus	hygiene hymen media literacy menstruation minor nocturnal emission ovulation passive	penis prostate gland puberty pubic lice respect scabies scrotum self-esteem	semen seminal vesicles social changes sperm STDs STIs syphilis teen pregnancy

Florida State Academic Standards	Complexity Level	Student Target
Topic 1: Decision Making and Media Influence		
HE.6.B.4.1 Determine strategies to improve effective verbal-and nonverbal-communication skills to enhance health (not assessed on the Statewide Science Assessment).	N/A	• demonstrate effective verbal- and nonverbal-communication skills with others in the decision making process and while using
HE.6.B.4.2 Practice refusal skills and negotiation skills to reduce health risks (not assessed on the Statewide Science Assessment).	N/A	• apply refusal skills and negotiation skills in the decision making process and while using media.
HE.6.B.4.3 Demonstrate effective conflict-management and/or resolution strategies (not assessed on the Statewide Science Assessment).	N/A	• demonstrate effective decision making skills
HE.6.B.4.4 Compile ways to ask for assistance to enhance the health of self and others (not assessed on the Statewide Science Assessment).	N/A	• discuss people who can be approached for assistance with making effective decisions
HE.6.B.5.1 Investigate health-related situations that require the application of a thoughtful decision-making process (not assessed on the Statewide Science Assessment).	N/A	• discuss various situations and how to use responsible decision making skills in order to handle the situations

HE.6.B.5.2 Choose healthy alternatives over unhealthy alternatives when making a decision (not assessed on the Statewide Science Assessment).	N/A	• apply decision making skills and the different choices a person can make then decide the most healthy choices
HE.6.B.5.3) Specify the potential outcomes of each option when making a health-related decision(not assessed on the Statewide Science Assessment).	N/A	• specify the potential outcomes of each choice when making decisions
HE.6.B.5.4 Distinguish between the need for individual or collaborative decision-making(not assessed on the Statewide Science Assessment).	N/A	• discuss situations in which more than one person may be needed when applying effective decision making skills
HE.6.B.5.5 Predict the potential outcomes of a health-related decision(not assessed on the Statewide Science Assessment).	N/A	• predict potential outcomes when applying decision making skills
HE.6.C.2.1 Examine how family influences the health of adolescents (not assessed on the Statewide Science Assessment).	N/A	• examine how family influences our decisions
HE.6.C.2.8 Determine how social norms may impact healthy and unhealthy behavior (not assessed on the Statewide Science Assessment).	N/A	• examine how social norms influence our decisions and the use of social media
HE.6.C.2.9 Identify the influence of personal values, attitudes, and beliefs about individual health practices and behaviors (not assessed on the Statewide Science Assessment).	N/A	• examine how personal values, attitudes and beliefs influence our decisions and the use of social media
HE.6.P.7.1 Explain the importance of assuming responsibility for personal-health behaviors (not assessed on the Statewide Science Assessment).	N/A	• explain the importance of assuming responsibility for the decisions made and the use of social media
SC.68.CS-PC.1.1 Recognize and describe legal and ethical behaviors when using information and technology and describe the consequences of misuse.	N/A	• recognize and describe proper behaviors when using social media • describe some of the consequences of misuse of social media
SC.68.CS-PC.1.2 Describe and use safe and appropriate practices when participating in online communities (e.g., discussion groups, blogs, and social networking sites).	N/A	• describe and use safe and appropriate practices when using social media
SC.68.CS-PC.1.3 Evaluate the proper use and operation of security technologies (e.g., passwords, virus protection software, spam filters, pop-up blockers, and cookies).	N/A	• evaluate the proper use of passwords and filters
Topic 2: Puberty		
SC.6.L.14.5 Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis (parent benchmark on the Statewide Science Assessment).	High	• identify and describe the functions of the reproductive system • identify the various changes that occur during puberty

SC.6.N.3.4 Identify the role of models in the context of the sixth grade science benchmarks (not assessed on the Statewide Science Assessment).	Moderate	• recognize the value of models in science • distinguish limitations and advantages of models of the human body systems
HE.6.C.1.3 Identify environmental factors that affect personal health (not assessed on the Statewide Science Assessment).	N/A	• discuss lifestyle choices, such as diet, exercise & sun exposure, that can affect a person's well-being
HE.6.C.1.4 Recognize how heredity can affect personal health (not assessed on the Statewide Science Assessment – supporting benchmark not in course description).	N/A	• identify hereditary involvement in a person's changes during puberty
HE.6.C.1.5 Explain how body systems are impacted by hereditary factors and infectious agents (not assessed on the Statewide Science Assessment).	N/A	• explain the effect of heredity on the changes that occur during puberty
HE.6.C.1.6 Examine how appropriate health care can promote personal health.	N/A	• examine how health care can promote personal health
HE.6.C.1.7 Recognize how heredity can affect personal health.	N/A	• recognize each person goes through puberty individually and that heredity can play a major role in how puberty develops in a person
Topic 3: Human Reproduction		
SC.6.L.14.5 Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis (parent benchmark on the Statewide Science Assessment).	High	• identify and describe the parts and functions of the male reproductive system • identify and describe the parts and functions of the female reproductive system • describe the menstrual cycle • examine teen pregnancy facts
SC.6.N.3.4 Identify the role of models in the context of the sixth grade science benchmarks (not assessed on the Statewide Science Assessment).	Moderate	• recognize the value of models in science • distinguish limitations and advantages of models of the human body systems
Topic 4: STIs/HIV		
SC.6.L.14.5 Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis (parent benchmark on the Statewide Science Assessment).	High	• compare the external and internal defenses of the human body against pathogens • identify and describe the functions of macrophages, T cells, and B cells • summarize the immune system response to pathogens invading the human body • describe how the human body can build immunity
SC.6.L.14.6 Compare and contrast types of infectious agents that may infect the human body, including viruses, bacteria, fungi, and parasites (assessed as SC.6.L.14.5 on the Statewide Science Assessment).	Moderate	• describe the main types of STIs and how they are transmitted • explain how various STIs affect the body and are treated • explain the difference between STI and STD

HE.6.C.1.3 Identify environmental factors that affect personal health (not assessed on the Statewide Science Assessment).	N/A	• discuss lifestyle choices, such as diet, exercise & sun exposure, that can affect a person's well-being • recognize that engaging in sexual activity can spread disease • recognize that abstinence is 100% effective against STI transmission • recognize that condom use can reduce risk if engaging in sexual activity
HE.6.C.1.4 Identify health problems and concerns common to adolescents including reproductive development.	N/A	• identify a person's increased susceptibility to diseases based on sexual activity.
HE.6.C.1.5 Explain how body systems are impacted by hereditary factors and infectious agents (not assessed on the Statewide Science Assessment).	N/A	• explain the effect of genetic predisposition • describe the effect pathogens have on the body • cite examples of how body systems are impacted (ex. cystic fibrosis affects the respiratory & digestive systems, sickle-cell anemia affects the circulatory system, and influenza affects the respiratory system)
HE.6.C.1.6 Examine how appropriate health care can promote personal health.	N/A	• examine how appropriate health care is important to maintaining sexual health
HE.6.C.1.8 Examine the likelihood of injury or illness if engaging in unhealthy/risky behaviors.	N/A	• discuss abstinence in avoiding diseases and the use of a condom when engaging in sexual activity
Topic 5: Consent		
HE.6.B.4.1 Determine strategies to improve effective verbal- and nonverbal- communication skills to enhance health.	N/A	• discuss what is means to give consent • discuss verbal- and nonverbal- communication when determining consent • examine various situations where consent is given and when it is not given
HE.6.B.4.2 Practice refusal skills and negotiation skills to reduce health risks.	N/A	• practice how to effectively give consent or how to use refusal skills when it comes to giving or not giving consent
HE.6.B.5.1 Investigate health-related situations that require the application of a thoughtful decision-making process.	N/A	• discuss various situations and how decision making skills play an important role in determining if a person has received consent or not received consent • recognize a minor cannot legally give consent
HE.6.C.2.1 Examine how family influences the health of adolescents.	N/A	•
HE.6.C.2.2 Examine how peers influences the health of adolescents.	N/A	•

Grade 6 End of Year Assessment		
Recommendations: Students take this assessment in paper/pencil format over two, 50-minute class periods or one, 90-minute block. If this assessment is taken in OLA format, note that students must complete it in one session.	**Suggested Time Frame:**	2 days (05/28 - 05/29)
Availability: Published on Unify in May 2022		

End of 4th Nine Weeks

M/J World History Scope and Sequence FY 24

School District of Palm Beach County Division of Teaching and Learning Secondary Social Studies Department

General Notes The primary content for this course pertains to the world's earliest civilizations to the ancient and classical civilizations of Africa, Asia, and Europe. Students will be exposed to the multiple dynamics of world history including economics, geography, politics, and religion/philosophy. Students will study methods of historical inquiry and primary and secondary historical documents.

Scope and Sequence: CPALMS : The Scope and Sequence format has been revised to closely align with CPALMS . CPALMS is an online toolbox of information, vetted resources, and interactive tools that helps educators effectively implement teaching standards. It is the State of Florida's official sourceforstandardsinformationandcoursedescriptions. TheScopeandSequencenowcontainscolorcodedbenchmarkthemesforeach course where applicable. They include: History including Skills, Civics & Government ,Economics , Geography and Holocaust Studies standards You'll notice that Economics and Geography standards are now back on our Scope and Sequences to support Social Studies instruction.

Required instruction refers to state statute 1003.42. Please click here to see what the required instruction is for Secondary Social Studies. Throughout the Scope and sequence you will see examples of the alignment of required instruction within our Scopes and Sequences. An example of this alignment is as follows: [aligns with F.S. 1003.42 (f)]. This means that that particular benchmark aligns with the 1003.42(f) , which is the history of the United States

English Language Arts: ELA Expectations are fundamental ELA skills that are included at the end of each Scope and Sequence.. They are the skills that support social studies instruction.

English Language Development ELD Standards Special Notes Section:Teachers are required to provide listening, speaking, reading and writing instruction that allows English language learners (ELL) to communicate information, ideas and concepts for academic success in the content area of Social Studies. For the given level of English language proficiency and with visual, graphic, or interactive support, students will interact with grade level words, expressions, sentences and discourse to process or produce language necessary for academic success. The ELD standard should specify a relevant content area concept or topic of study chosen by curriculum developers and teachers which maximizes an ELL's need for communication and social skills.

Mathematics Benchmark Guidance - Social Studies instruction should include opportunities for students to interpret and create representations of historical events and concepts using mathematical tables, charts and graphs.

M/J World History Scope and Sequence FY 24

M/J World History : Scope & Sequence

2023-2024

Early World History Benchmarks	
These standards can be used throughout the course to support the main benchmarks.	
History Skills & Historiography	SS.6.W.1.1 Use timelines to identify chronological order of historical events. SS.6.W.1.2: Identify terms and designations (decade, century, epoch, era, millennium, BC/BCE, AD/CE) of time periods. SS.6.W.1.3:Interpret primary and secondary sources. [. . . artifacts, images, auditory sources, written sources.] SS.6.W.1.4: Describe the methods of historical inquiry and how history relates to the other social sciences. [. . . archaeology, geography, political science, economics). SS.6.W.1.5:Describe the roles of historians and recognize varying historical interpretations (historiography). SS.6.W.1.6: Describe how history transmits culture and heritage and provides History Skills and Historiography resources
NEW! Civics & Government	These new Civics and Government Standards will be placed in Unit 9 Ancient Greece and Unit 10 Ancient Rome. SS.6.CG.1.1Analyze how democratic concepts developed in ancient Greece served as a foundation for the United States' constitutional republic. • ● Students will identify and explain the democratic principles of government in ancient Greece. • ● Students will compare and contrast the political systems of ancient Greece and modern-day United States. • ● Students will recognize the influence of ancient Greece on the American political process. SS.6.CG.2 Analyze the influence of ancient Rome on the United States' constitutional republic. • ● Students will compare and contrast the political systems in ancient Rome and modern-day United States. • ● Students will recognize the influence of ancient Rome on the American political process SS.6.CG.1.3: Examine rule of law in the ancient world and its influence on the United States' constitutional republic. • ● Students will recognize origins of what to include, but not be limited to, the contributions of ancient Greek and ancient Roman civilizations.

- ● Students will recognize that the rule of law is a foundational principle of the U.S. government

  SS.6.CG.4 Examine examples of civic leadership and virtue in ancient Greece and ancient Rome.

  ◦ Students will explain the influence of significant leaders (e.g., Marcus Tullius Cicero, Marcus Aurelius, Pericles, Solon, Cleisthenes) on civic participation and governance in the ancient world.

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Economics & Geography

Economics Standards

SS.6.E.1.1 Identify the factors (new resources, increased productivity, education, technology, slave economy, territorial expansion) that increase economic growth.

SS.6.E.1.2: Describe and identify traditional and command economies as they appear in different civilizations.
SS.6.E.1.3: Describe the following economic concepts as they relate to early civilization: scarcity, opportunity cost, supply and demand, barter, trade, productive resources (land, labor, capital, entrepreneurship).
SS.6.E.2.1: Evaluate how civilizations through clans, leaders, and family groups make economic decisions for that civilization providing a framework for future city-state or nation development.
SS.6.E.3.1: Identify examples of mediums of exchange (currencies) used for trade (barter) for each civilization, and explain why international trade requires a system for a medium of exchange between trading both inside and among various regions.
SS.6.E.3.2: Categorize products that were traded among civilizations, and give examples of barriers to trade of those products.
SS.6.E.3.3: Describe traditional economies (Egypt, Greece, Rome, Kush) and elements of those economies that led to the rise of a merchant class and trading partners.
SS.6.E.3.4: Describe the relationship among civilizations that engage in trade, including the benefits and drawbacks of voluntary trade.

Geography Standards

Basic Geography Skills
SS.6.G.1.1: Use latitude and longitude coordinates to understand the relationship between people and places on the Earth. SS.6.G.1.2: Analyze the purposes of map projections (political, physical, special purpose) and explain the applications of various types of maps.
SS.6.G.1.3: Identify natural wonders of the ancient world
SS.6.G.1.4: Utilize tools geographers use to study the world
SS.6.G.1.5: Use scale, cardinal, and intermediate directions, and estimation of distances between places on current and ancient maps of the world.

	SS.6.G.1.6: Use a map to identify major bodies of water of the world, and explain ways they have impacted the development of civilizations SS.6.G.1.7: Use maps to identify characteristics and boundaries of ancient civilizations that have shaped the world today Geography Standards to support the teaching of civilizations. These can be added to support unit instruction. SS.6.G.2.1: Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world. SS.6.G.2.2: Differentiate between continents, regions, countries, and cities in order to understand the complexities of regions created by civilizations. SS.6.G.2.3: Analyze the relationship of physical geography to the development of ancient river valley civilizations. SS.6.G.2.4: Explain how the geographical location of ancient civilizations contributed to the culture and politics of those societies. SS.6.G.2.5: Interpret how geographic boundaries invite or limit interaction with other regions and cultures.

	SS.6.G.2.6: Explain the concept of cultural diffusion, and identify the influences of different ancient cultures on one another. SS.6.G.2.7: Interpret choropleths or dot-density maps to explain the distribution of population in the ancient world SS.6.G.3.1: Explain how the physical landscape has affected the development of agriculture and industry in the ancient world SS.6.G.3.2: Analyze the impact of human populations on the ancient world's ecosystems. SS.6.G.4.1: Explain how family and ethnic relationships influenced ancient cultures SS.6.G.4.2: Use maps to trace significant migrations, and analyze their results. SS.6.G.4.3: Locate sites in Africa and Asia where archaeologists have found evidence of early human societies, and trace their migration patterns to other parts of the world. SS.6.G.4.4: Map and analyze the impact of the spread of various belief systems in the ancient world. SS.6.G.5.1: Identify the methods used to compensate for the scarcity of resources in the ancient world. SS.6.G.5.2: Use geographic terms and tools to explain why ancient civilizations developed networks of highways, waterways, and other transportation linkages. SS.6.G.5.3: Use geographic tools and terms to analyze how famine, drought, and natural disasters plagued many ancient civilizations. SS.6.G.6.1: Describe the Six Essential Elements of Geography (The World in Spatial Terms, Places and Regions, Physical Systems, Human Systems, Environment, The Uses of Geography) as the organizing framework for understanding the world and its people. SS.6.G.6.2: Compare maps of the world in ancient times with current political maps

NEW! Holocaust Studies	SS.68.HE.1.1.Examine the Holocaust as the planned and systematic state-sponsored persecution and murder of European Jews by Nazi Germany and its collaborators between 1933 and 1945. Students will describe the basic beliefs of Judaism and trace the origins and history of Jews in Europe. Students will analyze how antisemitism led to and contributed to the Holocaust. Students will identify examples of antisemitism (e.g., making mendacious, dehumanizing, demonizing or stereotypical allegations about Jews; demonizing Israel by using the symbols and images associated with classic antisemitism to characterize Israel or Israelis). This will only be taught in the 8th grade World History Course. This only applies to schools that have already changed their progression and offer 8th grade World History.

M/J World History Scope and Sequence FY 24

Unit 1 Early Humans and The Agricultural Revolution August 10th - Sept 1st 17 days			
CONTENT THEME STANDARDS		RELEVANT CONTENT	ALIGNED RESOURCES/ Required Instruction
History	SS.6.W.2.1: Compare the lifestyles of hunter-gatherers with those of settlers of early agricultural communities. SS.6.W.2.2: Describe how the developments of agriculture and	Special note: As the school year begins, you have the opportunity to introduce students to historiography and geography skills. Alternatively, you can seamlessly integrate these skills into the curriculum as they become relevant throughout the course. Choose from the various standards provided above to support your teaching approach.	Unit 1 Early Human & The Agricultural Revolution Blender Resources Social Studies FY24 Commemoration Calendar Corresponding Savvas Unit: SS.6.W.2.1 - Topic 1.1 The Distant Past SS.6.W.2.2 - Topic 1.2 Humans Spread Out; 1.4 New Ways of Life

	metallurgy related to settlement, population growth, and the emergence of civilization. SS.6.W.2.3: Identify the characteristics of civilization (e.g., urbanization, specialized labor, advanced technology, government and religious institutions, social classes)	Central Topic to Study The emergence of early civilizations (Nile, Tigris-Euphrates, Indus, and Yellow Rivers, Meso and South American). Essential Questions: What were the differences between the lives of hunter-gatherers and agricultural settlers? How did big developments/inventions help people start civilizations? Important Concepts	SS.6.W.2.3 - Topic 1.3 Developing Complex Cultures; 1.4 New Ways of Life; 1.5 The Rise of Civilizations
Economics & Geography			

M/J World History Scope and Sequence FY 24

BC/BCE, AD/CE decade, century, era, millennium Paleolithic Age Neolithic Age Hunter-gatherer Nomad Agriculture Domesticate Metallurgy		
Unit 2 Ancient Mesopotamia Sept 5th - Sept 22 14 days		
CONTENT THEME STANDARDS	RELEVANT CONTENT	ALIGNED RESOURCES/ Required Instruction

History	SS.6.W.2.4: Compare the economic, political, social, and religious institutions of ancient river civilizations. (e.g., Nile, Tigris-Euphrates, Indus, Huang He (Yellow River) and Chang Jiang (Yangtze River). SS.6.W.2.7: Summarize the important achievements of Mesopotamian civilization. (e.g. cuneiform writing, epic literature such as Gilgamesh, art and architecture, technology such as the wheel, sail, and plow). SS.6.W.2.8: Determine the impact of key figures from ancient Mesopotamian	Central Topic to Study: Located in modern-day Iraq, Mesopotamia is the land around the Tigris and Euphrates Rivers. These rivers provided fertile land and the basis for the growth of the first civilization, Sumer. Mesopotamia is home to many inventions and the birth of organized government. Essential Questions: What makes a civilization?	Ancient Mesopotamia Blender Unit Resources Corresponding Savvas Unit: SS.6.W.2.7 - Topic 2.1 Civilization Emerges in Mesopotamia SS.6.W.2.8 - Topic 2.2 The First Empires; Topic 2.3 The Assyrian and Persian Empires

	civilizations. e.g. Gilgamesh, Sargon, Hammurabi, Ashurbanipal, Nebuchadnezzar).	

Economics & Geography	SS.6.G.1.7 Use maps to identify characteristics and boundaries of ancient civilizations that have shaped the world today SS.6.G.2.1 Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.	How did Hammurabi affect life in Mesopotamia? Important Concepts Specialization Organized government Social classes Cuneiform Ziggurat Hammurabi Code of Hammurabi Stable Food Supply

Unit 3 Ancient Africa: Egypt , Kush and Axum Sept 26th - October 27th 24 days

CONTENT THEME STANDARDS		RELEVANT CONTENT	ALIGNED RESOURCES/ Required Instruction
History	SS.6.G.2.3 The relationship of the physical geography to the development of ancient river valley civilizations. Examples are Tigris and Euphrates [Mesopotamia], Nile [Egypt], Indus and Ganges [Ancient India], and Huang He [Ancient China]. [aligns with 1003.42 (h)] SS.6.W.2.5: Summarize important achievements of Egyption avilization. Examples are agriculture, calendar, pyramids, art and architecture, hieroglyphic writing and	Central Topic to Study Students will learn the importance of the Nile River to the ancient Egyptians The events led to the rise and fall of Kush and Axum. Essential Questions: How did the Nile River make Egypt flourish? What important things did Egypt create?	Ancient Egypt Resources Kush and Axum Resources Corresponding Savvas Unit: SS.6.W.2.5 - Topic 3.1 Egypt Under the Pharaohs; Topic 3.2 Achievements of Egyptian Civilization SS.6.W.2.6 - Topic 3.1 Egypt Under the Pharaohs

	record-keeping, literature such as The Book of the Dead, mummification. [aligns with 1003.42 (h)] SS.6.W.2.6: Determine the contributions of key	How did individuals impact ancient Egypt?	

	figures from ancient Egypt. (e.g.,Narmer, Imhotep, Hatshepsut, Ramses the Great, Akhenaten, Tutankhamen, Amenhotep IV) [aligns with 1003.42 (h)] SS.6.W.3.18: Describe the rise and fall of the ancient east African kingdoms of Kush and Axum and Christianity's development in Ethiopia.[aligns with 1003.42 (h)]	Compare and contrast the rise and fall of the kingdoms of Kush and Axum Important Concepts Nile River Flourish Pyramids Hieroglyphic writing Mummification Pharaoh Unification	
Economics & Geography	SS.6.E.3.3: Describe traditional economies (Egypt, Greece, Rome, Kush) and elements of those economies that led to the rise of a merchant class and trading partners. SS.6.G.1.7 Use maps to identify characteristics and boundaries of ancient civilizations that have shaped the world today SS.6.G.2.1 Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.	Kush Textile Nubian Axum Traditional economy Merchant class Scarcity	SS.6.W.3.18 - Topic 3.3 Egypt and Kush

Unit 4: Ancient Phoenicians and Israelites October 30th - November 17th 14 days			
CONTENT THEME STANDARDS		RELEVANT CONTENT	ALIGNED RESOURCES/ Required Instruction
History	SS.6.W.3.1: Analyze the cultural impact the ancient Phoenicians had on the Mediterranean world with regard to colonization (Carthage), exploration, maritime commerce (purple dye, tin), and written communication (alphabet),metalworking and	Central Topic to Study The key figures and the achievements of the ancient Israelites. They will learn how key figures such as Moses and King David helped shape Judaism. In	Ancient Phoenicians Resources Ancient Israelites Resources Corresponding Savvas Unit: SS.6.W.3.1 - Topic 2.4 The Phoenicians

	carpentry.[aligns with 1003.42 (h)] SS.6.W.2.9: Identify key figures and basic beliefs of the Israelites and determine how these beliefs compare with those of others in the geographic area. (e.g., Abraham, Moses, monotheism, law, emphasis on individual worth and responsibility). Abraham, Saul, King David, Solomon, Isaac, Jacob, Moses, Hebrew Bible, Canaan.	addition, they will learn about the spread of Judaism and its impact on ancient and modern society. Essential Questions: What do Jewish people believe? How are those beliefs different from other religions nearby? How did Judaism spread in ancient times?	SS.6.W.2.9 - Topic 2.5 Origins of Judaism; Topic 2.6 Beliefs of Judaism; Topic 2.7 Early History of the Jewish People NEW Instructional Guide for the Civics and Government Standards FLDOE Instructional Guide for the revised Civics and Government

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Economics & Geography	SS.6.G.1.7 Use maps to identify characteristics and boundaries of ancient civilizations that have shaped the world today SS.6.G.2.1 Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.	How are Jewish people today similar or different from Jewish people in ancient times? Important Concepts Monotheism Law Covenant Ten commandments Diaspora Heritage	standards is intended to assist educators with planning for student learning and instruction aligned to Florida's benchmarks for an upright and desirable citizen. This guide is designed to aid high-quality instruction through the identification of components that support learning and teaching the Civics and Government Benchmarks and Clarifications. The instructional guide includes an analysis of information related to the Standards for Civics and Government within 6th through 8th grades and includes aligned
Holocaust Studies	SS.68.HE.1.1 Examine the Holocaust as the planned and systematic state-sponsored persecution and murder of European Jews by Nazi Germany and its collaborators between 1933 and 1945. Students will describe the basic beliefs of Judaism and trace the origins and history of Jews in Europe. Students will analyze how antisemitism led to and contributed to the Holocaust. Students will identify examples of antisemitism (e.g., making mendacious, dehumanizing, demonizing or stereotypical allegations about Jews; demonizing Israel by using the symbols and images associated with classic antisemitism to characterize Israel or Israelis).		

	History. This will only be taught in the 8th grade World History Course. This only applies to schools that have already changed their progression and offer 8th grade World		primary sources to aid in instruction. World History - page 3 - page 11 Civics- page 12 - page 37 US History - page 38- page 118 Holocaust Studies The second week in November each year shall be designated as "Holocaust Education Week" in this state in recognition that November is

	the anniversary of Kristallnacht, widely recognized as a precipitating event that led to the Holocaust.Holocaust Education Week is an enhancement of ongoing Holocaust education as mandated by the state of Florida since 1994 (HB1213) Holocaust education week falls within this unit. The new added standard can be taught within this unit. I have built in extra days in the Scope and Sequence for this purpose. Resources for Holocaust education will be updated at a later date.	
Unit 5 Ancient India Nov 28th - Dec 22nd 20 days		
CONTENT THEME: STANDARDS	RELEVANT CONTENT	ALIGNED RESOURCES/ Required Instruction
History	SS.6.W.4.1: Discuss the significance of Aryan and other tribal migrations on Indian civilization. SS.6.W.4.2: Explain the major beliefs and practices associated with	Central Topic to Study The geography of the Indian subcontinent and how groups migrated into and lived together in the subcontinent.	Ancient India Resources Corresponding Savvas Unit: SS.6.W.4.1 - Topic 4.2 India's Vedic Age

	Hinduism and the social structure of the caste system in ancient India. Examples are Brahman, reincarnation, dharma, karma, ahimsa, moksha. SS.6.W.4.3: Recognize the political and cultural achievements of the Mauryan and Gupta empires. SS.6.W.4.4: Explain the teachings of Buddha, the importance of Asoka, and how Buddhism spread in India, Ceylon, and other parts of	The major religions that originated in India. Hinduism and Buddhism are both deeply influential parts of Indian culture and tradition. The major empires of India (Mauryan and Gupta) and significant contributions to Indian civilization.	SS.6.W.4.2 - Topic 4.3 Origins and Beliefs of Hinduism SS.6.W.4.3 - Topic 4.5 The Maurya Empire Begins; Topic 4/6 Asoka's Rule; Topic 4.7 The Gupta Empire SS.6.W.4.4 - Topic 4.4 Origins and Beliefs of Buddhism

	Asia. (e.g., The Four Noble Truths, Three Qualities, Eightfold Path) SS.6.W.4.5: Summarize the important achievements and contributions of ancient Indian civilization. SS.6.W.2.4: Compare the economic, political, social, and religious institutions of ancient river civilizations. (e.g., Nile, Tigris-Euphrates, Indus, Huang He (Yellow River) and Chang Jiang (Yangtze River Indian civilization. (e.g., Sanskrit, Bhagavad Gita, medicine, metallurgy, and mathematics including Hindu-Arabic numerals and the concept of zero).	Essential Questions: How did geography shape ancient Indian civilization? How can migrating groups impact a civilization? How did Buddhism start and spread throughout Asia? Compare and contrast the ideologies in	SS.6.W.4.5 - Topic 4.1 Indus Valley Civilization; Topic 4.7 The Gupta Empire

Economics & Geography	SS.6.G.1.7: Use maps to identify characteristics and boundaries of ancient civilizations that have shaped the world today SS.6.G.2.1: Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.	Hinduism and Buddhism. What are some achievements of the Mauryan and Gupta Empires? Important Concepts Ganges River Indus River Subcontinent Monsoon Aryan Mohenjo-Daro Harappa Sanskrit Vedas Caste system Hinduism Reincarnation Ashoka Buddha Buddhism Four Noble Truths Eightfold Path Nirvana Mauryan Gupta	

SECOND SEMESTER

Unit 6 Ancient and Imperial China Jan 9th - Feb 9th 23 days		
CONTENT THEME STANDARDS	RELEVANT CONTENT	ALIGNED RESOURCES/ Required Instruction

History	SS.6.W.4.6: Describe the concept of the Mandate of Heaven and its connection to the Zhou and later dynasties. SS.6.W.4.7: Explain the basic teachings of Laozi, Confucius, and Han Fei Zi. (e.g., filial	Central Topic to Study Recognize significant events, figures, and contributions of classical China.	Ancient and Imperial China Resources Corresponding Savvas Unit: SS.6.W.4.6 – Topic 5.2 The Zhou Dynasty

piety, the role of kinship in maintaining order, hierarchy in Chinese society). SS.6.W.4.10: Explain the significance of the silk roads and maritime routes across the Indian Ocean to the movement of goods and ideas among Asia, East Africa, and the Mediterranean Basin. Imperial China SS.6.W.4.8: Describe the contributions of classical and post-classical China. (e.g., Great Wall, Silk Road, bronze casting, silk-making, movable type, gunpowder, paper-making, magnetic compass, horse collar, stirrup, civil service system, The Analects, the Age of Poetry.) SS.6.W.4.9: Identify key figures from classical and post-classical China. (e.g., Shi Huangdi, Wu-ti, Empress Wu, Chengho). SS.6.W.4.11: Explain the rise and expansion of the Mongol empire and its effects on peoples of Asia and Europe including the achievements of Ghengis and Kublai Khan. SS.6.W.4.12: Identify the causes and effects of Chinese isolation and the decision to limit foreign trade in the 15th century. SS.6.W.2.4: Compare the economic, political, social, and religious institutions of ancient river civilizations. (e.g., Nile,	Essential Questions: How are the Mandate of Heaven and Chinese dynasties connected? How did major Chinese philosophies influence society and government? How did individuals shape ancient China? How were trade routes important to goods and ideas? Important Concepts Mandate of Heaven Dynasty Zhou Warring States Period Laozi Confucius Daoism Legalism Qin Shi Huangdi Qin Dynasty Terra-Cotta Warriors	SS.6.W.4.7 - Topic 5.3 Chinese Belief Systems SS.6.W.4.10 - Topic 5.5 The Han Dynasty Expands SS.6.W.4.8 - Topic 5.4 The Unification of China; Topic; Topic 5.5 The Han Dynasty Expands; Topic 5.6 Han Society and Achievements SS.6.W.4.9 - Topic 5.2 The Zhou Dynasty; Topic 5.4 The Unification of China; Topic; Topic 5.5 The Han Dynasty Expands SS.6.W.4.11 - Topic 9.2 The Mongol Empire and Ming Empires SS.6.W.4.12 -Topic 9.2 The Mongol Empire and Ming Empires; Topic 9.3 Chinese Thought and Achievements

Tigris-Euphrates, Indus, Huang He (Yellow River) and Chang Jiang (Yangtze River	Great Wall, Silk Roads Gunpowder Civil service system Indian Ocean Maritime Porcelain	

Economics & Geography	SS.6.G.1.7: Use maps to identify characteristics and boundaries of ancient civilizations that have shaped the world today SS.6.G.2.1: Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.

Unit 7 Mesoamerica and Andean cultures and Civilizations Feb 12th- Feb 23rd 9 days

CONTENT THEME STANDARDS	RELEVANT CONTENT	ALIGNED RESOURCES/ Required Instruction

History	SS.6.W.2.10: Compare the emergence of advanced civilizations in Meso and South America with the four early river valley civilizations. (e.g.,	Central Topic to Study The early civilizations of Mesoamerica were not located on a single major river like most other early civilizations were. Instead, those in	Mesoamerican and Andean Civilizations and Cultures As of 10/2023 there are no textbook resources available. Please refer to the list of links below to help supplement this unit -

	Olmec, Zapotec, Chavin) The Toltec, Moche and Nazca cultures can also be discussed. Olmec- La Venta, Laguna de los Cerros, San Lorenzo, basalt stone heads, trading. Zapotec- San José del Mogote, textiles, calendar and writing system, Monte Alban, Mitla. Chavin - Chavin de Huantar, stone carvings, ceremonial center.	Mesoamerica and others created civilizations among a network of various rivers and other waterways. Essential Questions: What makes Mesoamerican civilizations unique? How does the Olmec civilizations compare to other River Valley civilizations? Important Concepts Olmec Zapotec Meso-America Obsidian Maize Decline Deified	Presentations: Mother Cultures of Mesoamerica+ Olmec, Zapotec and Chavin peoples The Olmec Ball Game Video Clips: Who were the Olmec? The Mayan Creation Story Activities: Olmec Station Mother Culture Maps
Economics & Geography	S5.8.G.1.7 Use maps to identify characteristics and boundaries of ancient civilizations that have shaped the world today S5.6.G.2.1 Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.		

Greece Unit Resources

Corresponding Savvas Unit:
SS.6.W.3.2 - Topic 5.2 Democracy

Unit 8 Ancient Greece
CONTENT THEME STANDARDS

SS.6.W.3.2: Explain the democratic concepts (polis, civic participation and voting rights, legislative bodies, written constitutions, rule of law) developed in ancient Greece.

SS.6.W.3.3: Compare life in Athens and Sparta (government and the status of citizens, women and children, foreigners, helots). SS.6.W.3.4: Explain the causes and effects of the Persian and Peloponnesian Wars. SS.6.W.3.5: Summarize the important achievements and contributions of ancient Greek civilization. (e.g., art and architecture, athletic competitions, the birth of democracy and civic responsibility, drama, history, literature, mathematics, medicine, philosophy, science, warfare).

SS.6.W.3.6: Determine the impact of key figures from ancient Greece. (e.g., Aristophanes, Aristotle, Hippocrates, Herodotus, Homer, Pericles, Plato, Pythagoras, Socrates, Solon, Sophocles, Thales, Themistocles, Thucydides). SS.6.W.3.7: Summarize the key achievements,

contributions, and figures associated with the Hellenistic period. (e.g., Alexander the Great, Library of Alexandria, Archimedes, Euclid, Plutarch, The Septuagint, Stoicism, Ptolemy I).

RELEVANT CONTENT

Central Topic to Study Recognize significant events, figures, and contributions of Greek classical civilizations.

Essential Questions:
What did the Greeks contribute that we still use today?

How did individuals shape ancient Greece?

Important Concepts Democracy City-State Philosophy

Aristotle Hippocrates Hellenistic Herodotus Homer Pericles Plato Pythagoras Socrates

Feb 26th - April 12th 27 days ALIGNED RESOURCES/ Required Instruction

Ancient Greece Unit Resources

Corresponding Savvas Unit:
SS.6.W.3.2 - Topic 6.2 Democracy in Athens

SS.6.W.3.3 - Topic 6.3 Oligarchy in Sparta

SS.6.W.3.4 - Topic 6.5 Warfare in Ancient Greece

SS.6.W.3.5 - Topic 6.4 Ancient Greek Society and Economic Expansion; Topic 6.6 Ancient Greek Beliefs and Arts; Topic 6.7 Ancient Greek Learning

SS.6.W.3.6 - Topic 6.6 Ancient Greek Beliefs and Arts; Topic 6.7 Ancient Greek Learning

SS.6.W.3.7 - Topic 6.8 Alexander and the Hellenistic World

Florida Joint Council for Citizenship (FJCC) Civics and Government Lesson plans.

-these lesson plans are only for the new Civics and Government standards

M/J World History Scope and Sequence FY 24

Civics & Government	SS.6.CG.1.1 Analyze how democratic concepts developed in ancient Greece served as a foundation for the United States' constitutional republic. • • Students will identify and explain the democratic principles of government in ancient Greece. • • Students will compare and contrast the political systems of ancient Greece and modern-day United States. • • Students will recognize the influence of ancient Greece on the American political process. SS.6.CG.2.1 Analyze the influence of ancient Rome on the United States' constitutional republic. • Students will compare and contrast the political systems in ancient Rome and modern-day United States.	-keep in mind that for certain standards, only certain parts can be taught in a particular unit/time period due to the nature of the standard. -they are vetted -I will maintain the numbering they use on their website so that we know it's from the FJCC. For example lesson plan 6.CG.1.1 was created for SS.6.CG.1.1. Click the pink hyperlink(s) below to go directly to the lesson plans. There are 3 formats- Word, PDF and Google. The Google format has the most information. (Please note that they are updating the Civics 360 resources.) 6.CG.1.1 6.CG.1.2
Economics & Geography	SS.6.E.3.3 Describe traditional economies (Egypt, Greece, Rome, Kush) and elements of those economies that led to the rise of a merchant class and trading partners. SS.6.G.1.7 Use maps to identify characteristics and boundaries of ancient civilizations that have shaped the world today SS.6.G.2.1 Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.	

Unit 9 Ancient Rome
CONTENT THEME STANDARDS

SS.6.W.3.8: Determine the impact of significant figures associated with ancient Rome. (e.g., Augustus, Cicero, Cincinnatus, Cleopatra, Constantine the Great, Diocletian, Tiberius and Gaius Gracchus, Hadrian, Hannibal, Horace, Julius Caesar, Ovid, Romulus and Remus, Marcus Aurelius, Scipio Africanus, Virgil, Theodosius, Attila the Hun.) SS.6.W.3.9: Explain the impact of the Punic Wars on the development of the Roman Empire.
SS.6.W.3.10: Describe the government of the Roman Republic and its contribution to the development of democratic principles (separation of powers, rule of law, representative government, civic duty). SS.6.W.3.11: Explain the transition from Roman Republic to empire and Imperial Rome, and compare Roman life and culture under each one.
SS.6.W.3.12: Explain the causes for the growth and longevity of the Roman Empire. (e.g., centralized and efficient government, religious toleration, expansion of citizenship, the legion, the extension of road networks).
SS.6.W.3.13: Identify key figures and the basic beliefs of early Christianity. (e.g., Christian Monotheism, Jesus as the son of God, Peter, Paul) and how these beliefs impacted the Roman Empire.

RELEVANT CONTENT

Please note that the amount of days allotted for this unit takes into account the New Civics and Government Standards as well as testing.

Central Topic to Study
Discuss the government of ancient Rome and its influence on modern government.

Essential Questions:
Was it better for the Roman people under the republic or the empire?

What was life like for different Romans?

What did Rome give us that we still use today?

What makes a civilization decline?

Important Concepts Separation of powers
Rule of law
Representative government Civic duty

Roman Republic Patricians Plebeians Enslaved people

April12th-May24th 30days ALIGNED RESOURCES/ Required Instruction

Ancient Rome Resources

Corresponding Savvas Unit:
SS.6.W.3.8 - Topic 7.1 The Roman Republic Rises; Topic 7.2 Government of the Republic

SS.6.W.3.9 - Topic 7.4 The Republic Struggles

SS.6.W.3.10 - Topic 7.1 The Roman Republic Rises; Topic 7.2 Government of the Republic; Topic 7.3 Society in the Republic

SS.6.W.3.11 Topic 7.4 The Republic Struggles; Topic 8.1 The Roman Empire Begins

SS.6.W.3.12 - Topic 8.1 The Roman Empire Begins; Topic 8.4 Roman Culture and Its Legacy

SS.6.W.3.13 - Topic 8.2 - Origins of Christianity; Topic 8.3 Beliefs of Christianity

SS.6.W.3.14 - Topic 8.1 The Roman Empire Begins; Topic 8.4 Roman Culture and Its Legacy

SS.6.W.3.15 - Topic 8.5 Decline of the Roman Empire

M/J World History Scope and Sequence FY 24

	SS.6.W.3.14: Describe the key achievements and contributions of Roman civilization. (e.g., art and	Centralized government Citizenship Road	SS.6.W.3.16 - Topic 7.2 Government of the Republic; Topic 7.3 Society in the Republic

	architecture, engineering, law, literature, technology). SS.6.W.3.15: Explain the reasons for the gradual decline of the Western Roman Empire after the Pax Romana. (e.g., internal power struggles, constant Germanic pressure on the frontiers, economic policies, over dependence on slavery and mercenary soldiers.) SS.6.W.3.16: Compare life in the Roman Republic for patricians, plebeians, women, children, and slaves. SS.6.W.3.17: Explain the spread and influence of the Latin language on western civilization. (e.g., education, law, medicine, religion, science)	Networks Pax Romana Germanic Tribes Slavery Latin	SS.6.W.3.17 - Topic Topic 8.1 The Roman Empire Begins; Topic 8.4 Roman Culture and Its Legacy -these lesson plans are only for the new Civics and Government standards -keep in mind that for certain standards, only certain parts can be taught in a particular unit/time period due to the nature of the standard. -they are vetted -I will maintain the numbering they use on their website so that we know it's from the FJCC. For example lesson plan 6.CG.1.1 was created for SS.6.CG.1.1. Click the pink hyperlink(s) below to go directly to the lesson plans. There are 3 formats- Word, PDF and Google. The Google format has the most information. (Please note that they are updating the Civics 360 resources.) 6.CG.1.3 6.CG.1.4 [redacted]
Civics & Government	Students will recognize the influence of ancient Rome on the American political process SS.6.CG.1.3: Examine rule of law in the ancient world and its influence on the United States' constitutional republic. • • Students will recognize origins of what to include, but not be limited to, the contributions of ancient Greek and ancient Roman civilizations. • • Students will recognize that the rule of law is a foundational principle of the U.S. government		Florida Joint Council for Citizenship (FJCC) [redacted] Civics and Government Lesson plans.

	SS.6.CG.1.4 Examine examples of civic leadership and virtue in ancient Greece and ancient Rome. • Students will explain the		

	influence of significant leaders (e.g., Marcus Tullius Cicero, Marcus Aurelius, Pericles, Solon, Cleisthenes) on civic participation and governance in the ancient world.
Economics & Geography	SS.6.E.3.3: Describe traditional economies (Egypt, Greece, Rome, Kush) and elements of those economies that led to the rise of a merchant class and trading partners. SS.6.G.1.7 Use maps to identify characteristics and boundaries of ancient civilizations that have shaped the world today SS.6.G.2.1: Explain how major physical characteristics, natural resources, climate, and absolute and relative locations have influenced settlement, interactions, and the economies of ancient civilizations of the world.

2023 – 2024 Scope and Sequence 1st Trimester
2nd Grade Social Studies

There aren't any live links below.

NGSSS	B.E.S.T Standards	Required Instruction	Student Target	Vocabulary	Resources (District, Text, & Additional)
Lesson 1: Classroom Schedule					
SS.2.A.3.1 Identify terms and designations of time sequences.	ELA.2.V.1.1	N/A	I can: •recall the sequence of my school day.	sequence first last second third last	Text Seven Blind Mice - YouTube
Lesson 2: Year, Decade, and Century					
SS.2.A.3.1 Identify terms and designations or time sequences.	ELA.2.R.2.2	N/A	I can: •identify the length of time of a year, decade, and century.	month year decade century	Text Century Farm: One Hundred Years on a Family Farm – Epic! Additional Who Decided a Year Should Have 12 Months? - Epic! How many years are in decades, centuries, and millennia? - YouTube Time measurement relations (Year, Decade, Century, and Millennium) - YouTube

2023 – 2024 Scope and Sequence 1st Trimester
2nd Grade Social Studies

Lesson 3: Cars 100 Years Ago - Epic!					
SS.2.A.3.1 Identify terms and designations or time sequences.	ELA.2.R.2.2	N/A	I can: •compare cars from 100 years ago to today's cars.	duster electric car gasoline car horseless carriage inventor steam engine	N/A
Lesson 4: Communication Changes					
SS.2.A.3.1 Identify terms and designations or time sequences.	ELA.2.R.2.2	N/A	I can: •trace changes in communication over time.	communication	<u>District</u> Alexander Graham Bell – BrainPop Jr.
Lesson 5: Read A Timeline					
SS.2.A.3.1 Identify terms and designations or time sequences.	ELA.2.R.2.2	N/A	I can: •read a timeline to determine the sequence.	timeline	<u>Text</u> Lily's Timeline - ReadWorks <u>Additional</u> Timeline template – Squarehead Teachers
Unit 1 Assessment					

2023 – 2024 Scope and Sequence 1st Trimester
2nd Grade Social Studies

Unit 2 - Geography	Suggested Time Frame: 09/18/2023 - 10/31/2023
Unit 2 Lesson Plans and Resources Document (live link to separate document)	Blender Resources

Foundational Content (live link to separate document) Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.
SS.1.G.1.1 SS.1.G.1.2 SS.1.G.1.4

Access Point Standards
SS.2.G.1.In/Su/Pa.a SS.2.G.1.In/Su/Pa.c SS.2.G.1.In/Su/Pa.d

September/October Legislative Requirements, Special Events & Holidays	Legislative Requirements:	September/October Special Events & Holidays:
	1003.42 (p) Hispanic Heritage Month (9/15-10/15) 1003.42 (a) Celebrate Freedom Week (09/25-09/29) 1003.421 Recitation of the Declaration of Independence (09/25-09/29) 1003.42 (e) The elements of civil government (10/16-10/22)	Hispanic Heritage Month (9/15-10/15) Celebrate Freedom Week (09/25-09/29) City Government Week (10/16-10/22)

2023 – 2024 Scope and Sequence 1st Trimester
2nd Grade Social Studies

There aren't any live links below.

NGSSS	Florida Standards	Required Instruction	Student Target	Vocabulary	Resources (District, Text, Additional, & Dual Language)
Lesson 1: This Is North America					
SS.2.G.1.1 Use different types of maps (political, physical, and thematic) to identify map elements. SS.2.G.1.4 Use a map to locate the countries in North America (Canada, United States, Mexico, and the Caribbean Islands).	ELA.2.C.2.1 ELA.2.V.1.1	N/A	I can: •discuss a map of North America.	divide	Text This Is North America - ReadWorks
Lesson 2: Your Address					
SS.2.G.1.1 Use different types of maps (political, physical, and thematic) to identify map elements. SS.2.G.1.2 Using maps and globes, locate the student's hometown, Florida, and North America, and locate the state capital and the national capital. SS.2.G.1.3 Label on a map or globe the continents, oceans, Equator, Prime Meridian, North and South Pole.	ELA.2.C.2.1 ELA.2.V.1.1	N/A	I can: •locate visual representations of global addresses: community, state, country, continent, and world.	country state continent nation	Text Finding Places with a Map – ReadWorks

2023 – 2024 Scope and Sequence 1st Trimester
2nd Grade Social Studies

Lesson 3: Take a Trip to Canada! - NearPod					
SS.2.G.1.4 Use a map to locate the countries in North America (Canada, United States, Mexico, and the Caribbean Islands).	ELA.2.C.2.1	N/A	I can: •understand that Canada is a part of North America. •discuss facts about Canada.	N/A	District Take a Trip to Canada! – NearPod
Lesson 4: Take a Trip to Mexico! - NearPod					
SS.2.G.1.4 Use a map to locate the countries in North America (Canada, United States, Mexico, and the Caribbean Islands).	ELA.2.C.2.1	1003.42 (p)	I can: •understand that Mexico is a part of North America. •discuss facts about Mexico.	N/A	District Take a Trip to Mexico! - NearPod
Lesson 5: Continents					
SS.2.G.1.1 Use different types of maps (political, physical, and thematic) to identify map elements. SS.2.G.1.3 Label on a map or globe the continents, oceans, Equator, Prime Meridian, North and South Pole. SS.2.G.1.4 Use a map to locate the countries in North America (Canada, United States, Mexico, and the Caribbean Islands).	ELA.2.C.2.1 ELA.2.V.1.1	1003.42 (h) 1003.42 (p)	I can: •label the continents and oceans.	continent ocean	District Continents and Oceans – BrainPop Jr Continents on Maps - PebbleGo Unscramble the Continents - NearPod Dual Language Continentes en Mapas - PebbleGo

2023 – 2024 Scope and Sequence 1st Trimester
2nd Grade Social Studies

Lesson 6: Parts of a Globe					
SS.2.G.1.3 Label on a map or globe the continents, oceans, Equator, Prime Meridian, North and South Pole.	ELA.2.C.2.1 ELA.2.V.1.1	N/A	I can: •identify and name the parts of a globe.	globe	<u>Dual Language</u> Mapamundi Continentes
Lesson 7: Plant Regions					
SS.2.G.1.1 Use different types of maps (political, physical, and thematic) to identify map elements.	ELA.2.V.1.1	N/A	I can: •describe and identify plant regions on a map.	region	N/A
Reviews					
Unit 2 Assessment					

H&G	Human Growth & Development Curriculum	8/15/23 - 8/21/23 **(5 days)**
1	Unit 1: Discovering Science	8/22/23 - 9/15/23 **(18 days)**
2	Unit 2: Needs of Living Things	9/18/23 - 10/12/23 **(18 days)**
3	Unit 3: Living Things Change	10/16/23 - 11/13/23 **(20 days)**
4	Unit 4: Matter and Its Properties	11/14/23 - 12/22/23 **(22 days)**
5	Unit 5: How Matter Changes	1/9/22 - 1/25/24 **(12 days)**
6	Unit 6: Using Energy	1/26/24 - 2/12/24 **(12 days)**
7	Unit 7: Matter in Motion	2/13/24 - 3/12/24 **(20 days)**
8	Unit 8 :Rocks Becoming Soil	3/13/24 - 4/19/24 **(20 days)**
9	Unit 9: Weather and the Sun	4/22/24 - 5/21/24 **(22 days)**
Gr. 2 Spanish Science Scope and Sequence		

How to Use This Planning Tool

The Scope and Sequence has been created by the Department of K-12 Curriculum Elementary Science team to assist the teacher in planning for meaningful instruction of the science content. It is a recommended progression of content, organized into units, compiled based upon the course description provided by the Florida Department of Education.

Format: The format for each unit includes the **Benchmark**/standard from the Florida Department of Education course description alongside **Student Targets** which illustrate the fundamental knowledge and understanding that each student should be able to do in the progression towards mastery of the benchmark. The **Key Questions** are sample guiding questions, targeting key concepts, that the student should be able to answer following instruction.

At the end of each unit is a set of **Resources** as described in the chart below. It is strongly suggested that these resources be integrated at the teacher's discretion, based upon the readiness levels of his/her students.

Resources for Unit #		
Vocabulary SSA vocabulary bolded	**Daily Essential Questions**	**STEMscopes Resources**
This box includes recommended vocabulary for the student to reach mastery of the concepts within this unit. Vocabulary identified by the Florida Department of Education, which students may see on the Statewide Science Assessment, are **bolded**.	These questions are examples which may be utilized to bring the lesson into focus and to guide the inquiry as students explore this content.	This box includes the varied lessons and units which correspond to the standards within this unit. Please be selective in choosing the aspects of each lesson which align to your content focus.
Assessment Tools/ACCESS POINTS	**Content Literacy**	**Open Education Resources**
The tools shown here are a means to assist the teacher in developing appropriately complex, content-based questions. The link to the State Item Specifications may be helpful in reviewing the foundational pieces for each parent benchmark and ACCESS POINTS are also provided here to further assist teachers with those specific student needs for each unit of study.	The texts shown here align with the content of this unit. Each text should be accessible within the school media center or classroom library. Please note that this is not a complete list, just a few ideas to get you started on science-literacy integration.	The resources within this section are a small sampling of free, educational resources which are accessible via the internet. We intend to update this box as new resources become available and would appreciate your suggestions as well.
Foundational Content: Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.		
Standards	**I can statement**	**Pre-check and Instructional Resources**

The importance of Grades K-2 Science instruction: The content covered in Grades K-2 lays the foundational framework for future science study and is crucial to success in Grades 3-5. In addition, science instruction at this age encourages students to think creatively, ask questions, and wonder.

Integration of Nature of Science standards: The Big Ideas focusing on the Nature of Science should be consistently fused with content units as appropriate for your students throughout the year. It is critical that students understand how to integrate these concepts and that these practices of science are not stand-alone.

Skills for Learning and Life	**Suggested Pacing: August 10, 2023 - August 12, 2023** (3 days) **Week 1**

SLL Palm Beach County

Unit: Human Growth and Development
Suggested Pacing: **August 15, 2023 - August 21, 2023** (5 days) **Week 2**
All resources posted on Blender

Big Idea: The Practice of Science		**Unit 1**: Discovering Science
Unit Essential Question: How do we use inquiry skills?		**Suggested Pacing**: **August 22, 2023 - September 15, 2023** (17 days) **Week 3 through Week 7**
Benchmark	**Student Targets**	**Key Questions**
SC.2.N.1.1 Raise questions about the natural world, investigate them in teams through free exploration and systematic observations, and generate appropriate explanations based on those explorations.	• I can identify inquiry skills. • I can ask and raise questions about the world and investigate them by observing. • I can explain the difference between what you observe and what you think. • I can identify science tools used for observing and measuring. • I can ask and raise questions about the world around me. • I can communicate findings and ask new questions based on the findings of an investigation. • I can organize and analyze data, communicate the findings, and ask new questions based on the findings of an investigation.	**Which science process skills are used by primary learners?** observing, measuring, predicting, inferring, investigating, collecting and recording data, comparing, sorting, making models and communicating **What is science?** a way of answering questions by investigating, collecting data and drawing conclusions **What do scientists do?** ask questions, investigate, collect evidence, think about and explain how things work
SC.2.N.1.2 Compare the observations made by different groups using the same tools.	• I can identify and demonstrate scientific methods and processes and explain how scientists are continually looking for new ways to solve problems. • I can ask and raise questions about the world and investigate them by observing and then explain that similar results should occur when investigations are repeated.	**Which science tools should young scientists be able to use?** hand lens, magnifying box, forceps, ruler, tape measure, eye dropper, measuring cups, balance scales, and a thermometer

SC.2.N.1.3 Ask "how do you know?" in appropriate situations and attempt reasonable answers when asked the same question by others.	• I can use questions such as "how do you know" in the appropriate circumstances.	**What is your data?** the observations you record **What does your data show you?** if your observations support your original prediction (hypothesis) or not
SC.2.N.1.4 Explain how particular scientific investigations should yield similar conclusions when repeated.	• I can describe how similar investigations should have similar results.	**Why is it important to repeat an investigation?** the more observations/measurements you make, the more accurate your data. The more trials you do the more you can trust the data you collect
SC.2.N.1.5 Distinguish between empirical observation (what you see, hear, feel, smell, or taste) and ideas or inferences (what you think).	• I can differentiate between observations and inferences.	**What is an observation?** using your senses to collect direct evidence **What is an inference?** an explanation based on prior knowledge or available evidence but NOT direct observation
SC.2.N.1.6 Explain how scientists alone or in groups are always investigating new ways to solve problems.	• I can describe how scientists work together and individually to find creative ways to solve problems.	**How do scientists solve problems?** developing a hypothesis, plan an experiment (test), make observations, collect and record data (evidence) then compare and contrast the data and decide to accept or reject their hypothesis

Resources for Unit 1

Vocabulary		SSA vocabulary bolded	Daily Essential Questions	STEMscopes Resources	
inquiry skills science tools thermometer **investigation**	hypothesis **conclusions** communicate **data**	**inference** **observation** scientist	How do we use inquiry skills? How do we use science tools? What tools can we use? How do scientists think? How do we solve problems?	Platform Scopes: What Do Scientists Do? Skills Tools Measurement Safety	STEMscopes Notebook pages: Please see the "Nature of Science" tab in "Teacher Toolbox: Elementary"
Assessment Tools & ACCESS POINTS			**Content Literacy**	**Open Education Resources**	
Comprehension Check #1 (Blender) Additional assessments available via scope "Evaluate" tab or create your own using the Assessment tab on the STEMscopes platform. **ACCESS POINTS:** Grade 2 ACCESS POINTS				**Open Education Resources:** Great Innovators: "George Washington Carver: The Wizard of Tuskegee" Top 10 Fun Facts about George Washington Carver **For Teachers:** YouTube: Best Practices for Teaching Primary Science	

Foundational Content: Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.		
SC.1.N.1.1 Raise questions about the natural world, investigate them in teams through free exploration, and generate appropriate explanations based on those explorations. **SC.1.N.1.2** Using the five senses as tools, make careful observations, describe objects in terms of number, shape, texture, size, weight, color, and motion, and compare their observations with others. **SC.1.N.1.3** Keep records as appropriate - such as pictorial and written records - of investigations conducted. **SC.1.N.1.4** Ask "how do you know?" in appropriate situations.	• I can ask questions, make predictions, and carry out an experiment to find answers. • I can use my senses to observe. • I can name the five senses and my body part that goes with each sense. • I can record my observations and/or results. • I can follow steps when I do an investigation. • I can record observation in drawings and/or words • I can ask, "How do you know?" to question other's observations.	Senses Precheck BrainPop Jr. Senses lesson BrainPop Jr. YouTube: The Five Senses Precheck: Making Observations BrainPop Jr. Making Observations BrainPop Jr. Precheck: Making and Testing Predictions BrainPop Jr. Making and Testing Predictions BrainPop Jr.

Big Idea: Interdependence (resources fulfill Florida Statute §1003.42 (2) (i))		**Unit 2**: Needs of Living Things
Unit Essential Question: What are the needs of living things?		**Suggested Pacing**: **September 18, 2023 - October 12, 2023** (18 days) **Week 8 through Week 11**
Benchmark	**Student Targets**	**Key Questions**
SC.2.L.17.1 Compare and contrast the basic needs that all living things, including humans, have for survival.	• I can identify sunlight, air, water, nutrients, and space as the basic needs of plants. • I can explain that a living thing must meet its basic needs in order to survive. • I can identify air, water, food, shelter, and space as the basic needs of animals and humans, and explain that if its basic needs are not met, a living thing will die. • I can compare and contrast the basic needs of plants and animals, and describe some ways in which animals depend on plants to meet their basic needs.	**What does it mean to survive?** stay alive (long enough to reproduce) **What do animals need to survive?** food, water, air (oxygen) shelter and space to live **What do plants need to survive?** sunlight, air (carbon dioxide, and oxygen), water and nutrients **What is shelter?** a safe place to live
SC.2.L.17.2 Recognize and explain that living things are found all over Earth, but each is only able to live in habitats that meet its basic needs.	• I can demonstrate that plants live where their needs are met. • I can recognize and explain that living things are found just about everywhere on Earth, and define an environment as everything that surrounds a living thing, including other living and nonliving things.	**What is a habitat?** the (specific) environment that meets an organism's needs **What is an adaptation?** body parts or behaviors that help an organism survive in its habitat

	• I can recognize and explain that living things are best suited to live in certain habitats, and explain that different kinds of living things are found in different places on Earth.	

Resources for Unit 2

Vocabulary	SSA vocabulary bolded	Daily Essential Questions	STEMscopes Resources
basic needs **nutrients** survive lungs gills shelter **environment** habitat		What are plant needs? What are animal needs? Can plants survive in different environments? Where do plants and animals live?	Platform Scopes: 2.L.17.1 and 17.2 Basic Needs and Habitats
Assessment Tools & ACCESS POINTS		**Content Literacy**	**Open Education Resources**
Statewide Science Item Specifications (pp. 72-73) Comprehension Check #7 (Blender) Additional assessments available via scope "Evaluate" tab or create your own using the Assessment tab on the STEMscopes platform. **ACCESS POINTS:** Grade 2 ACCESS POINTS		**Benchmark Resources:** Benchmark Readers Andre's Dream	Famous African American Scientists National Geographic Kids - Percy L. Julian In the Garden with Dr. Carver	George Washington Carver for Kids Inventions Read Aloud YouTube: Adaptations The Adaptation Song PBS: Needs of Living Things YouTube: Animals and Their Shelters YouTube: Animal Adaptations for Kids **For Teachers**:

		Grade 2 Vocabulary (p. 1-2)
Foundational Content: Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.		
SC.1.L.14.3 Differentiate between living and nonliving things.	• I can tell the difference between living things and nonliving things. • I can recognize living things and nonliving things in an environment. • I can tell that an environment contains both living things and nonliving things.	Precheck: Living and Nonliving STEMscopes Basic Needs STEMscopes (video & questions) Living and Nonliving STEMscopedia

Big Ideas: Heredity and Reproduction, Organization and Development of Living Organisms (resources fulfill Florida Statute §1003.42 (2) (n))		**Unit 3**: Living Things Change
Unit Essential Question: What are cycles and parts of living things?		**Suggested Pacing**: **October 16, 2023 - November 13, 2023** (20 days) **Week 12 through Week 16**
Benchmark	**Student Targets**	**Key Questions**
SC.2.L.16.1 Observe and describe major stages in the life cycles of plants and animals, including beans and butterflies.	• I can define the term life cycle and explain that different animals have different life cycles. • I can explain that all life cycles include birth/hatching, growth and development, maturity, and reproduction. • I can identify animals, such as frogs, that undergo complete metamorphosis during their life cycles. • I can describe the sequence of the stages of the frog life cycle. • I can explain that all life cycles include birth/hatching, growth and development, maturity, and reproduction.	**Draw, label and describe in words the life cycle of a bean plant.** Include these terms: seed, germinates, sprout (tiny plant), grows, stem, leaves (makes food), adult plant, flowers (makes new seeds), bean life cycle. **Draw, label and describe in words the life cycle of a butterfly**. Include these terms: egg, larva (caterpillar), pupa, adult (butterfly), lays eggs, complete metamorphosis.

	• I can describe the sequence of the stages of the mammal life cycle. • I can identify some animals, including butterflies that undergo complete metamorphosis during their life cycles.	
SC.2.L.14.1 Distinguish human body parts (brain, heart, lungs, stomach, muscles, and skeleton) and their basic functions.	• I can identify where major human body parts are located in the body. • I can describe the functions of the brain (controlling the body), and the stomach (breaking down food). • I can describe the functions of the muscles (moving the body) and the skeleton (supporting the body and protecting vital organs). • I can describe the functions of the heart (pumping blood through the body) and the lungs (obtaining oxygen for the body). • I can identify and compare my heart rate while resting and after activity.	**What are the major organs and their functions?** brain – controlling the body, stomach – breaking down food, muscles – moving the body, skeleton – supporting the body and protecting the skeleton, heart – pumping blood, lungs – take in oxygen
HE.2.C.1.5 Recognize the locations and functions of major human organs.	• I can recognize the locations of major human organs. • I can recognize the functions of major human organs.	**What are the major human organs?** heart, lungs, skeleton, muscles, stomach, brain **What are the functions of the major human organs?** skeleton gives me support/shape, muscles-move my arms and legs, chest/heart-pumps my blood, lungs-breath in air, abdomen - stomach helps me digest food that gives me energy, and head /brain-controls my body, helps me learn and make decisions
HE.2.B.5.2 Name healthy options to health-related issues or problems.	• I can recognize healthy options for health-related problems or issues.	**What are healthy practices that can help with health-related problems?** eat healthy, exercise regularly, get a good night's sleep
HE.2.B.3.2 Select trusted adults and professionals who can help promote health.	• I can recognize trusted adults and professionals that can help promote health.	**Who are some trusted adults and health professionals that can help promote health?** Family members, educators, doctors, nurses, therapists

Resources for Unit 3

Vocabulary		SSA vocabulary bolded	Daily Essential Questions	STEMscopes Resources
reproduction	seed	stomach	What are some animal life cycles?	Platform Scopes:
life cycle	**germination**	skeleton	How does a bean plant grow?	2.L 16.1 Life Cycles
metamorphosis	seedling	muscles	What are some plant life cycles?	2.L 14.1 Distinguishing Body Parts
tadpole	cone	heart	What makes up the human body?	

larva brain **pupa** lungs	What changes your heart rate?	
Assessment Tools & ACCESS POINTS	**Content Literacy**	**Open Education Resources**
Comprehension Check #8 (Blender) Additional assessments available via scope "Evaluate" tab or create your own using the Assessment tab on the STEMscopes platform. **ACCESS POINTS:** Grade 2 ACCESS POINTS		**Open Education Resources:** Real-World Connections - Marie Van Brittan Brown & Dr. Patricia E. Bath Biography - Elijah McCoy Gifted Hands Excerpts - Dr. Ben Carson George Edward Alcorn Jr. Dr. Charles R. Drew - Fun Facts YouTube: Plant Life Cycles PBS: Plant Life Cycles **For teachers:** Prezi: Human Body 31 Human Body Websites
Foundational Content: Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.		
SC.1.L.14.1 Make observations of living things and their environment using the five senses. **SC.1.L.14.2** Identify the major parts of plants, including stem, roots, leaves, and flowers. **SC.1.L.14.3** Differentiate between living and nonliving things.	• I can tell the difference between plants and animals. • I can explain that there are many kinds of plants and animals on Earth. • I can identify physical characteristics of animals. • I can sort animals based on characteristics I observe. • I can identify and compare the major parts of a (flowering) plant. • I can describe what each "basic part of the plant does. • I can tell the difference between living things and nonliving things. • I can recognize the living things and nonliving things in my surroundings..	Precheck: Parts of a Plant BrainPop Jr. Parts of a Plant BrainPop Jr. Schooltube: Plant Parts Song Precheck: Living and Nonliving Stemscopes YouTube: Living and Nonliving Living and Nonliving STEMscope Reading Science Living Things STEMscopes Song

Big Idea: Properties of Matter		**Unit 4**: Matter and Its Properties
Unit Essential Question: What are properties of matter?		**Suggested Pacing:November 14, 2023 - December 22, 2023** (20 Days) **Week 17 through Week 22**
Benchmark	**Student Targets**	**Key Questions**
SC.2.P.8.1 Observe and measure objects in terms of their properties, including size, shape, color, and temperature, and weight, texture, sinking or floating in water, and attraction and repulsion of magnets.	• I can identify and describe properties of matter. • I can identify tools that are used to measure objects. • I can measure objects using the appropriate tools. • I can order a group of objects by length and by weight. • I can compare the order of two groups of objects that I measured. • I can compare my data with the data of classmates.	**What is a physical property of matter?** a characteristic that can be observed measured or changed without changing the material (matter) itself **What is mass?** mass is the amount of matter in an object (material, substance). Mass is measured using gram (g) weights and a balance
SC.2.P.8.2 Identify objects and materials as solid, liquid, or gas.	• I can identify solids, liquids, and gases. • I can describe and compare the properties of solids, liquids, and gases. • I can identify solids, liquids, and gases and compare their properties.	**What is matter?** any materials that have mass and take up space **How do you classify matter?** organize it into groups based on similar characteristics
SC.2.P.8.3 Recognize that solids have a definite shape and that liquids and gases take the shape of their container.	• I can explain that all objects and substances are made of matter and matter has two properties: it takes up space and has mass.	**How do solids, liquids and gases differ?** solids have a measurable shape and volume. Liquids take the shape of their containers and have a measurable volume. Gases also take the shape of their containers, but have no shape or volume of their own
SC.2.P.8.6 Measure and compare the volume of liquids using containers of various shapes and sizes.	• I can measure and compare the volumes of liquids. • I can communicate the results of an investigation.	**How can we compare volumes of liquid?** measure in similar containers and compare the resultant numbers
SC.2.P.8.4 Observe and describe water in its solid, liquid, and gaseous states.	• I can identify water in each of the three states of matter.	**What is water for each of the three states of matter?** solid – ice, liquid – water, gas – water vapor
SC.2.P.8.5 Measure and compare temperatures taken every day at the same time.	• I can measure temperatures using a thermometer. • I can compare temperatures that were taken over several days.	**What is a thermometer?** a tool that measures temperature

Resources for Unit 4

Vocabulary	SSA vocabulary bolded		Daily Essential Questions	STEMscopes Resources
matter property **texture** measure **weight**	**mass** solid liquid gas	**water vapor** **volume** **attraction** **repel**	What are the properties of matter? How can we measure and compare objects? What are solids, liquids, and gases? How can we compare volumes?	Platform Scopes: 2.P 8.1 and 8.3 Classifying Matter 2.P 8.2, 8.4, and 8.6 States of Matter 2.P 8.5 Weather

Assessment Tools & ACCESS POINTS	Content Literacy	Open Education Resources
Statewide Science Item Specifications (pp. 42-43, 48-49, 51-52) Comprehension Check #2 (Blender) Additional assessments available via scope "Evaluate" tab or create your own using the Assessment tab on the STEMscopes platform. **ACCESS POINTS:** Grade 2 ACCESS POINTS	**EDUSmart Readers:** Reader: Properties of Matter Reader: Many Shapes Reader: A Trip To The Midwest Reader: Water and Its Various Forms **Additional Resources:** Precious Water: A Book of Thanks by Brigitte Weninger, North-South, 2000	**Open Education Resources:** Little Known Black History Fact: Marie M. Daly Madame C. J. Walker Celebrating Black Scientist (Medical) The Chemist YouTube: Investigating Matter YouTube: Matter Rap YouTube: Liquid Volume YouTube: Changing Water **For Teachers:** YouTube: Matter and Thinking Skills

Foundational Content: Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.1.P.8.1 Sort objects by observable properties, such as size, shape, color, temperature (hot or cold), weight (heavy or light), texture, and whether objects sink or float. **SC.1.E.5.4** Identify the beneficial and harmful properties of the Sun.	• I can observe objects and sort them by their physical properties. • I can name the different kinds of matter (solid, liquid, gas) around me. • I can test, observe and sort objects that sink or float. • I can use a balance scale to sort heavy and light objects. • I can compare the temperature in different places (direct sunlight, shade). • I can determine that dark colors make things warmer in the sunshine.	Precheck: Heavy or Lighter BrainPop Jr. Heavy or Light BrainPop Jr. Hot and Cold Changes STEMscopes (video & questions) Precheck: Sink or Float BrainPop Jr. Sink or Float BrainPop Jr. Precheck: The Sun BrainPop Jr. The Sun BrainPop Jr.

Big Idea: Changes in Matter		**Unit 5:** How Matter Changes
Unit Essential Question: How does matter change?		**Suggested Pacing January 9, 2024 - January 25, 2024**(10 Days) **Week 22 through 24**
Benchmark	**Student Targets**	**Key Questions**
SC.2.P.9.1 Investigate materials that can be altered to change some of their properties, but not all materials respond the same way to any one alteration.	• I can describe how cutting, breaking, dissolving, freezing, and melting can change matter. • I can explain that not all matter responds to change in the same way. • I can explain how burning and cooking can change the texture, size, color, shape, and taste of different matter. • I can experiment with dissolving objects to change their properties. • I can communicate the results of an investigation. • I can demonstrate that not all objects respond to the same alteration in the same way.	**What is a chemical property?** the ability of a substance to change into a new substance with different properties **What is a chemical change?** a change that produces a new substance

Resources for Unit 5

Vocabulary SSA vocabulary bolded	Daily Essential Questions	STEMscopes Resources
physical change melt change dissolve freeze burning	How does matter change? How can we change matter?	Platform Scopes: 2.P 9.1 Changes in Properties
Assessment Tools ACCESS POINTS	**Content Literacy**	**Open Education Resources**
Statewide Science Item Specifications (p. 55) Comprehension Check #3 (Blender) Additional assessments available via scope "Evaluate" tab or create your own using the Assessment tab on the STEMscopes platform. **ACCESS POINTS:** Grade 2 ACCESS POINTS		**Open Education Resources:** Youtube: Chemical and Physical Changes **ForTeachers:** Grade 2 Vocabulary (p. 4)
Foundational Content: Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.		
SC.K.P.9.1 Recognize that the shape of materials such as paper and clay can be changed by cutting, tearing, crumpling, smashing, or rolling	• I can identify ways that the shape of material can be physically changed by cutting, tearing, crumpling, smashing, or rolling.	Precheck: Changing Matter STEMscopes Physical Changes STEMscopedia

Big Idea: Forms of Energy		**Unit 6:** Using Energy
Unit Essential Question: How do we use energy?		**Suggested Pacing**: **January 26, 2024 - February 12, 2024**(9 days) **Week 24 through Week 26**
Benchmark	**Student Targets**	**Key Questions**

SC.2.P.10.1 Discuss that people use electricity or other forms of energy to cook their food, cool or warm their homes, and power their cars.	• I can identify forms and sources of energy. • I can explain how people use energy in their daily lives. • I can observe how the sun's energy warms our homes. • I can communicate the results of an investigation.	**What can energy do?** energy can also cause changes in matter **What are some common forms of energy?** electricity from a power plant sent to your home, a car battery, or dry cell batteries in a flashlight or toy. Light energy from a light bulb, the stars, the sun, a computer or TV screen and lightning. Chemical energy stored in the food you eat and fuels such as wood and gasoline

Resources for Unit 6

Vocabulary SSA vocabulary bolded		Daily Essential Questions	STEMscopes Resources
energy solar energy heat	light electricity **mechanical energy**	How do we use energy? How does the sun warm our homes?	Platform Scopes: 2.P 10.1 Uses of Energy
Assessment Tools & ACCESS POINTS		**Content Literacy**	**Open Education Resources**
Comprehension Check #3 (Blender) Additional assessments available via scope "Evaluate" tab or create your own using the Assessment tab on the STEMscopes platform. **ACCESS POINTS:** Grade 2 ACCESS POINTS			Real-World Connections: Benjamin Banneker Garrett Morgan & Other Inventors PBS: Wind YouTube: Hydropower YouTube: Solar Pizza Oven Science4Us: Light Energy Song
Foundational Content: Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.			
No Prior Knowledge		No Student Targets	Not Applicable

Big Idea: Forces and Changes in Motion		**Unit 7**: Matter in Motion
Unit Essential Question: What Are Forces?		**Suggested Pacing**: **February 13, 2024 - March 12, 2024** (20 days) **Week 27 through Week 31**
Benchmark	**Student Targets**	**Key Questions**
SC.2.P.13.1 Investigate the effect of applying various pushes and pulls on different objects.	• I can explain how forces change motion. • I can demonstrate that the amount and direction of force exerted on an object will determine how much and in what direction the object moves. • I can explain how objects fall to the ground unless something holds them up. • I can classify forces as pushes or pulls. • I can classify forces as pushes or pulls and explain how forces change motion. • I can explain how objects fall to the ground unless something holds them up and recognize that the amount and direction of a force exerted on an object will determine how much and in what direction the object will move. • I can describe what a roller coaster designer does.	**What is a force?** force is a push or pull **What is motion?** the change in the position of an object caused when a force is applied
SC.2.P.13.2 Demonstrate that magnets can be used to make some things move without touching them.	• I can observe and demonstrate that magnets can move objects without touching them. • I can sort objects based on whether they are attracted by a magnet. • I can demonstrate that magnets can be used to make some things move without touching them.	**What is a magnet?** a metal object (tool) with an invisible force that attracts iron **What is the pole of a magnet?** the parts of the magnet were the pull is strongest **What does a magnet attract?** metals made of iron (or the opposite pole of another magnet) **What will a magnet repel?** another like pole magnet
SC.2.P.13.3 Recognize that objects are pulled toward the ground unless something holds them up.	• I can classify forces as pushes or pulls and explain how forces change motion. • I can explain how objects fall to the ground unless something holds them up.	**What is gravity?** a force that pulls objects towards the ground and each other
SC.2.P.13.4 Demonstrate that the greater the force (push or pull) applied to an object, the greater the change in motion of the object.	• I can explain how push and pull works. • I can explain how an increased push or pull will result in an increased change in motion.	**When the ramp is increased what happens to the motion of a toy jeep?** the higher the ramp the further the jeep rolls

Resources for Unit 7

Vocabulary		SSA vocabulary bolded	Daily Essential Questions	STEMscopesResources
motion	gravity	pole	What are forces? How do forces make objects move? What are magnets? How strong is a magnet?	Platform Scopes: 2.P 13.1 Pushes and Pulls 2.P 13.2 and 13.3 Magnets and Gravity 2.P 13.4 Force and Motion
force	**friction**	**repel**		
speed	magnet	**attract**		

Assessment Tools & ACCESS POINTS	Content Literacy	Open Education Resources
Statewide Science Item Specifications (pp. 58, 61-62) Comprehension Check #4 (Blender) Additional assessments available via scope "Evaluate" tab or create your own using the Assessment tab on the STEMscopes platform. **ACCESS POINTS:** Grade 2 ACCESS POINTS		Alice H. Parker Chemists Who Changed the World

Foundational Content: Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.1.P.12.1 Demonstrate and describe the various ways that objects can move, such as in a straight line, zigzag, back-and-forth, round-and-round, fast, and slow. **SC.1.P.13.1** Demonstrate that the way to change the motion of an object is by applying a push or a pull.	• I can show different ways that objects move. • I can compare the speeds of objects (fast or slow). • I can use objects to name and show types of motion. • I can name the force (push or pull) used to move or stop an object. • I can push and pull objects to see how they move. • I can use a push or a pull to change the motion of an object.	Precheck: Ways Objects Move STEMscopes Ways Objects Move STEMscopes (video & questions) Patterns of Movement STEMscopedia Precheck: Push and Pull BrainPop Jr. Pushes and Pulls BrainPop Jr.

Big Idea: Earth Structures		**Unit 8:** Rocks Becoming Soil
Unit Essential Question: What are rocks?		**Suggested Pacing**: **March 13, 2024 - April 19, 2023** (20 days) **Weeks 31 through 35**
Benchmark	**Student Targets**	**Key Questions**
SC.2.E.6.1 Recognize that Earth is made up of rocks. Rocks come in many sizes and shapes.	• I can recognize that Earth is made of rocks. • I can tell how rocks are used by people. • I can compare rocks of different sizes, shapes, and colors. • I can recognize that rocks are made of minerals. • I can identify and sort rocks based on physical properties such as size, shape, and color. • I can tell the ways that rocks are used.	**What are rocks?** a solid mixture of minerals found in the Earth's crust **How can rocks change?** they can be broken, heated, pressed, and pushed around over and over again
SC.2.E.6.2 Describe how small pieces of rock and dead plant and animal parts can be the basis of soil and explain the process by which soil is formed.	• I can explain how soil is formed. • I can identify the parts that make up soil. • I can classify different types of soil based on their properties.	**How is soil formed?** soil is a mixture made up of broken (weathered) pieces of rock, minerals and decayed plant and animal (humus)
SC.2.E.6.3 Classify soil types based on color, texture (size of particles), the ability to retain water, and the ability to support the growth of plants.	• I can classify different types of soil based on their properties. • I can identify which soil is best for growing plants.	**What is humus?** the decaying plant and animal matter in the soil **What are three layers of soil**? top soil – loose minerals with dark, rich organic humus; Subsoil – (below the soil layer) mostly minerals and clay; Rock – (below subsoil)

Resources for Unit 8			
Vocabulary	**SSA vocabulary bolded**	**Daily Essential Questions**	**STEMscopes Resources**

rock	humus		What are rocks? What is soil? How do soils differ?	Platform Scopes: 2.E 6.1 Rocks 2.E 6.2 and 6.3 Properties of Soil
weathering	clay	**texture**		
soil	sand			

Assessment Tools & ACCESS POINTS	Content Literacy	Open Education Resources
Comprehension Check #5 (Blender) Additional assessments available via scope "Evaluate" tab or create your own using the Assessment tab on the STEMscopes platform. **ACCESS POINTS:** Grade 2 ACCESS POINTS		NatGeo: Humus YouTube: Soil Song YouTube: Topsoil Song YouTube: Soil Formation Geography4Kids: Rocks and Minerals **For Teachers:** Soil Science Teacher Resources Nutrients for Life Teacher Resources

Foundational Content: Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.

SC.1.E.6.1 Recognize that water, rocks, soil, and living organisms are found on Earth's surface.	• I can name places where rocks are found on Earth's surface. • I can describe some ways people use rocks. • I can name places where soil is found on Earth's surface. • I can describe some properties of soil. • I know that rocks are natural materials (not man made). • I can sort rocks by their size, shape, color, and texture (physical properties).	Precheck: Rocks & Soil Stemscopedia Earth's Surface STEMscopedia Water on Earth STEMscopes video Properties of Soil STEMscopes video

Big Idea: Earth Systems and Patterns	**Unit 9**: Weather and the Sun
Unit Essential Question: How does weather change?	**Suggested Pacing**: **April 22, 2024 - May 21, 2024** (22 days) **Week 35 through 39**

Benchmark	Student Targets	Key Questions
SC.2.E.7.1 Compare and describe changing patterns in nature that repeat themselves, such as	• I can explain that air is all around us and that moving air is called wind.	**What is a weather pattern?** the changes in conditions of the atmosphere at a place over a short period of time

weather conditions including temperature and precipitation, day to day and season to season.	• I can observe, measure, and describe how weather changes over time. • I can identify tools used to measure and predict the weather. • I can explain the water cycle. • I can observe, measure, and predict the weather. • I can describe and compare patterns in weather from day to day and from season to season.	**What is a season?** a time of year that has a certain kind of weather **What is precipitation?** water that falls from the sky
SC.2.E.7.2 Investigate by observing and measuring that the Sun's energy directly and indirectly warms the water, land, and air.	• I can measure temperature using a thermometer and demonstrate how heat energy from the Sun warms the water, the land, and the air.	**What is temperature?** how warm the air is outside **What is a thermometer?** a tool to measure the air temperature
SC.2.E.7.3 Investigate, observe and describe how water left in an open container disappears (evaporates), but water in a closed container does not disappear (evaporate).	• I can demonstrate that water left in an open container evaporates. • I can measure volume using a measuring cup.	**What is evaporation?** the process in which water changes into water vapor
SC.2.E.7.4 Investigate that air is all around us and that moving air is wind.	• I can explain that air and water are always moving, and this motion causes changing conditions that can be observed over time.	**What is wind?** moving air **What is a weather vane?** a tool that shows which way the wind is blowing
SC.2.E.7.5 State the importance of preparing for severe weather, lightning, and other weather related events.	• I can give examples of severe weather. • I can tell why it is important to prepare for severe weather-related events.	**What are some examples of severe weather?** thunderstorms (lightning), flooding, tornadoes, hurricanes **Why is it important to prepare for severe weather?** to keep yourself, your loved ones, and your things safe

Resources for Unit 9

Vocabulary		SSA vocabulary bolded	Daily Essential Questions	STEMscopes Resources
weather **precipitation** temperature **water cycle**	**evaporation** **condensation** tornado	hurricane lightning thunderstorm	How does the weather change? How does the Sun heat the Earth? What is evaporation? How can we prepare for severe weather?	Platform Scopes: 2.E 7.1 Patterns in Nature 2.E 7.2 and 7.3 The Sun and Water 2.E 7.4 Air 2.E 7.5 Severe Weather

Assessment Tools & ACCESS POINTS	Content Literacy	Open Education Resources
Comprehension Check #6 (Blender) Additional assessments available via scope "Evaluate" tab or create your own using the Assessment tab on the STEMscopes platform. **ACCESS POINTS:** Grade 2 ACCESS POINTS		Benjamin Banneker Dr. Warren Washington: A Pioneering Black Climate Scientist Weather Patterns How to Make a Weathervane WeatherWizKids: Thunderstorms **For Teachers:** Water Cycle Resources
Foundational Content: Foundational content includes skills & knowledge that are essential for understanding the current grade-level standards and benchmarks. The linked document contains supporting resources.		
SC.1.E.6.1 Recognize that water, rocks, soil, and living organisms are found on Earth's surface. **SC.1.E.6.2** Describe the need for water and how to be safe around water.	• I can name places where water is found on Earth's surface. • I can name some ways people use water. • I can name where freshwater is found on Earth. • I can describe how people use natural resources such as water. • I can explain why plants, animals, and people need water. • I can describe how to be safe around water.	Precheck: Water Safety STEMscopes KidsHealth: Swimming Safety Kids Health Water Safety YouTube

		Open Education Resources
STEM & Nature of Science Enrichment Activities	**Suggested Pacing:** **May 22, 2024 - May 30, 2024** Week 37 **(5-6 days)**	Great Innovators: "George Washington Carver: The Wizard of Tuskegee" The Why Files **Teacher Resource:** Ted Ed: Simple Ideas Lead to Discovery **STEM Resources:** Code.org Code Monkey Raspberry Pi MIT Scratch Hockey STEM

The following content-area literacy standards, grade level mathematics standards, and English Language Learner standards are also included in the Grade Two Science course description and should be implemented on a routine basis.

B.E.S.T. Standards for English Language Arts: Informational Text	B.E.S.T. Standards for English Language Arts: Communication & Vocabulary
Students should have mastered print concepts and phonological awareness. The foundational skills emphasized at this grade level are phonics and fluency. The concept of theme is introduced in 2nd grade, building on the finding of a moral from 1st grade. Author's purpose is introduced for informational text. Students are now printing legibly and writing narratives that include transitional words. FY 23 ELA Scope and Sequence	
Reading Informational Text: Structure: **ELA.2.R.2.1:** Explain how text features—including titles, headings, captions, graphs, maps, glossaries, and/or illustrations—contribute to the meaning of texts	
Central Idea: **ELA.2.R.2.2:** Identify the central idea and relevant details in a text **ELA.2.R.2.3:** Explain an author's purpose in an informational text.	
Communication: **Communicating Through Writing:** **ELA.2.R.2.3:** Explain an author's purpose in an informational text. **Oral Presentation:**	

ELA.2.C.2.1: Present information orally using complete sentences, appropriate volume, and clear pronunciation.

ELA.2.C.1.2: Write personal or fictional narratives using a logical sequence of events, transitions, and an ending.

ELA.2.C.1.3: Write opinions about a topic or text with reasons supported by details from a source, use transitions, and provide a conclusion.

Researching Researching and Using Information:

ELA.2.C.4.1: Participate in research to gather information to answer a question about a single topic using multiple sources.

Creating and Collaborating Multimedia:

ELA.2.C.5.1:

Technology in Communication:

ELA.2.C.5.2: Use digital tools to produce and publish writing individually or with peers and with support from adults.

Academic Vocabulary:

Finding The Meaning:ELA.2.V.1

ELA.2.V.1.1:Use grade-level academic vocabulary appropriately in speaking and writing

Supporting Benchmarks for BEST Standards and Foundational Skills:

LA.2.F.1: Applying Foundational Reading Skills

ELA.2.R.2.4: Explain an author's opinion(s) and supporting evidence.

ELA.2.C.4.1: Researching and Using InformationParticipate in research to gather information to answer a question about a single topic using multiple sources

English Language Development/Proficiency Standards for English Language Learners

ELD.K12.ELL.SC.1: English language learners communicate information, ideas and concepts necessary for academic success in the content area of Science.

ELD.K12.ELL.SI.1: English language learners communicate for social and instructional purposes within the school setting.

B.E.S.T. Standards for Mathematics:

Grade 2 Mathematics students will still receive instruction in the current MAFS. To prepare for implementation of the B.E.S.T. Standards for Mathematics, the Department has identified possible mathematical concepts that may cause gaps in future courses aligned to the B.E.S.T. Standards for Mathematics.

FY 23 Grade 2 Mathematics BEST Standards

B.E.S.T. benchmark coding scheme:

B.E.S.T. benchmark language Identifies the new concept or changes to the current expectation

FY 23 Grade 2 Mathematics Pacing Calendar

Number Sense: **MA.2.NSO.1.3** Plot, order and compare whole numbers up to 1,000.	**Number Sense:** **MA.2.NSO.1.4** o Round whole numbers from 0 to 100 to the nearest 10.
Measurement: **MA.2.M.2.1** Using analog and digital clocks, tell and write time to the nearest five minutes using a.m. and p.m. appropriately. Express portions of an hour using the fractional terms half an hour, half past, quarter of an hour, quarter after and quarter til.	**Data Analysis and Probability:** **MA.2.DP.1.1** Collect, categorize and represent data using tally marks, tables, pictographs or bar graphs. Use appropriate titles, labels and units. **Data Analysis and Probability:** **MA.2.DP.1.2** Interpret data represented with tally marks, tables, pictographs or bar graphs including solving addition and subtraction problems.

Human Growth & Development Curriculum		
Unit Goal: Students will comprehend concepts related to health promotion and disease prevention to enhance health, analyze internal and external influences on health behaviors, and demonstrate the ability to practice health-enhancing behaviors.	**Suggested Time Frame:**	3 days **(8/15/23 - 8/19/2023)** or throughout the school year
Text Resources: Materials provided on Blender (resources fulfill Florida Statute 1003.42.2n)		

Content/Academic Language							
Vocabulary	antibiotics bacteria buddy system caring character pillars	citizenship consequence decision fairness	fungi germs handwashing hygiene	internet internet safety netiquette parasites	password pop-ups protozoa respect	responsibility route stop & think trustworthiness	uncomfortable vaccine virtual world viruses

Next Generation Sunshine State Standards	Complexity Level	Student Target
Topic 1: Decision Making		
HE.2.B.3.2 Select trusted adults and professionals who can help promote health.	N/A	• discuss how trusted adults and professionals play an important role when making difficult decisions
HE.2.B.4.1 Demonstrate healthy ways to express needs, wants, feelings, and listening skills to enhance health.	N/A	• demonstrate effective verbal- and nonverbal-communication skills with others in the decision making process
HE.2.B.4.3 Demonstrate ways to respond to unwanted, threatening, or dangerous situations.	N/A	• demonstrate effective decision making skills
HE.2.B.5.1 Differentiate between situations when a health-related decision can be made individually or when assistance is needed.	N/A	• discuss various situations and how to use responsible decision making skills in order to handle these situations • understand when to seek a trusted adult in the decision making process
HE.2.B.5.3 Compare the consequences of not following rules/practices when making healthy and safe decisions.	N/A	• specify the potential outcomes of each choice when making decisions • discuss how the decisions we make can have negative consequences when rules/practices are not followed
HE.2.C.1.1 Recognize the locations and functions of major human organs.	N/A	• understand healthy behaviors and decisions lead to personal health
HE.2.C.2.1 Describe how family rules and practices influence health behaviors.	N/A	• discuss how family influences our decisions
HE.2.C.2.2 Describe how friends' health practices influence health behaviors of others.	N/A	• discuss how friends influence our decisions
HE.2.C.2.3 Describe how the school and community influence health behaviors of children.	N/A	• discuss how the school and community influence our decisions
HE.2.P.7.1 Demonstrate health behaviors to maintain or improve personal health.	N/A	• discuss how our decisions can maintain or improve personal health
HE.2.P.8.1 Support peers when making positive health choices.	N/A	• discuss how to assist others in making decisions
Topic 2: Media Safety		
HE.2.B.3.2 Select trusted adults and professionals who can help promote health.	N/A	• discuss how trusted adults and professionals play an important role when online and using digital media
HE.2.B.4.3 Demonstrate ways to respond to unwanted, threatening, or dangerous situations.	N/A	• discuss how to respond to pop-ups while online and using digital media

HE.2.B.5.1 Differentiate between situations when a health-related decision can be made individually or when assistance is needed.	N/A	• understand when to seek a trusted adult while using the internet and digital media
HE.2.B.5.3 Compare the consequences of not following rules/practices when making healthy and safe decisions.	N/A	• discuss how to respond to pop-ups while online and using digital media
HE.2.C.2.1 Describe how family rules and practices influence health behaviors.	N/A	• discuss how family rules and practices can keep up safe while using the internet and digital media
HE.2.C.2.2 Describe how friends' health practices influence health behaviors of others.	N/A	• discuss how friends can influence our behaviors while using the internet and digital media
HE.2.C.2.3 Describe how the school and community influence health behaviors of children.	N/A	• discuss how the school and community can influence our behaviors while using the internet and digital media
HE.2.C.2.4 Explain the ways that rules make the classroom, school, and community safer.	N/A	• understand how rules while using the internet and digital media make the classroom, school and community safer
HE.2.P.8.1 Support peers when making positive health choices.	N/A	• understand how to support peers when making positive health choices while using the internet and digital media
SC.K2.CS-PC.1.2 Describe the attributes of a good digital citizen: one who protects private information, balances time online, reports cyberbullying, and recognizes inappropriate content/contact.	N/A	• describe the attributes of a good digital citizen: one who protects private information, balances time online, reports cyberbullying, and recognizes inappropriate content/contact
SC.K2.CS-PC.1.3 Identify safe and unsafe examples of online communications.	N/A	• identify safe and unsafe examples while using media
SC.K2.CS-PC.1.4 Explain that a password helps protect the privacy of information.	N/A	• explain that a password helps protect the privacy of information
Topic 3: Germs & Hygiene		
HE.2.C.1.1 Identify that healthy behaviors affect personal health.	N/A	• identify how effective hygiene practices affect personal health
HE.2.C.1.6 Determine when it is important to seek health care.	N/A	• discuss various situations where seeking professional health care is needed
HE.2.C.2.1 Describe how family rules and practices influence health behaviors.	N/A	• discuss how family hygiene practices can influence health behaviors and prevent the spread of germs
HE.2.C.2.2 Describe how friends' health practices influence health behaviors of others.	N/A	• discuss how friends' hygiene practices can influence health behaviors and prevent the spread of germs
HE.2.C.2.3 Describe how the school and community influence health behaviors of children.	N/A	• discuss how school and community hygiene practices can influence health behaviors and prevent the spread of germs

HE.2.P.7.1 Demonstrate health behaviors to maintain or improve personal health.	N/A	• demonstrate effective hygiene practices to maintain or improve personal health and prevent the spread of germs
HE.2.P.8.1 Support peers when making positive health choices.	N/A	• discuss how to support peers in preventing the spread of germs and practicing proper hygiene
Topic 4: Character Education		
HE.2.B.3.2 Select trusted adults and professionals who can help promote health.	N/A	• discuss how trusted adults can help promote health
HE.2.B.4.1 Demonstrate healthy ways to express needs, wants, feelings, and listening skills to enhance health.	N/A	• demonstrate effective verbal- and nonverbal-communication skills with others when expressing needs, wants and feelings
HE.2.B.4.3 Demonstrate ways to respond to unwanted, threatening, or dangerous situations.	N/A	• demonstrate effective responses to unwanted, threatening or dangerous situations
HE.2.B.5.1 Differentiate between situations when a health-related decision can be made individually or when assistance is needed.	N/A	• discuss various situations when assistance is needed
HE.2.B.5.3 Compare the consequences of not following rules/practices when making healthy and safe decisions.	N/A	• understand the consequences of not following rules/practices when making healthy and safe decisions
HE.2.C.1.1 Identify that healthy behaviors affect personal health.	N/A	• understand how healthy behaviors affect personal health
HE.2.C.2.1 Describe how family rules and practices influence health behaviors.	N/A	• discuss how family influences health behaviors
HE.2.C.2.2 Describe how friends' health practices influence health behaviors of others.	N/A	• discuss how friends influence health behaviors
HE.2.C.2.3 Describe how the school and community influence health behaviors of children.	N/A	• discuss how the school and community influence health behaviors
HE.2.C.2.4 Explain the ways that rules make the classroom, school, and community safer.	N/A	• discuss how rules make the classroom, school and community safer
HE.2.P.7.1 Demonstrate health behaviors to maintain or improve personal health.	N/A	• discuss some health behaviors to maintain or improve personal health
HE.2.P.8.1 Support peers when making positive health choices.	N/A	• discuss how to support peers when making positive health choices
Topic 5: Personal Safety/Amber Watch		
HE.2.B.3.2 Select trusted adults and professionals who can help promote health.	N/A	• select trusted adults and professionals who can help with personal safety

HE.2.B.4.1 Demonstrate healthy ways to express needs, wants, feelings, and listening skills to enhance health.	N/A	• demonstrate effective verbal- and nonverbal-communication skills with others into express needs, wants, feelings and listening skills to enhance personal safety
HE.2.B.4.3 Demonstrate ways to respond to unwanted, threatening, or dangerous situations.	N/A	• demonstrate ways to respond to various unhealthy personal safety situations
HE.2.B.5.1 Differentiate between situations when a health-related decision can be made individually or when assistance is needed.	N/A	• discuss various situations where assistance may be needed for personal safety
HE.2.B.5.2 Name healthy options to health-related issues or problems.	N/A	• discuss healthy options to problems the influence personal safety
HE.2.B.5.3 Compare the consequences of not following rules/practices when making healthy and safe decisions.	N/A	• discuss how family influences personal safety
HE.2.C.1.3 Describe ways a safe, healthy home environment can promote personal health.	N/A	• describe ways a positive home environment can keep someone safe
HE.2.C.1.4 Describe ways to prevent childhood injuries in the home, school, and community settings.	N/A	• discuss how to prevent injuries in various settings
HE.2.C.2.1 Describe how family rules and practices influence health behaviors.	N/A	• discuss how family rules and practices can impact personal safety
HE.2.C.2.2 Describe how friends' health practices influence health behaviors of others.	N/A	• discuss how friends can influence personal safety
HE.2.C.2.3 Describe how the school and community influence health behaviors of children.	N/A	• discuss how the school and community can influence personal safety
HE.2.C.2.4 Explain the ways that rules make the classroom, school, and community safer.	N/A	• discuss how rules can influence personal safety
HE.2.P.7.1 Demonstrate health behaviors to maintain or improve personal health.	N/A	• discuss how health behaviors can influence personal safety
HE.2.P.8.1 Support peers when making positive health choices.	N/A	• discuss how to support peers with their personal safety

The School District of Palm Beach County
Grade 2 Mathematics
Scope & Sequence: Trimester 1

Unit 2: Foundations for Multiplication: Work with Equal Groups
9 days: September 8 - September 20

English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.AR.1.AP.1:	Solve one-step addition and subtraction real-world problems within 20 using objects.
MA.2.AR.3.AP.1:	Explore the concept of odd and even by pairing objects to represent an even number using two equal groups or represent an odd number by using two equal groups with one left over. Group of objects may not exceed 20.
MA.2.AR.3.AP.2:	Explore using repeated addition to find the total number of objects represented in a collection of equal groups (e.g., 3 groups of 2 objects) or in a rectangular array (e.g., 3 rows of 2 objects). Total objects may not exceed 20.
MA.2.NSO.2.AP.1:	Recall addition facts with sums to 10 and related subtraction facts.

The School District of Palm Beach County Grade 2 Mathematics Scope & Sequence: Trimester 1	
Unit 3: Add with Sums to 100 12 days: September 21 - October 9	
English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.AR.1.AP.1:	Solve one-step addition and subtraction real-world problems within 20 using objects.
MA.2.NSO.1.AP.4:	Round whole numbers from 0 to 100 to the nearest 10 with visual support.
MA.2.NSO.2.AP.3:	Apply a strategy for adding and subtracting a two-digit number (from 11 to 19) and a single digit whole number.

The School District of Palm Beach County
Grade 2 Mathematics
Scope & Sequence: Trimester 1

Unit 4: More Adding with Sums to 100
9 days: October 10 - October 23

English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.AR.1.AP.1:	Solve one-step addition and subtraction real-world problems within 20 using objects.
MA.2.NSO.2.AP.3:	Apply a strategy for adding and subtracting a two-digit number (from 11 to 19) and a single digit whole number.

End of Trimester 1: October 31, 2023

Revised: July 2023

The School District of Palm Beach County Grade 2 Mathematics Scope & Sequence: Trimester 2	
Unit 5: Subtract with Numbers to 100 **10 days: October 24 - November 7**	
English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.AR.1.AP.1:	Solve one-step addition and subtraction real-world problems within 20 using objects.
MA.2.NSO.2.AP.3:	Apply a strategy for adding and subtracting a two-digit number (from 11 to 19) and a single digit whole number.
MA.2.NSO.1.AP.4:	Round whole numbers from 0 to 100 to the nearest 10 with visual support.

The School District of Palm Beach County Grade 2 Mathematics Scope & Sequence: Trimester 2	
Unit 6: More Subtracting with Numbers to 100 **10 days: November 6 - November 25**	
English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.AR.1.AP.1:	Solve one-step addition and subtraction real-world problems within 20 using objects.
MA.2.NSO.2.AP.3:	Apply a strategy for adding and subtracting a two-digit number (from 11 to 19) and a single digit whole number.

The School District of Palm Beach County
Grade 2 Mathematics
Scope & Sequence: Trimester 2

Unit 14: Collect, Graph, and Interpret Data
9 Days: November 29 - December 11

English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.AR.1.AP.1:	Solve one-step addition and subtraction real-world problems within 20 using objects.
MA.2.DP.1.AP.1:	Sort data into up to three categories and represent the results using tally marks, tables, pictographs or bar graphs. Align data with given title, labels and units.
MA.2.DP.1.AP.2:	Interpret data represented with tally marks, tables, pictographs or bar graphs to solve one-step put-together and take-apart problems. Pictograph symbols and bar graph intervals may only represent a quantity of 1.

The School District of Palm Beach County
Grade 2 Mathematics
Scope & Sequence: Trimester 2

Unit 7: Solve Problems Involving Addition and Subtraction
14 days: December 12 - January 16 (includes 2 days for FLDOE Progress Monitoring 2)

English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.AR.1.AP.1:	Solve one-step addition and subtraction real-world problems within 20 using objects.
MA.2.NSO.2.AP.3:	Apply a strategy for adding and subtracting a two-digit number (from 11 to 19) and a single digit whole number.
MA.2.AR.2.AP.2:	Determine the unknown whole number in an addition or subtraction equation, relating three whole numbers, with the change or result unknown (e.g., 7 + _ = 10, 10 − 3= ?). Sums may not exceed 20 and their related subtraction facts.

The School District of Palm Beach County
Grade 2 Mathematics
Scope & Sequence: Trimester 2

Unit 8: Understand Fractions: Partition Shapes into Equal-Sized Parts
8 Days: January 17 - January 26

English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.FR.1.AP.1:	Partition circles and rectangles into two, three or four equal-sized parts. Recognize the parts of the whole as halves, thirds or fourths. Explore the whole as two halves, three thirds or four fourths.3
MA.2.FR.1.AP.1:	Partition circles and rectangles into two, three or four equal-sized parts. Recognize the parts of the whole as halves, thirds or fourths. Explore the whole as two halves, three thirds or four fourths.

The School District of Palm Beach County
Grade 2 Mathematics
Scope & Sequence: Trimester 2

Unit 9: Work with Time and Money
12 Days: January 29 - February 13

English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.M.2.AP.1:	Using analog and digital clocks, express the time in hours and half hours. Explore the concept of a.m. and p.m.
MA.2.M.2.AP.2:	Solve one-step addition and subtraction real-world problems involving either dollar bills within $20 or coins within 20¢. Explore using $ for dollar bills and ¢ symbol for coins.

End of Trimester 2: February 16, 2024

Revised July 2023

The School District of Palm Beach County
Grade 2 Mathematics
Scope & Sequence: Trimester 2

Unit 10: Place Value: Numbers to 1,000
11 Days: February 14 - February 28

English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.NSO.1.AP.1:	Read and generate numbers from 0 to 100 using standard form and expanded form.
MA.2.NSO.1.AP.2:	Compose and decompose two-digit numbers using tens and ones. Demonstrate each composition or decomposition with objects, drawings, expressions or equations.
MA.2.NSO.1.AP.3	Plot, order and compare whole numbers up to 100.
MA.2.NSO.2.AP.2:	Identify the number that is ten more or ten less than a given two-digit number.

The School District of Palm Beach County
Grade 2 Mathematics
Scope & Sequence: Trimester 3

Unit 11: Add and Subtract with Numbers to 1,000 14 Days: March 1 – March 26	
English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.NSO.2.AP.2:	Identify the number that is ten more or ten less than a given two-digit number.
MA.2.NSO.2.AP.4:	Explore the addition of a two-digit and a single-digit whole number with sums up to 100. Explore the subtraction of a one-digit from a two-digit whole number.
MA.2.M.2.AP.2:	Solve one-step addition and subtraction real-world problems involving either dollar bills within $20 or coins within 20¢. Explore using $ for dollar bills and ¢ symbol for coins.

The School District of Palm Beach County Grade 2 Mathematics Scope & Sequence: Trimester 3	
Unit 12: Measuring Length **14 Days: April 1 - April 19**	
English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.M.1.AP.a:	Measure the length of an object to the nearest inch, foot and or yard when given the appropriate tool.
MA.2.M.1.AP.b	Explore estimation strategies by developing measurement benchmarks of familiar objects that could be used to make reasonable estimates of length to the nearest inch, foot, or yard.
MA.2.M.1.AP.2:	Measure the lengths of two objects using the same unit (i.e., inch, foot, yard) and determine the difference between their measurements.
MA.2.M.1.AP.3:	Solve one-step real-world measurement problems involving addition and subtraction of lengths within 20 given in the same unit (i.e., inch, foot, yard)

The School District of Palm Beach County
Grade 2 Mathematics
Scope & Sequence: Trimester 3

Unit 1.4: Identify, Analyze, and Describe Two-Dimensional (2-D) Figures and Their Attributes
9 Days: April 23 - May 3

English Language Arts Standards	
ELA.K12.EE.1.1	Cite evidence to explain and justify reasoning.
ELA.K12.EE.2.1	Read and comprehend grade-level complex texts proficiently.
ELA.K12.EE.3.1	Make inferences to support comprehension.
ELA.K12.EE.4.1	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations.
ELA.K12.EE.5.1	Use the accepted rules governing a specific format to create quality work.
ELA.K12.EE.6.1	Use appropriate voice and tone when speaking or writing.
English Language Development Standards	
ELD.K12.ELL.MA.1	English language learners communicate information, ideas and concepts necessary for academic success in the content area of mathematics.
ELD.K12.ELL.SI.1	English language learners communicate for social and instructional purposes within the school setting.
Access Points	
MA.2.GR.1.AP.1:	Identify and produce two-dimensional figures when given defining attributes. Figures are limited to triangles, rectangles, hexagons and squares.
MA.2.GR.1.AP.2:	Sort two-dimensional figures based on the number of sides, number of vertices, whether they are closed or open and whether the sides are curved or straight.
MA.2.GR.1.AP.3:	Identify a line of symmetry for a two-dimensional figure.
MA.2.GR.2.AP.1:	Explore perimeter as an attribute of a figure that can be measured by placing unit segments along the boundary without gaps or overlaps. Find perimeters of rectangles by counting unit segments.
MA.2.GR.2.AP.2:	Find the perimeter of a polygon with whole-number side lengths given. Polygons are limited to triangles, rectangles and squares.
MA.2.M.1.AP.a:	Measure the length of an object to the nearest inch, foot and or yard when given the appropriate tool.
MA.2.M.1.AP.b:	Explore estimation strategies by developing measurement benchmarks of familiar objects that could be used to make reasonable estimates of length to the nearest inch, foot, or yard.
MA.2.M.1.AP.3:	Solve one-step real-world measurement problems involving addition and subtraction of lengths within 20 given in the same unit (i.e., inch, foot, yard).
MA.2.NSO.2.AP.3:	Apply a strategy for adding and subtracting a two-digit number (from 11 to 19) and a single digit whole number.

May 6 - May 30

- FLDOE Progress Monitoring 3
- Finalize the mastery of the Grade 2 B.E.S.T.

End of Trimester 3: May 30, 2024

Revised July 2023

FY24 Grade 2 Scope and Sequence

Unit and Planner	Foundations	Reading	Communication & Vocabulary	Assessment Information
Unit 3: Government and Citizenship: Government at Work Unit Planner Unit Cadre Recording Oct 25 - Nov 28 (15 lessons, 3 days for unit assessment and reteaching, and 1 flex day)	2.F.1.3a 2.F.1.3b 2.F.1.3d 2.F.1.4	2.R.1.1 2.R.1.3 2.R.1.4 2.R.2.2 2.R.3.2a 2.R.3.2b 2.R.3.3	2.C.1.1 2.C.1.4 2.C.1.5 2.C.2.1 2.C.3.1 2.C.4.1 2.C.5.1 2.C.5.2 2.V.1.1 2.V.1.3	
Unit 4: Perspectives in Literature: Many Characters, Many Points of View Unit Planner Unit Cadre Recording Nov 29 - Jan 11 (15 lessons, 3 days for unit assessment and reteaching, 1 day for F.A.S.T., and 2 flex days)	2.F.1.3b 2.F.1.3d 2.F.1.4	2.R.1.1 2.R.1.2 2.R.1.3 2.R.1.4 2.R.3.1 2.R.3.2a 2.R.3.3	2.C.1.1 2.C.1.2 2.C.1.5 2.C.2.1 2.C.3.1 2.V.1.1	F.A.S.T. PM#2 (Window 12/4-12/22)
Unit 5: Technology and Society: Solving Problems Through Technology Unit Planner Unit Cadre Recording Jan 12 - Feb 9 (15 lessons, 3 days for unit assessment and reteaching, 1 day for PBPA, and 1 flex day)	2.F.1.3a 2.F.1.3b 2.F.1.3c 2.F.1.3d 2.F.1.4	2.R.1.4 2.R.2.1 2.R.2.2 2.R.2.3 2.R.3.2b 2.R.3.3	2.C.1.1 2.C.1.3 2.C.1.5 2.C.2.1 2.C.3.1 2.C.5.1 2.C.5.2 2.V.1.1 2.V.1.3	Argumentative PBPA Week of Feb 5
Trimester 2 Data Collection (Trimester ends on February 16)	**Standards and Benchmarks for Report Card Coding:** 2.F.1.3a, 2.F.1.3b, 2.F.1.3c, 2.F.1.3d, 2.F.1.4 2.R.1.2, 2.R.1.3, 2.R.1.4, 2.R.2.2, 2.R.3.1, 2.R.3.2b, 2.R.3.3 2.C.1.3, 2.C.1.4, 2.C.1.5, 2.C.3.1, 2.C.5.1, 2.C.5.2 2.V.1.3			

Note: The benchmarks presented on this scope reflect the work that students are practicing and applying within each unit. Additional benchmarks not shown here are introduced and taught in order to lay the foundation for the students to do the work. These additional benchmarks can be found within the unit planners.

FY24 Grade 2 Scope and Sequence

Unit and Planner	Foundations	Reading	Communication & Vocabulary	Assessment Information
Unit 6: Themes Across Cultures: Tales to Live By Unit Planner Unit Cadre Recording Feb 12 - March 8 (15 lessons, 3 days for unit assessment and reteaching, 1 flex day)	2.F.1.3a 2.F.1.3b 2.F.1.3d 2.F.1.4	2.R.1.1 2.R.1.2 2.R.1.3 2.R.3.1 2.R.3.2a	2.C.1.1 2.C.1.2 2.C.1.5 2.C.2.1 2.C.3.1 2.C.5.1 2.C.5.2 2.V.1.1 2.V.1.3	
Unit 7: History, Culture, and Geography: Investigating the Past Unit Planner Unit Cadre Recording March 11 - April 16 (15 lessons, 3 days for unit assessment and reteaching, and 1 flex day)	2.F.1.3b 2.F.1.3d 2.F.1.3e 2.F.1.4	2.R.2.1 2.R.2.2 2.R.3.1 2.R.3.2b	2.C.1.1 2.C.1.2 2.C.1.5 2.C.2.1 2.C.3.1 2.C.5.1 2.C.5.2 2.V.1.1 2.V.1.2 2.V.1.3	F.A.S.T. PM#3 (Window 4/15-5/30)
Unit 8: Earth Science: Wind and Water Change the Earth Unit Planner Unit Cadre Recording April 17 - May 14 (15 lessons, 3 days for unit assessment and reteaching, 1 day for PBPA, and 1 day for F.A.S.T.)	2.F.1.3b 2.F.1.3d 2.F.1.4	2.R.2.1 2.R.2.2 2.R.2.3 2.R.2.4 2.R.3.1 2.R.3.2b 2.R.3.3	2.C.1.1 2.C.1.4 2.C.1.5 2.C.2.1 2.C.3.1 2.C.4.1 2.C.5.1 2.C.5.2 2.V.1.1 2.V.1.2 2.V.1.3	Expository PBPA Week of May 6 F.A.S.T. PM#3 (Window 4/15-5/30)
Unit 9: Economics: Buyers and Sellers Unit Planner Unit Cadre Recording May 15 - May 30 (10 lessons and 1 flex day)	2.F.1.3b 2.F.1.3d 2.F.1.3e 2.F.1.4	2.R.1.1 2.R.1.3 2.R.1.4 2.R.2.1 2.R.2.2 2.R.3.1 2.R.3.2b 2.R.3.3	2.C.1.1 2.C.1.2 2.C.1.5 2.C.2.1 2.C.3.1 2.C.5.1 2.C.5.2 2.V.1.1 2.V.1.2 2.V.1.3	F.A.S.T. PM#3 (Window 4/15-5/30)

Note: The benchmarks presented on this scope reflect the work that students are practicing and applying within each unit. Additional benchmarks not shown here are introduced and taught in order to lay the foundation for the students to do the work. These additional benchmarks can be found within the unit planners.

FY24 Grade 2 Scope and Sequence

Trimester 3 Data Collection (Trimester 3 ends on May 30)	**Standards and Benchmarks for Report Card Coding:** 2.F.1.3a, 2.F.1.3b, 2.F.1.3d, 2.F.1.3e 2.R.2.1, 2.R.2.3, 2.R.2.4 2.C.1.1, 2.C.1.2, 2.C.1.5, 2.C.3.1, 2.C.4.1 2.V.1.2, 2.V.1.3

*ELA Expectations (ELA.K12.EE) for students are overarching skills that run through every component and should be taught and practiced throughout the strands. They are interconnected and should be developed over time.

Options for Collecting Evidence	
Benchmark Advance End of Unit Tests Weekly Tests Oral Reading Records Text for Close Reading Responses Writing Samples Independent Writing Tasks Quick Checks Culminating Tasks Research and Inquiry Projects	F.A.S.T. (3 assessment windows) iReady Diagnostic Palm Beach Performance Assessment Observations Checklists Conference Notes Turn and Talk Responses Stop and Jot Responses/Exit Tickets Other Teacher Designed Tasks

Note: The benchmarks presented on this scope reflect the work that students are practicing and applying within each unit. Additional benchmarks not shown here are introduced and taught in order to lay the foundation for the students to do the work. These additional benchmarks can be found within the unit planners.

FY24 Grade 2 Scope and Sequence

Grade 2 Palm Beach Performance Assessment Windows	
Administration 1	**Administration 2**
Argumentative PBPA #21 Suggested Administration: At the end of Unit 5 February 5 - February 9 Deadline for entry into EDW by **Friday, February 23**	**Expository** PBPA #22 Suggested Administration: At the end of Unit 8 May 6 - May 10 Deadline for entry into EDW by **Friday, May 24**

Note: The benchmarks presented on this scope reflect the work that students are practicing and applying within each unit. Additional benchmarks not shown here are introduced and taught in order to lay the foundation for the students to do the work. These additional benchmarks can be found within the unit planners.

Attachment D:
American Academy of Palm Beach
Reading Curriculum

The American Academy of Palm Beach will implement with fidelity the SDPBC Comprehensive Evidence-Based Reading Plan (CERP), offering our educators a structured blueprint for reading education aligned with the Florida Standards. Literacy will be seamlessly woven into our interdisciplinary curriculum, ensuring a holistic approach to learning. Teachers will rely on Scope and Sequences along with pacing guides to synchronize reading instruction with the Florida Standards, ensuring a cohesive educational experience. All programs utilized by the American Academy will provide evidence for Every Student Succeeds Act (ESSA).

American Academy will utilize the SDPBC Decision tree for all to guide the appropriate placement and scheduling for the students.

The K-5 core reading program will provide students with a 90-minute uninterrupted reading block. The reading block will include whole group instruction utilizing an evidence-based sequence of reading instruction and small group differentiated instruction to meet individual student needs. All materials have been selected from the current SDPBC Instructional Materials list.

The core instructional materials for grades K-5 will be Benchmark Advance. These curriculum materials address the six components of reading through a gradual release model. The intervention materials will be provided by Passports Reading by Voyager/Lexia.

American Academy students in grades 6-8 will be provided with Core (Tier 1) Instruction and will be monitored using screening, progress monitoring/formative assessment, diagnosis, and summative assessments. Students with a reading deficiency will be provided Core (Tier 1) Instruction and Supplemental (Tier 2) Intervention. Students who exhibit a substantial reading deficiency will be provided with Intensive (Tier 3) Intervention, in addition to and in alignment with the Core (Tier 1) Instruction and Supplemental (Tier 2) Intervention.

The core instructional materials for grades 6-8 will be McGraw/Hill StudySync. The core curriculum is designed around different components of Balanced Literacy, Multi-Tiered Systems of Support (MTSS), and the Focused Instructional Model (FIM). Reading Plus will be used as the intervention program for grades 6-8.

American Academy will utilize an inclusive model, all ESE and ELL students will receive their core reading block within the mainstream classroom though a variety of methods. Reading remediation will be provided by the regular classroom teacher, by an ESE certified or ELL-endorsed teacher.

Tier 3 Intensive approved reading intervention will be provided for students with disabilities if the student is performing below grade level as indicated by the SDPBC decision tree. Intervention instruction will include the evidence-based programs and/or strategies that align with the student's IEP goals and

address their targeted skill gaps. Students with disabilities receiving reading intervention will have an ongoing record of progress monitoring if the student is performing below grade level. Students will continue to be provided with these interventions until the reading deficiency is remediated as measured by multiple sources of student data.

Students with disabilities also receive supplemental specially designed instruction to address their individual needs as identified by their IEP teams. Exceptional Student Education (ESE) services during core instruction do not replace the need for additional intervention including those interventions provided by appropriately trained content-area teachers.

If it is determined that an ELL student requires reading intervention, evidence-based programs, resources and/or strategies will align with the student's individual ELL plan, ensuring the language acquisition support. As these students are acquiring language their ELL plan is the progress monitoring tool and it will be updated to reflect student's current services, as needed.

Attachment E- Student (Pupil) Progression Plan

Since American Academy K-8 Charter School will be adopting the SDPBC K-12 Student Progression Plan a link to that plan is provided below:

Student Progression Plan_2023-2024 (palmbeachschools.org)

Attachment F – Assessment Schedule

The following and most current assessment instruments and information about the assessments are in this attachment:

1. **SDPBC ACCESS for ELL's Paper**

2. **Florida Standards Alternate Assessment (FSAA)**

3. **FLICKRS – Information not on website but listed**

4. **Florida Uniform Statewide Assessment Calendar (SDPBC Adopted)**

5. **Sample – Preliminary 2024-25 Florida Statewide Assessment Program – (Most Current)**

FLORIDA STATEWIDE ASSESSMENT PROGRAM
PRELIMINARY 2024–2025 SCHEDULE*

The testing windows below denote the amount of time provided for districts and schools to select test administration days; they do not represent the amount of time students spend taking the assessments. The windows are established to provide maximum flexibility to efficiently deliver these important measurements of student progress and performance and maximize student learning and instructional time.

Writing	
Dates	**Assessment**
March 31–April 11, 2025	Grades 4–10 Benchmarks for Excellent Student Thinking (B.E.S.T.) Writing
ELA Reading and Mathematics	
Dates	**Assessment**
May 1–30, 2025	Grades 3–10 Florida Assessment of Student Thinking (FAST) English Language Arts (ELA) Reading & Grades 3–8 Mathematics End-of-Year Progress Monitoring Assessment (**Third Administration, PM3**)
Statewide Science Assessment	
Dates	**Assessment**
May 1–30, 2025	Grades 5 & 8 Science
EOC & FAST ELA Reading Retake Assessments	
Dates	**Assessment**
September 16–October 4, 2024 December 2–20, 2024 May 1–30, 2025 July 14–25, 2025	B.E.S.T. Algebra 1 & Geometry End-of-Course (EOC) Assessments Biology 1, Civics, & U.S. History EOCs FAST Grade 10 ELA Reading Retake

* School districts establish daily testing schedules within these windows according to state-provided guidance. For more detailed scheduling information for a specific school or district, please visit that organization's website.

FAST	
Dates	**Grade Levels and Subjects**
First Administration (PM1): August 5–September 27, 2024 **Second Administration (PM2):** December 2, 2024–January 24, 2025 **Third Administration (PM3):** April 14–May 30, 2025	Grades K–2* FAST Reading & Mathematics
First Administration (PM1): August 12–September 27, 2024 **Second Administration (PM2):** December 2, 2024–January 24, 2025 **Third Administration (PM3):** May 1–May 30, 2025	Grades 3–10 FAST ELA Reading, Grades 3–8 FAST Mathematics

*Assessment calendar guidance for VPK programs is available at https://www.fldoe.org/schools/early-learning/providers/fast-star-earlit.stml.

FLORIDA STATEWIDE ASSESSMENT PROGRAM
PRELIMINARY 2024–2025 SCHEDULE

The windows below denote the amount of time provided for districts and schools to select progress monitoring administration days; they do not represent the amount of time students spend taking progress monitoring assessments. The windows are established to provide maximum flexibility to efficiently deliver these important measurements of student progress and performance and maximize student learning and instructional time.

Florida Alternate Assessment	
Dates	**Grade Levels and Subjects**
September 23–October 11, 2024	**Florida Alternate Assessment (FAA)—Performance Task** Grade 10 ELA Makeup Algebra 1 Makeup
February 24–April 11, 2025	**Florida Alternate Assessments (FAA)*—Performance Task** Grades 3–8 ELA & Mathematics Grades 4–8 Writing Grades 5 & 8 Science End-of-Course Assessment (Civics)
March 10–April 25, 2025	**FAA*—Performance Task** Grades 9 & 10 ELA Grades 9 & 10 Writing End-of-Course Assessments (Algebra 1, Biology 1, Geometry & U.S. History)
Data Collection Periods: September–October 2024 November–December 2024 March–April 2025	**FAA*—Datafolio** Grades 3–10 ELA (Reading & Writing) Grades 3–8 Mathematics Grades 5 & 8 Science End-of-Course Assessments (Algebra 1, Biology 1, Civics, Geometry & U.S. History)

*Aligned to Access Points for B.E.S.T.

FLORIDA STATEWIDE ASSESSMENT PROGRAM
PRELIMINARY 2024–2025 SCHEDULE

Other Statewide Assessments	
Dates	**Assessment**
October 2024–April 2025	Preliminary ACT (PreACT)
TBD	Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT)
November 4–December 20, 2024 March 31–May 30, 2025	Florida Civic Literacy Exam
January–March 2025	National Assessment of Educational Progress (NAEP) Long-Term Trend (ages 9, 13, 17)
January 20–March 14, 2025	ACCESS for ELLs Alternate ACCESS for ELLs
March–April 2025	ACT*
March–April 2025	SAT*
March–April 2024	Classic Learning Test (CLT)*
May 2025	Advanced Placement (AP) Exams

*Districts will select either ACT, SAT, or CLT to administer to all Grade 11 students in the district.

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ACCESS for ELL's Paper

Florida uses the ACCESS for ELLs suite of assessments as a tool to measure **English Language Learners (ELLs)** proficiency in the English language; thus, ensuring the skills needed in school to achieve at high levels, academically. The ACCESS for ELLs suite is a product of a collaborative effort by the multistate WIDA Consortium that is designed to provide:

- Evidence of program accountability in accordance with Title I and III of the Every Student Succeeds Act of 2015 (formerly the No Child Left Behind Act), which calls for schools and districts to meet state accountability objectives for increasing the English-language proficiency of English Language Learners.
- Data useful for charting student progress over time and, for the newly arrived students, charting progress over the first year.
- Information about the language proficiency levels of individual students that can be used in making decisions regarding exit from the English for Speakers of Other Languages (ESOL) program.
- Diagnostically useful information about students' strengths and weaknesses in English (with as much specificity as possible within the limitations of a large-scale standardized test).

For more information about ACCESS for ELL's 2.0, see the Florida Department of Education's ACCESS for ELL's 2.0 website.

Florida Standards Alternate Assessment (FSAA)

All Florida students participate in the state's assessment and accountability system. The Florida Standards Alternate Assessment (FSAA) is designed for students whose participation in the general statewide assessment program (Florida Standards Assessments, Statewide Science Assessment, Next Generation Sunshine State Standards End-of-Course Assessments) is not appropriate, even with accommodations. The FSAA measures student academic performance on the Access Points (FS-AP) in Language Arts, Mathematics, Science, and Social Studies. Access Points are academic expectations written specifically for students with significant cognitive disabilities. They reflect the essence or core intent of the standards that apply to all students in the same grade, but at reduced levels of complexity. Beginning in 2016–2017, the FSAA program will include two assessment components.

FSAA—Performance Task (FSAA-PT)
FSAA-PT is designed to assess students at three levels of complexity and results are reported through achievement levels.

FSAA—Datafolio
Florida has a new assessment component designed to address the needs of a small population of students who typically do not have a formal of communication and may be working at pre-academic levels.

- Student work is aligned to pre-determined standards and submitted via an online portfolio system during three collection periods throughout a school year.
- Scoring outcomes are designed to show progress along a continuum of access to academic content via reduced levels of assistance and increased accuracy.
- Regardless of the component with which a student is assessed, it is expected that only students with the most significant cognitive disabilities who are eligible under IDEA will participate in the FSAA program.

Uniform Statewide Assessment Calendar

According to Section 1008.22(7)(b), Florida Statutes (F.S.), and State Board of Education Rule 6A-1.094224, Florida Administrative Code (F.A.C), the uniform assessment calendar must be published on the Florida Department of Education (FDOE) website by January of each year for, at a minimum, the following two school years. Prior to posting, FDOE will complete sections 1 through 4 with the appropriate information.

Each school district must then complete the uniform calendar with district-required assessment information, publish the calendar to the district website, and provide it to the FDOE by October 1 of each school year. Districts must provide completed calendars to schools and include the calendar in their parent guides. In addition, each school must publish the completed calendar on its website.

The statewide assessment information provided by the Department in sections 1 through 4 should not be altered; however, districts may otherwise modify and populate this template to accurately indicate their assessment schedules for the school year.

1. Glossary of Assessment Terms

The following glossary includes definitions of assessment terms and explanations of acronyms used throughout this template. The FDOE will populate this section with state-level terms in addition to those specified in s. 1008.22(7)(i), F.S. Districts may add rows as needed for additional glossary terms that are specific to district-required assessments but should not modify any FDOE-provided information.

Acronym/Term	Definition
ACCESS for ELLs	Assessing Comprehension and Communication in English State-to-State (ACCESS) for English Language Learners (ELLs)
Accommodation	Per Rule 6A-1.0943, F.A.C., "Accommodations are defined as adjustments to the presentation of the statewide standardized assessment questions, methods of recording examinee responses to the questions, scheduling for the administration of a statewide standardized assessment to include amount of time for administration, settings for administration of a statewide standardized assessment, and the use of assistive technology or devices to facilitate the student's participation in a statewide standardized assessment."
B.E.S.T.	Benchmarks for Excellent Student Thinking
CBT	Computer-Based Test
Concordant and Comparative Scores	Concordant and comparative scores refer to scores that have been determined by establishing a relationship between assessments that measure similar (but not identical) constructs, such as the Algebra 1 End-of-Course Assessment and the SAT. In statute, concordant refers to scores associated with the ELA assessment and comparative refers to scores associated with the Algebra 1 assessment. A student can meet assessment graduation requirements by earning a concordant or comparative score as specified in Rule 6A-1.09422, F.A.C.
Diagnostic	Assessments that measure students' understanding of a subject area or skills base, which allow teachers and educators to evaluate student learning, focusing on strengths and areas of need
District Window	The selected dates within the statewide window during which a district will administer a given assessment
District-Required Assessments	Assessments required by the school district for students in a specific grade or course
ELA	English Language Arts
EOC	End-of-Course
Evaluative	Assessments that measure student proficiency at selected intervals in order to compare change over time and to compare state-level results

Uniform Statewide Assessment Calendar

Acronym/Term	Definition
FAST	Florida Assessment of Student Thinking
FCLE	Florida Civic Literacy Exam
Formative	Formative assessments are the formal and informal ways that teachers and students gather and respond to evidence of student learning. Formative assessments are part of teaching in the classroom. Formative assessments will not result in a score that will appear on a student's report card, but they serve the greater purpose of informing both students and teachers on what changes need to happen in classroom instruction to better serve the needs of individual students.
FSA	Florida Standards Assessments
FSAA	Florida Standards Alternate Assessment
Interim	Interim assessments are administered on a smaller scale (i.e., school or district) with results that can be used at the classroom level or aggregated at the school- or district-level. Depending on the design, interim assessments can be used to predict a student's ability to succeed on a summative assessment, to evaluate a program, or to diagnose student learning gaps.
NAEP	National Assessment of Educational Progress
NGSSS	Next Generation Sunshine State Standards
PBT	Paper-Based Test
PM1	The baseline administration of FAST Progress Monitoring in the beginning of the school year.
PM2	The midyear administration of FAST Progress Monitoring in the middle of the school year.
PM3	The summative administration of FAST Progress Monitoring at the end of the school year.
Progress Monitoring	The process used to determine whether a student's academic performance is improving, at what rate it is improving, and how effective instruction has been. In accordance with s. 1008.25(8)(b)1., F.S., the progress monitoring assessments for VPK through grade 2 must be administered at least three times within a program year or school year, as applicable, with the first administration occurring no later than the first 30 instructional days after a student's enrollment or the start of the program or school year, the second administration occurring midyear, and the third administration occurring within the last 30 days of the program or school year. In accordance with s. 1008.25(8)(b)2., F.S., the progress monitoring assessments for grades 3 through 10 must be administered at the beginning, middle, and end of the school year.
PSAT/NMSQT	Preliminary SAT/National Merit Scholarship Qualifying Test
Summative	Assessments that evaluate student mastery of Florida's academic standards at or near the conclusion of the course of instruction
Statewide, Standardized Assessments	All assessments required by s. 1008.22, F.S.
Statewide Window	The range of dates during which districts and/or schools may choose to administer a given assessment
Testing Time	The amount of time individual students are each given to respond to test items on each test
VAM	A Value-Added Model (VAM) is used by some school districts as part of their educator evaluation system. It is also used in the approval process for teacher preparation programs and as part of the criteria to extend an educator's temporary teaching certificate.
VPK	Florida's Voluntary Prekindergarten Education Program

Uniform Statewide Assessment Calendar

2. Test, Type, and Purpose/Use

FDOE will populate this section with information related to state-level tests. Districts may add rows as needed to define district-required tests, test type, and their purpose/use in the district but should not modify any FDOE-provided information. If additional types are added, define applicable types in the glossary.

Test	Type	Purpose/Required Use	Statutory Authority/Required Use Citation
ACCESS for ELLs	Diagnostic	Measure English language acquisition of ELLs	s. 1003.56, F.S. Rule 6A-6.0902, F.A.C. Rule 6A-6.09021, F.A.C. Rule 6A-6.0903, F.A.C.
Alternate ACCESS for ELLs	Diagnostic	Measure English language acquisition of ELLs with significant cognitive disabilities	
ACT	Summative	Inform course placement; can be used as a concordant or comparative score to meet assessment graduation requirements; provide postsecondary opportunities	s. 1008.22, F.S. Rule 6A-1.09422, F.A.C.
Coordinated Screening and Progress Monitoring Program	Diagnostic/Progress Monitoring	Provides information in mastering the appropriate grade-level standards and provides information on students' progress to parents, teachers, and school and program administrators. Used to provide data for accountability of the Voluntary Prekindergarten Education Program.	s. 1008.25(8), F.S. s. 1008.2125, F.S. s. 1002.68 Rule 6M-8.601, F.A.C.
FCLE	Summative	If passed, exempts students from the postsecondary civic literacy assessment requirement established by s. 1007.25(4), F.S.	s. 1003.4282(3)(d), F.S. s. 1007.25(4)(b), F.S.
FAST PM1 and PM2	Progress Monitoring	Provides information regarding whether a student's academic performance is improving, at what rate it is improving, and how effective instruction has been.	
B.E.S.T. EOC	Summative	Purpose: FAST PM3, B.E.S.T., Florida Standards, Next Generation Sunshine State Standards assessments measure student achievement of Florida's academic standards Required uses: third grade retention; high school standard diploma; EOC assessments as 30% of course grade; school grades; school improvement rating; district grades; differentiated accountability; VAM; scholar designation; Credit Acceleration Program; school improvement plans; school, district, state, and federal reporting	s. 1002.38, F.S. s. 1002.68, F.S. s. 1003.4156, F.S. s. 1003.4282, F.S. s. 1004.04, F.S. s. 1004.85, F.S. s. 1008.22, F.S. s. 1008.25, F.S. s. 1008.33, F.S. s. 1008.34, F.S. s. 1008.341, F.S. s. 1012.34, F.S. s. 1012.56, F.S. Rule 6A-1.09422, F.A.C. Rule 6A-1.094221, F.A.C.
FAST PM3	Progress Monitoring/Summative		
FSA	Summative		
FSAA	Summative		
NGSSS EOC	Summative		
Statewide Science Assessment	Summative		

Uniform Statewide Assessment Calendar

Test	Type	Purpose/Required Use	Statutory Authority/Required Use Citation
			Rule 6A-1.094222, F.A.C. Rule 6A-1.0943, F.A.C. Rule 6A-1.09432, F.A.C. Rule 6A-1.09981, F.A.C. Rule 6A-1.099811, F.A.C. Rule 6A-1.099822, F.A.C. Rule 6A-5.0411, F.A.C.
NAEP	Evaluative	Measure student performance for comparison among state and national populations over time	s. 1008.22, F.S.
PreACT	Summative	Inform course placement	s. 1007.35, F.S.
PSAT/NMSQT	Summative	Inform course placement; can be used as a concordant or comparative score to meet Algebra 1 assessment graduation requirements	s. 1007.35, F.S. Rule 6A-1.09422, F.A.C.
SAT	Summative	Inform course placement; can be used as a concordant or comparative score to meet assessment graduation requirements; provide postsecondary opportunities	s. 1008.22, F.S. Rule 6A-1.09422, F.A.C.

3. Required Statewide Assessments

The following assessments are required for students as indicated in the **Students to Be Tested** column. FDOE will complete this section with the required statewide assessments. Districts should then populate the **District Window** column for each assessment in the table but should not modify any FDOE-provided information.

When calculating total test time in Section 6, do not include times for assessments indicated by grey rows, which indicate duplicate assessment windows (e.g., EOCs), assessments that take the place of another assessment, or assessments that do not have a specified testing time.

Assessment	Students to Be Tested	Statewide Window	District Window	Mode	Testing Time	Results Expected
VPK FAST PM1	Students enrolled in VPK	First 30 instructional days after a student's enrollment or the start of a program year or school year	August 17–September 22, 2022	CBT	10–20 minutes	Immediately following test completion
FAST PM1	K–Grade 1 ELA Reading	August 8–September, 30 2022	August 17–September 22, 2022	CBT	10–20 minutes	Immediately following test completion

Uniform Statewide Assessment Calendar

Assessment	Students to Be Tested	Statewide Window	District Window	Mode	Testing Time	Results Expected
FAST PM1	Grade 2 ELA Reading	August 8–September, 30 2022	August 17–September 22, 2022	CBT	15–20 minutes	Immediately following test completion
FAST PM1	K–Grade 2 Mathematics	August 8–September, 30 2022	August 17–September 22, 2022	CBT	20-30 minutes	Immediately following test completion
FAST PM1	Grades 3–10 ELA Reading	August 15–September, 30 2022	August 24–September 30, 2022	CBT	90 minutes	Immediately following test completion
FAST PM1	Grades 3–5 Mathematics	August 15–September, 30 2022	August 24–September 30, 2022	CBT	80 minutes	Immediately following test completion
FAST PM1	Grades 6–8 Mathematics	August 15–September, 30 2022	August 24–September 30, 2022	CBT	100 minutes	Immediately following test completion
FSAA—Datafolio[4]	Grades 3–10 ELA (Reading & Writing); Grades 3–8 Mathematics; Grades 5 & 8 Science; and Algebra 1, Biology 1, Civics, Geometry, & U.S. History EOCs	Collection Period 1: September–October 2022	Collection Period 1: September–October 2022	PBT	Varies/Untimed	June 2023
FSAA—Datafolio[4]	Grades 3–10 ELA (Reading & Writing); Grades 3–8 Mathematics; Grades 5 & 8 Science; and Algebra 1, Biology 1, Civics, Geometry, & U.S. History EOCs	Collection Period 2: November–December 2022	Collection Period 2: November–December 2022	PBT	Varies/Untimed	June 2023
B.E.S.T. Algebra 1 and Geometry EOC	Students enrolled in associated courses	November 28–December 16, 2022	November 28–December 16, 2022	CBT[1]	160 minutes	January 2023
NGSSS Biology 1, Civics, and U.S. History EOC	Students enrolled in associated courses	November 28–December 16, 2022	November 28–December 16, 2022	CBT[1]	160 minutes[3]	January 2023
FCLE	Students enrolled in associated courses	November 7–December 16, 2022	November 7–December 16, 2022	CBT[1]	160 minutes[2]	Immediately following test completion
VPK FAST PM2	Students enrolled in VPK	Midyear	December 5, 2022–January 27, 2023	CBT	10–20 minutes	Immediately following test completion

Uniform Statewide Assessment Calendar

Assessment	Students to Be Tested	Statewide Window	District Window	Mode	Testing Time	Results Expected
FAST PM2	K–Grade 1 ELA Reading	December 5, 2022–January 27, 2023	December 5, 2022–January 27, 2023	CBT	10–20 minutes	Immediately following test completion
FAST PM2	Grade 2 ELA Reading	December 5, 2022–January 27, 2023	December 5, 2022–January 27, 2023	CBT	15–20 minutes	Immediately following test completion
FAST PM2	K–Grade 2 Mathematics	December 5, 2022–January 27, 2023	December 5, 2022–January 27, 2023	CBT	20–30 minutes	Immediately following test completion
FAST PM2	Grades 3–10 ELA Reading	December 5, 2022–January 27, 2023	December 5, 2022–January 27, 2023	CBT	90 minutes	Immediately following test completion
FAST PM2	Grades 3–5 Mathematics	December 5, 2022–January 27, 2023	December 5, 2022–January 27, 2023	CBT	80 minutes	Immediately following test completion
FAST PM2	Grades 6–8 Mathematics	December 5, 2022–January 27, 2023	December 5, 2022–January 27, 2023	CBT	100 minutes	Immediately following test completion
FSAA—Datafolio[4]	Grades 3–10 ELA (Reading & Writing); Grades 3–8 Mathematics; Grades 5 & 8 Science; and Algebra 1, Biology 1, Civics, Geometry, & U.S. History EOCs	Collection Period 3: March–April 2023	Collection Period 3: March–April 2023	PBT	Varies/Untimed	June 2023
FSAA—Performance Task[5]	Grades 3–8 ELA & Mathematics; Grades 4–8 Writing; Grades 5 & 8 Science; and Civics EOC	February 27–April 14, 2023	February 27–April 14, 2023	PBT	Varies/Untimed	June 2023
ACT[6]	Grade 11 students in districts that selected ACT	March–April 2023	**NA**	CBT	175 minutes	3–8 weeks after test administration
SAT[6]	Grade 11 students in districts that selected SAT	March–April 2023	March 1, 2023	CBT	180 minutes	2–4 weeks after test administration
VPK FAST PM3	Students enrolled in VPK	The last 30 days of the program or school year	May 1–26, 2023	CBT	10–20 minutes	Immediately following test completion
FAST PM3	K–Grade 1 ELA Reading	May 1–June 2, 2023	May 1–26, 2023	CBT	10–20 minutes	Immediately following test completion