M/J Accelerated Grade 6 Mathematics (#1205020)   2022 – 2023 Course Description

Course Title:	M/J Grade 6 Mathematics
Course Number:	1205020
General Notes:	In grade 6 accelerated, instructional time will emphasize five areas: (1) performing all four operations with rational numbers with procedural fluency; (2) exploring and applying concepts of ratios, rates, percentages and proportions to solve problems; (3) creating, interpreting and using expressions, equations and inequalities; (4) extending geometric reasoning to plotting points on the coordinate plane, area and volume of geometric figures and (5) extending understanding of statistical thinking to represent and compare categorical and numerical data. Curricular content for all subjects must integrate critical-thinking, problem-solving, and workforce-literacy skills; communication, reading, and writing skills; mathematics skills; collaboration skills; contextual and applied-learning skills; technology-literacy skills; information and media-literacy skills; and civic-engagement skills. **Florida's Benchmarks for Excellent Student Thinking (B.E.S.T.) Standards** This course includes Florida's B.E.S.T. ELA Expectations (EE) and Mathematical Thinking and Reasoning Standards (MTRs) for students. Florida educators should intentionally embed these standards within the content and their instruction as applicable. For guidance on the implementation of the EEs and MTRs, please visit https://www.cpalms.org/Standards/BEST_Standards.aspx and select the appropriate B.E.S.T. Standards package. **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 Mathematics. 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. To access an ELL supporting document which delineates performance definitions and descriptors, please click on the following link: https://cpalmsmediaprod.blob.core.windows.net/uploads/docs/standards/eld/ma.pdf

Florida's Benchmarks for Excellent Student Thinking (B.E.S.T.) Standards: 7 Mathematical Thinking and Reasoning Standards, 71 Mathematics Benchmarks, 6 English Language Arts Benchmarks and 2 English Language Development Benchmark

7 Mathematical Thinking and Reasoning Standards		Textbook Section
MA.K12.MTR.1.1:	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. Clarifications: 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.	Incorporated Throughout
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. Clarifications: 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.	Incorporated Throughout
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.	Incorporated Throughout

	● Complete tasks accurately and with confidence. ● Adapt procedures to apply them to a new context. ● Use feedback to improve efficiency when performing calculations. Clarifications: 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. Clarifications: 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.	Incorporated Throughout
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. Clarifications:	Incorporated Throughout

	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.	
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. Clarifications: 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.	Incorporated Throughout
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. Clarifications: 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.	Incorporated Throughout

71 Accelerated Grade 6 Mathematics Benchmarks		Textbook Section
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.	4-4, 4-5, 4-7, 6-3, 6-4, 6-5
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. **Clarifications:** *Clarification 1*: Variables may be on the left or right side of the inequality symbol.	6-6, 6-7
MA.6.AR.1.3:	Evaluate algebraic expressions using substitution and order of operations. **Clarifications:** *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).	4-5, 10-4, 10-8, 10-9, 10-10
MA.6.AR.1.4:	Apply the properties of operations to generate equivalent algebraic expressions with integer coefficients. **Clarifications:** *Clarification 1*: Properties include associative, commutative and distributive. *Clarification 2*: Refer to Properties of Operations, Equality and Inequality (Appendix D).	4-7, 6-2
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.	6-1, 6-6, 6-7
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. **Clarifications:** *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.	6-2, 6-3, 6-4,
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. **Clarifications:** *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 either side of the equal sign.	6-4

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. **Clarifications:** *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.	6-5
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 $b \neq 0$. **Clarifications:** *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.	7-1, 7-2
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. **Clarifications:** *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	7-5, 7-6, 7-7
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. **Clarifications:** *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.	7-3, 7-4, 7-5, 7-6
MA.6.AR.3.4:	Apply ratio relationships to solve mathematical and real-world problems involving percentages using the relationship between two quantities. **Clarifications:** *Clarification 1*: Instruction includes the comparison of *part* to *whole* to *percent* to 100 in order to determine the percent, the part or the whole.	8-1, 8-2, 8-3, 8-4, 8-5, 8-6
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. **Clarifications:** *Clarification 1*: Instruction includes the use of tables, tape diagrams and number lines	7-8, 7-9

MA.6.DP.1.1:	Recognize and formulate a statistical question that would generate numerical data.	11-1
MA.6.DP.1.2:	Given a numerical data set within a real-world context, find and interpret mean, median, mode and range. **Clarifications:** *Clarification 1*: Numerical data is limited to positive rational numbers.	11-2, 11-3, 11-4. 11-6
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. **Clarifications:** *Clarification 1*: Instruction includes describing range, interquartile range, halves and quarters of the data	11-5
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. **Clarifications:** *Clarification 1*: Refer to K-12 Mathematics Glossary (Appendix C).	11-3, 11-4
MA.6.DP.1.5:	Create box plots and histograms to represent sets of numerical data within real world contexts **Clarifications:** *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.	11-4, 11-5
MA.6.DP.1.6:	Given a real-world scenario, determine and describe how changes in data values impact measures of center and variation. **Clarifications:** *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.	11-6
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	10-1
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.	10-2

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. **Clarifications:** *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	10-2
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. **Clarifications:** *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.	10-3
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. **Clarifications:** *Clarification 1*: Problem types include finding areas of composite shapes and determining missing dimensions. *Clarification 2:* Within this benchmark, the expectation is to know from memory a formula for the area of a rectangle and triangle. *Clarification 3*: Dimensions are limited to positive rational numbers.	10-4
MA.6.GR.2.3:	Solve mathematical and real-world problems involving the volume of right rectangular prisms with positive rational number edge lengths using a visual model and a formula. **Clarifications:** *Clarification 1*: Problem types include finding the volume or a missing dimension of a rectangular prism	10-10
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. **Clarifications:** *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.	10-7, 10-8, 10-9

MA.6.NSO.1.1:	Extend previous understanding of numbers to define rational numbers. Plot, order and compare rational numbers. **Clarifications:** *Clarification 1*: Within this benchmark, the expectation is to plot, order and compare positive and negative rational numbers when given in the same form and to plot, order and compare positive rational numbers when given in different forms (fraction, decimal, percentage). *Clarification 2:* Within this benchmark, the expectation is to use symbols (<,> or =).	2-1, 2-2
MA.6.NSO.1.2:	Given a mathematical or real-world context, represent quantities that have opposite directions using rational numbers. Compare them on a number line and explain the meaning of zero within its context. **Clarifications:** *Clarification 1*: Instruction includes vertical and horizontal number lines, context referring to distances, temperatures and finances and using informal verbal comparisons, such as, lower, warmer or more in debt. *Clarification 2:* Within this benchmark, the expectation is to compare positive and negative rational numbers when given in the same form.	2-1
MA.6.NSO.1.3:	Given a mathematical or real-world context, interpret the absolute value of a number as the distance from zero on a number line. Find the absolute value of rational numbers. **Clarifications:** *Clarification 1*: Instruction includes the connection of absolute value to mirror images about zero and to opposites. *Clarification 2:*: Instruction includes vertical and horizontal number lines and context referring to distances, temperature and finances.	2-3
MA.6.NSO.1.4:	Solve mathematical and real-world problems involving absolute value, including the comparison of absolute value. **Clarifications:** *Clarification 1*: Absolute value situations include distances, temperatures and finances. *Clarification 2:* Problems involving calculations with absolute value are limited to two or fewer operations. *Clarification 3:* Within this benchmark, the expectation is to use integers only	2-3, 2-8
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. **Clarifications:** *Clarification 1*: Multi-digit decimals are limited to no more than 5 total digits	1-1, 1-2, 4-1, 4-6, 11-2
MA.6.NSO.2.2:	Extend previous understanding of multiplication and division to compute products and quotients of positive fractions by positive fractions, including mixed numbers, with procedural fluency. **Clarifications:** *Clarification 1*: Instruction focuses on making connections between visual models, and the relationship between multiplication and division, reciprocals and algorithms.	1-3, 1-4, 1-5, 1-6, 1-7

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. **Clarifications:** *Clarification 1*: Within this benchmark, it is not the expectation to include both decimals and fractions within a single problem.	1-1, 1-4, 1-5, 1-6, 1-7, 4-1, 4-6, 11-2
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. **Clarifications:** *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.	4-2
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. **Clarifications:** *Clarification 1*: Instruction includes using the distributive property to generate equivalent expressions.	4-2
MA.6.NSO.3.3:	Evaluate positive rational numbers and integers with natural number exponents. **Clarifications:** *Clarification 1*: Within this benchmark, expectations include using natural number exponents up to 5.	4-3
MA.6.NSO.3.4:	Express composite whole numbers as a product of prime factors with natural number exponents.	4-2
MA.6.NSO.3.5:	Rewrite positive rational numbers in different but equivalent forms including fractions, terminating decimals and percentages. **Clarifications:** *Clarification 1*: Rational numbers include decimal equivalence up to the thousandths place.	8-2, 8-3
MA.6.NSO.4.1:	Apply and extend previous understandings of operations with whole numbers to add and subtract integers with procedural fluency. **Clarifications:** *Clarification 1*: Instruction begins with the use of manipulatives, models and number lines working towards becoming procedurally fluent by the end of grade 6. *Clarification 2:* Instruction focuses on the inverse relationship between the operations of addition and subtraction. If p and q are integers, then $p - q = p + (-q)$ and $p + q = p - (-q)$.	2-4, 2-5

MA.6.NSO.4.2:	Apply and extend previous understandings of operations with whole numbers to multiply and divide integers with procedural fluency. **Clarifications:** *Clarification 1*: Instruction includes the use of models and number lines and the inverse relationship between multiplication and division, working towards becoming procedurally fluent by the end of grade 6. *Clarification 2:*: Instruction focuses on the understanding that integers can be divided, provided that the divisor is not zero, and every quotient of integers (with non-zero divisor) is a rational number. If p and q are integers where $q \neq 0$, then $-\left(\frac{p}{q}\right) = -\frac{p}{q}, -\left(\frac{p}{q}\right) = \frac{p}{-q}$ and $\frac{p}{q} = \frac{-p}{-q}$.	2-6, 2-7
MA.7.AR.1.1:	Apply properties of operations to add and subtract linear expressions with rational coefficients. **Clarifications:** *Clarification 1:* Instruction includes linear expressions in the form $ax \pm b$ or $b \pm ax$, where a and b are rational numbers. *Clarification 2:* Refer to Properties of Operations, Equality and Inequality (Appendix D).	5-1, 5-2, 5-3, 5-4, 5-5, 5-6, 5-7, 5-8
MA.7.AR.1.2:	Determine whether two linear expressions are equivalent. **Clarifications:** *Clarification 1:* Instruction includes using properties of operations accurately and efficiently. *Clarification 2:* Instruction includes linear expressions in any form with rational coefficients. *Clarification 3:* Refer to Properties of Operations, Equality and Inequality (Appendix D).	5-2, 5-4, 5-5, 5-8
MA.7.AR.2.1:	Write and solve one-step inequalities in one variable within a mathematical context and represent solutions algebraically or graphically. **Clarifications:** *Clarification 1:* Instruction focuses on the properties of inequality. Refer to Properties of Operations, Equality and Inequality (Appendix D). *Clarification 2:* Instruction includes inequalities in the forms ;; x±p>q and p±x>q, where p and q are specific rational numbers and any inequality symbol can be represented. *Clarification 3:* Problems include inequalities where the variable may be on either side of the inequality symbol.	6-8, 6-9
MA.7.AR.3.1:	Apply previous understanding of percentages and ratios to solve multi-step real-world percent problems. **Clarifications:** *Clarification 1:* Instruction includes discounts, markups, simple interest, tax, tips, fees, percent increase, percent decrease and percent error.	9-1, 9-2, 9-3, 9-4, 9-5, 9-6
MA.7.AR.3.2:	Apply previous understanding of ratios to solve real-world problems involving proportions.	9-2, 9-3, 9-4, 9-5, 9-6

MA.7.DP.1.1:	Determine an appropriate measure of center or measure of variation to summarize numerical data, represented numerically or graphically, taking into consideration the context and any outliers. **Clarifications:** *Clarification 1:* Instruction includes recognizing whether a measure of center or measure of variation is appropriate and can be justified based on the given context or the statistical purpose. *Clarification 2:* Graphical representations are limited to histograms, line plots, box plots and stem-and-leaf plots. *Clarification 3:* The measure of center is limited to mean and median. The measure of variation is limited to range and interquartile range.	12-2, 12-3
MA.7.DP.1.2:	Given two numerical or graphical representations of data, use the measure(s) of center and measure(s) of variability to make comparisons, interpret results and draw conclusions about the two populations. **Clarifications:** *Clarification 1:* Graphical representations are limited to histograms, line plots, box plots and stem-and-leaf plots. *Clarification 2:* The measure of center is limited to mean and median. The measure of variation is limited to range and interquartile range.	12-4
MA.7.DP.1.3:	Given categorical data from a random sample, use proportional relationships to make predictions about a population.	12-1
MA.7.DP.2.1:	Determine the sample space for a simple experiment. **Clarifications:** *Clarification 1:* Simple experiments include tossing a fair coin, rolling a fair die, picking a card randomly from a deck, picking marbles randomly from a bag and spinning a fair spinner.	12-5
MA.7.DP.2.2:	Given the probability of a chance event, interpret the likelihood of it occurring. Compare the probabilities of chance events. **Clarifications:** *Clarification 1:* Instruction includes representing probability as a fraction, percentage or decimal between 0 and 1 with probabilities close to 1 corresponding to highly likely events and probabilities close to 0 corresponding to highly unlikely events. *Clarification 2:* Instruction includes P(event) notation. *Clarification 3:* Instruction includes representing probability as a fraction, percentage or decimal.	12-5, 12-6
MA.7.DP.2.3:	Find the theoretical probability of an event related to a simple experiment. **Clarifications:** *Clarification 1:* Instruction includes representing probability as a fraction, percentage or decimal. *Clarification 2:* Simple experiments include tossing a fair coin, rolling a fair die, picking a card randomly from a deck, picking marbles randomly from a bag and spinning a fair spinner.	12-6

MA.7.DP.2.4:	Use a simulation of a simple experiment to find experimental probabilities and compare them to theoretical probabilities. **Clarifications:** *Clarification 1:* Instruction includes representing probability as a fraction, percentage or decimal. *Clarification 2:* Instruction includes recognizing that experimental probabilities may differ from theoretical probabilities due to random variation. As the number of repetitions increases experimental probabilities will typically better approximate the theoretical probabilities. *Clarification 3:* Experiments include tossing a fair coin, rolling a fair die, picking a card randomly from a deck, picking marbles randomly from a bag and spinning a fair spinner.	12-8
MA.7.GR.1.1:	Apply formulas to find the areas of trapezoids, parallelograms and rhombi. **Clarifications:** *Clarification 1:* Instruction focuses on the connection from the areas of trapezoids, parallelograms and rhombi to the areas of rectangles or triangles. *Clarification 2:* Within this benchmark, the expectation is not to memorize area formulas for trapezoids, parallelograms and rhombi.	10-5
MA.7.GR.1.2	Solve mathematical or real-world problems involving the area of polygons or composite figures by decomposing them into triangles or quadrilaterals. **Clarifications:** *Clarification 1:* Within this benchmark, the expectation is not to find areas of figures on the coordinate plane or to find missing dimensions	10-6
3 English Language Arts Benchmarks and 2 English Language Development Benchmarks		**Textbook Section**
ELA.K12.EE.1.1:	Cite evidence to explain and justify reasoning. Clarifications: 6-8 Students continue with previous skills and use a style guide to create a proper citation.	Incorporated Throughout
ELA.K12.EE.2.1:	Read and comprehend grade-level complex texts proficiently. Clarifications: See Text Complexity for grade-level complexity bands and a text complexity rubric.	Incorporated Throughout
ELA.K12.EE.3.1:	Make inferences to support comprehension. Clarifications: 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.	Incorporated Throughout

ELA.K12.EE.4.1:	Use appropriate collaborative techniques and active listening skills when engaging in discussions in a variety of situations. Clarifications: 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.	Incorporated Throughout
ELA.K12.EE.5.1:	Use the accepted rules governing a specific format to create quality work. Clarifications: 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.	Incorporated Throughout
ELA.K12.EE.6.1:	Use appropriate voice and tone when speaking or writing. Clarifications: In 2nd grade and beyond, students practice appropriate social and academic language to discuss texts.	Incorporated Throughout
ELD.K12.ELL.MA.1:	English language learners communicate information, ideas and concepts necessary for academic success in the content area of Mathematics.	Incorporated Throughout
ELD.K12.ELL.SI.1:	English language learners communicate for social and instructional purposes within the school setting.	Incorporated Throughout