AAC K-12 Math Scope and Sequence

AAC's Math Curriculum uses the Common Core Math Standards as its base, along with Illustrative Mathematics as a curricular resource.
Emphasis is placed on critical thinking and problem-solving skills, applying math to everyday life whenever possible.
Students in secondary are tracked according to their ability in order to improve differentiation and meet learners at their level.

Math Practices K - 12

These eight practices outline core processes and proficiencies that students of mathematics are taught to develop at all grade levels at AAC.

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Click on the hyperlinks below to navigate directly to a grade-level.

G12	G11	G10	G09	G08	G07	G06	G05	G04	G03	G02	G01	KG2	KG1

G12 Math - Statistics

Note that an AP Math course option will be made available each year instead of Statistics for qualified G12 students

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Probability	**Unit 2:** Univariate Statistics	**Unit 3:** Bivariate Statistics	**Unit 4:** Financial Literacy
Learning Targets	**1a.** Use the Fundamental Counting Principle, permutations, and combinations to compute probabilities and solve related problems. **1b.** Recognize and explain the concepts of independence and conditional probability, and use these to calculate probabilities. **1c.** Apply the Addition Rule and the general Multiplication Rule to calculate probabilities, and interpret the answer in terms of the uniform probability model. **1d.** Construct and interpret two-way frequency tables of data in order to solve probability problems. **1e.** Calculate and interpret expected value in a variety of situations. **1f.** Analyze the fairness of a variety of games and situations, and develop a fair game.	**2a.** Calculate and interpret measures of center, position and variability for quantitative data. **2b.** Write a univariate statistical question and create a study to answer this question. **2c.** Conduct a univariate statistical study using appropriate methods. **2d.** Analyze and present the results from a univariate statistical study. **2e.** Use the mean and standard deviation of a data set to fit it to a normal distribution and estimate population percentages. **2f.** Use calculators, spreadsheets and data to find and interpret areas under the normal curve.	**3a.** Summarize categorical data for two categories in two-way frequency tables and discuss possible associations and trends in the data. **3b.** Represent data on two quantitative variables on a scatter plot and fit an appropriate function to this data. **3c.** Find and use the correlation coefficient to make observations and predictions about a relationship between two quantities. **3c.** Write a bivariate statistical question and create a study to answer this question. **3d.** Conduct a bivariate statistical study using appropriate methods. **3e.** Analyze and present the results from a bivariate statistical study.	**4a.** Outline and justify living expenses at university. **4b.** Investigate making a large purchase using a loan or credit card by running simulations and analyzing relevant mathematical models. **4c.** Investigate savings and investments over time by running simulations and analyzing relevant mathematical models. **4d.** Create a comprehensive financial plan for yourself ten years in the future. **4e.** Use spreadsheets to organize finances.
Standards High School CCSS Math	Revisit and extend core **Statistics** standards with an emphasis on **S-CP.A.2, S-CP.A.3, S-CP.A.4, S-CP.A.5, S-CP.A.6, S-CP.B.7, S-CP.B.8 and S-CP.B.9**	Revisit and extend core **Statistics** standards with an emphasis on **S-ID.A.1, S-ID.A.2, S-ID.A.3 and S-ID.A.4**	Revisit and extend core **Statistics** and **Function** standards with an emphasis on **S-ID.B.5, S-ID.B.6, S-ID.C.7, S-ID.C.8, and S-ID.C.9**	**N-Q** group of standards + Revisit and extend core **Algebra** and **Function** standards

G11 Math - Algebra 2

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Sequences as Functions **Unit 2:** Polynomial and Rational Functions	**Unit 3:** Complex Numbers and Rational Exponents **Unit 4:** Exponential Functions and Equations	**Unit 5:** Transformations of Functions **Unit 6:** Trigonometric Functions	**Unit 7:** Statistical Inferences **Unit 8:** Interdisciplinary Unit
Learning Targets	**1a.** Write arithmetic and geometric sequences both recursively and explicitly, and use them to model situations. **1b.** Apply an understanding of functions in order to read and write about sequences and their domains. **1c.** Connect arithmetic and geometric sequences to linear and exponential functions. **2a.** Create graphs of polynomial functions using zeros and showing end behavior. **2b.** Create graphs of rational functions, identify zeros and asymptotes, and show end behavior. **2c.** Explore and apply methods for solving polynomial and rational equations. **2d.** Model with polynomial and rational functions.	**3a.** Investigate and explain properties of complex numbers. **3b.** Solve quadratic equations with complex solutions, as well as systems of quadratic equations. **3c.** Connect rational exponents to radical equations, and solve simple rational and radical equations. **3e.** Investigate and explain properties of irrational numbers. **4a.** Use logarithms to express the solutions to exponential equations. **4b.** Explore the logarithmic function as the inverse of the exponential function in order to define basic logarithm rules. **4c.** Graph exponential and logarithmic functions, showing intercepts and end behavior. **4d.** Model with exponential and logarithmic functions.	**5a.** Experiment with transformations and illustrate an explanation of the effects on the graph of the function. **5b.** Build and compare new functions by combining different functions using arithmetic operations. **5c.** Fit a function to the data; use functions fitted to data to solve problems in the context of the data. **6a.** Explain how to use the unit circle to extend trigonometric functions to all real numbers. **6b.**Prove and apply trigonometric identities. **6c.** Construct trigonometric graphs and show key features. **6d.** Model with trigonometric functions.	**7a.** Recognize the purposes of and differences among sample surveys, experiments, and observational studies. **7b.** Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. **7c.** Estimate and interpret a margin of error **7d.** Analyze the validity and results of a study. . **8a.** Collaborate and research effectively during an interdisciplinary unit. **8b.** Explain relationships between key variables using equations, tables and graphs. **8c.** Process and analyze data collected in order to justify a conclusion.
Standards *High School CCSS Math*	**Unit 1:** A-SSE.B.4, F-BF.A.1, F-BF.A.2, F-IF.A.3, F-IF.B.5, F-IF.C, F-LE.A.2 **Unit 2:** A-APR.A, A-APR.A.1, A-APR.B, A-APR.B.2, A-APR.B.3, A-APR.C, A-APR.C.4, A-APR.D, A-APR.D.6, A-CED.A, A-CED.A.1, A-CED.A.2, A-CED.A.4, A-REI.A, A-REI.A.1, A-REI.A.2, A-REI.C.7, A-REI.D.11, A-SSE.A, A-SSE.A.1, A-SSE.A.2, A-SSE.B.3, A-SSE.B.4, F-BF.B.3, F-IF.A.2, F-IF.B.4, F-IF.B.5, F-IF.C, F-IF.C.7	**Unit 3:** A-REI.A.1, A-REI.A.2, A-REI.B.4, A-REI.D.11, N-CN.A.1, N-CN.A.2, N-CN.C.7, N-RN.A.1, N-RN.A.2 **Unit 4:** A-REI.D.11, A-SSE.A, A-SSE.A.1, A-SSE.B.3, F-BF.A.1, F-IF.A.2, F-IF.B.4, F-IF.C, F-IF.C.7, F-IF.C.8, F-LE.A, F-LE.A.1, F-LE.A.2, F-LE.A.4, F-LE.B.5, N-RN.A.1	**Unit 5:** F-BF.A.1, F-BF.B.3, F-IF.B.4, F-IF.C, F-IF.C.8, F-LE.B, S-ID.B.6 **Unit 6:** F-BF.B.3, F-IF.B.4, F-IF.C, F-IF.C.7, F-TF.A, F-TF.A.1, F-TF.A.2, F-TF.B, F-TF.B.5, F-TF.C, F-TF.C.8, N-Q.A.1	**Unit 7:** S-IC.A.1, S-IC.A.2, S-IC.B.3, S-IC.B.4, S-IC.B.5, S-IC.B.6, S-ID.A.1, S-ID.A.2, S-ID.A.4, G-GPE.B.7 **Unit 8:** *Review of previously taught and assessed standards - select key standards that need more practice, and then to transfer and apply them in another discipline*

G10 Math - Geometry

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Constructions and Rigid Transformations **Unit 2:** Congruence	**Unit 3:** Similarity **Unit 4:** Right Triangle Trigonometry	**Unit 5:** Solid Geometry **Unit 6:** Coordinate Geometry	**Unit 7:** Circles **Unit 8:** Conditional Probability
Learning Targets	**1a.** Make formal geometric constructions. **1b.** Use rotations and reflections to informally define symmetry. **1c.** Draw a transformed figure given specified transformation(s), and describe a sequence of transformations that will carry a given figure onto another. **1d.** Prove congruence theorems about lines, angles and triangles. **2a.** Draw and describe key components of congruent figures using appropriate notation and vocabulary. **2b.** Prove congruence theorems about triangles and quadrilaterals. **2c.** Apply congruence criteria in order to find measurements and explain properties of geometric figures.	**3a.** Draw and describe key components of similar figures appropriate notation and vocabulary. **3b.** Prove similarity theorems about triangles and quadrilaterals. **3c.** Apply similarity criteria in order to find measurements and explain properties of geometric figures. **4a.** Write and solve simple trigonometric equations. **4b.** Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems. **4c.** Investigate formal and informal proofs of the Pythagorean Theorem.	**5a.** Generate a variety of 3D objects by rotating 2D objects, and decompose 3D objects into 2D cross-sections. **5b.** Construct and communicate informal arguments for volume and surface area formulas of 3D objects. **5c.** Use volume and surface area formulas of 3D objects to solve simple and applied problems. **6a.** Develop the distance and midpoint formulas on the coordinate plane and use them to solve geometric problems. **6b.** Prove the slope criteria for parallel and perpendicular lines and use them to solve geometric problems. **6c.** Derive the equation of a circle and a parabola and use them to solve geometric problems. **6d.** Use coordinates to prove simple geometric theorems algebraically. **6e.** Perform and describe geometric transformations on the coordinate plane using appropriate notation.	**7a.** Construct inscribed and circumscribed circles of polygons. **7b.** Prove properties of angles for polygons inscribed in a circle. **7c.** Construct and communicate derivations and informal arguments of formulas related to circles. **7d.** Find arc lengths and areas of sectors of circles. **8a.** Develop accurate and precise vocabulary about basic probability in order to describe events and the likelihood of their outcomes. **8b.** Recognize and explain the concepts of independence and conditional probability, and use these to calculate probabilities. **8c.** Construct and interpret two-way frequency tables. **8d.** Explore the concept of fairness as it relates to probability.
Standards *High School CCSS Math*	**Unit 1:** G-CO.A.1, G-CO.A.2, G-CO.A.3, G-CO.A.4, G-CO.A.5, G-CO.B.6, G-CO.C, G-CO.C.9, G-CO.C.10, G-CO.D.12, G-CO.D.13, G-MG.A.3, N-Q.A.2, N-Q.A.3 **Unit 2:** G-CO.A.1, G-CO.A.3, G-CO.A.5, G-CO.B.6, G-CO.B.7, G-CO.B.8, G-CO.C.9, G-CO.C.10, G-CO.C.11, G-MG.A.3, G-SRT.A.3, N-Q.A.3	**Unit 3:** A-CED.A.4, G-C.A.1, G-CO.A.2, G-CO.C.10, G-MG.A.3, G-SRT.A.1, G-SRT.A.2, G-SRT.A.3, G-SRT.B.4, G-SRT.B.5, G-SRT.C.6, G-SRT.C.8, N-Q.A.1, N-Q.A.3 **Unit 4:** G-GMD.A.1, G-MG.A.3, G-SRT.B.5, G-SRT.C, G-SRT.C.6, G-SRT.C.7, G-SRT.C.8, N-Q.A.2, N-Q.A.3	**Unit 5:** A-CED.A.2, A-SSE.A.1, G-GMD, G-GMD.A.1, G-GMD.A.3, G-GMD.B.4, G-MG.A.1, G-MG.A.2, G-MG.A.3, G-SRT.C.8, F-IF.C.7, N-Q.A.1 **Unit 6:** A-CED.A.2, A-CED.A.4, A-REI.C.7, A-SSE.A, A-SSE.A.1, A-SSE.A.2, A-SSE.B.3, G-C.A.2, G-CO.A.1, G-CO.A.2, G-CO.A.5, G-CO.B, G-CO.C.10, G-GPE.A.1, G-GPE.A.2, G-GPE.B.4, G-GPE.B.5, G-GPE.B.6, G-GPE.B.7, G-SRT.B.5, N-Q.A.1	**Unit 7:** A-CED.A.2, A-SSE.A.1, G-C.A.2, G-C.A.3, G-C.B, G-C.B.5, G-CO.C.9, G-CO.C.10, G-GMD.A.1, G-MG.A.3, G-SRT.B.5, G-SRT.C.8 **Unit 8:** S-CP.A.1, S-CP.A.2, S-CP.A.3, S-CP.A.4, S-CP.A.5, S-CP.B.6, S-CP.B.7, S-ID.B.5

G09 Math - Algebra 1

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** One-Variable Statistics **Unit 2:** Modeling with Linear Equations and Inequalities	**Unit 2 *continued*:** Modeling with Linear Systems **Unit 3:** Two-Variable Statistics	**Unit 4:** Functions **Unit 5:** Exponential Functions	**Unit 6:** Quadratic Functions **Unit 7:** Quadratic Equations
Learning Targets	**1a.** Based on a data set, choose and create the most appropriate graphical representation of that data. **1b,** Use statistics appropriate to the shape of the data distribution to compare the center and spread of different data sets. **1c.** Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points. **2a.** Create linear equations and inequalities to represent relationships between quantities. **2b.** Graph linear equations and inequalities on coordinate axes with labels and scales, and describe key features of these graphs. **2c.** Construct a viable argument to justify a solution method in solving a linear equation; describe and interpret these solutions.	**2d.** Represent constraints by systems of equations and inequalities, and interpret solutions as viable or nonviable options in a modeling context. **2e.** Graph the solution set to a system of linear equations or inequalities. **2f.** Construct a viable argument to justify a solution method in solving a system of linear equations or inequalities; describe and interpret these solutions. **3a.** Analyze categorical data in two-way frequency tables. **3b.** Fit a linear function for a scatter plot, interpret key features of the linear model in the context of the data it represents, and use this model to make observations and predictions. **3c.** Distinguish between correlation and causation.	**4a.** Apply an understanding of functions in order to read and write function notation, and construct and evaluate functions. **4b.** Graph basic functions, including piecewise-defined functions, and describe features of these functions. **4c.** Experiment with transformations and illustrate an explanation of the effects on the graph of the function. **4d.** For a simple function with an inverse, determine the input value when given an output, and write an equation for the inverse function. **5a.** Graph exponential functions and show key features of the graph. **5b.** Use the properties of exponents to interpret and transform expressions for exponential functions. **5c.** Construct linear and exponential functions, and compare and contrast key features. **5d.** Distinguish between situations that can be modeled with linear functions and exponential functions.	**6a.** Graph quadratic functions on coordinate axes with labels and scales, and describe key features of these graphs and the context they represent. **6b.** Identify and write functions defined by expressions in different but equivalent forms to reveal and explain different properties of the function. **6c.** Construct and compare linear, quadratic, and exponential models and solve related problems. **7a.** Create quadratic equations and inequalities to represent relationships between quantities. **7b.** Construct a viable argument to justify a solution method in solving a quadratic equation. **7c.** Investigate and explain properties of irrational numbers.
Standards *High School CCSS Math*	**Unit 1:** S-ID.A.1, S-ID.A.2, S-ID.A.3 **Unit 2:** A-CED.A.1, A-CED.A.2, A-CED.A.3, A-CED.A.4, A-REI.A, A-REI.A.1, A-REI.B.3, A-REI.D.10, A-SSE.A.1, F-LE.A.2, N-Q.A.2	**Unit 2 *continued*:** A-CED.A.3, A-REI.A, A-REI.C.5, A-REI.C.6, A-REI.D.10, A-REI.D.12, N-Q.A.2 **Unit 3:** S-ID.B.5, S-ID.B.6, S-ID.C.7, S-ID.C.8, S-ID.C.9, N-Q.A.3	**Unit 4:** A-CED.A.4, A-REI.A.1, A-REI.D.11, F-BF.A.1, F-BF.B.3, F-BF.B.4, F-IF.A.1, F-IF.A.2, F-IF.B, F-IF.B.4, F-IF.B.5, F-IF.B.6, F-IF.C, F-IF.C.7, S-ID.B.6 **Unit 5:** A-CED.A.2, A-SSE.A, A-SSE.A.1, A-SSE.B.3, F-BF.A, F-BF.A.1, F-IF.A.2, F-IF.B, F-IF.B.4, F-IF.B.5, F-IF.B.6, F-IF.C.7, F-IF.C.8, F-LE.A.1, F-LE.A.2, F-LE.A.3, F-LE.B.5, N-Q.A.1, N-Q.A.2, N-Q.A.3, S-ID.B.6	**Unit 6:** A-SSE.A, A-SSE.A.1, A-SSE.A.2, A-SSE.B.3, F-BF.A.1, F-BF.B.3, F-IF.A.2, F-IF.B.4, F-IF.B.5, F-IF.C, F-IF.C.7, F-IF.C.8, F-IF.C.9, F-LE.A, F-LE.A.2, F-LE.A.3 **Unit 7:** A-CED.A.1, A-CED.A.3, A-REI.A, A-REI.A.1, A-REI.B.4, A-REI.C.7, A-REI.D, A-REI.D.10, A-SSE.A, A-SSE.A.2, A-SSE.B.3, F-IF.A.2, F-IF.B.4, F-IF.B.5, F-IF.C, F-IF.C.7, F-IF.C.8, F-IF.C.9, N-RN.B, N-RN.B.3

G08 Math

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Rigid Transformations and Congruence **Unit 2:** Dilations, Similarity and Introducing Slope	**Unit 3:** Linear Relationships **Unit 4:** Linear Equations and Systems	**Unit 5:** Functions and Volume **Unit 6:** Associations in Data	**Unit 7:** Exponents and Scientific Notation **Unit 8:** Pythagorean Theorem and Irrational Numbers
Learning Targets	**1a.** Verify experimentally the properties of rotations, reflections, and translations. **1b.** Given two congruent figures, describe a sequence that exhibits the congruence between them. **1c.** Describe the effect of dilations, translations, rotations, and reflections on two-dimensional figures using coordinates. **1d.** Use informal arguments to establish facts about angles and triangles. **2a.** Apply dilations to figures on a rectangular grid. **2b.** Find missing side lengths in a pair of similar triangles using scale factor. **2c.** Draw a line on a grid with a given slope, and find the slope of a line on a grid. **2d.** Find an equation for a line and use it to decide which points are on that line. **2e.** Model a real-world context with similar triangles to find the height of an unknown object.	**3a.** Represent proportional and linear relationships using graphs, tables, equations and verbal descriptions. **3b.** Compare and contrast linear and proportional relationships. **3c.** Explain slope using algebraic expressions, and illustrate an understanding of positive, negative and zero slope. **3d.** Graph lines and write equations for lines. **4a.** Write and solve linear equations in one variable. **4b.** Identify and interpret ordered pairs that are solutions to an equation, or a system of equations. **4c.** Write and solve systems of equations graphically and algebraically. **4d.** Use linear equations and systems of equations to model real-world situations.	**5a.** Use appropriate function vocabulary. **5b.** Write an equation and draw the graph of a function to represent a situation. **5c.** Find the volume of 3D solids (output given input). **5d.** Find the missing dimension of a 3D solid (input given output). **5e.** Compare functions about volume represented in a variety of ways. **6a.** Draw and interpret a scatter plot for two variables, including a discussion of outliers. **6b.** Use a line of best fit to model a relationship in a scatter plot, including a discussion of positive or negative association. **6c.** I can construct and interpret bar graphs, segmented bar graphs, two-way frequency tables and relative frequency tables in order to find associations among variables.	**7a.** Apply the exponent rules in a variety of situations to represent quantities, simplify expressions and solve basic equations. **7b.** Use scientific notation to write extremely large and small numbers, and perform basic arithmetic operations on numbers written in scientific notation. **7c.** Reason with exponents (and scientific notation) to describe relative size. **8a.** Define a radical using area, and extend this to a definition of irrational numbers. **8b.** Find or approximate a radical. **8c.** Prove and apply the Pythagorean Theorem in a variety of situations.
Standards *Grade 8 CCSS Math*	**Unit 1:** G.A.1, G.A.2, G.A.3, G.A.5, G.B.6 **Unit 2:** EE.B.6, G.A, G.A.2, G.A.3, G.A.4, G.A.5	**Unit 3:** EE.B, EE.B.5, EE.B.6, EE.C, EE.C.8, G.A.1 **Unit 4:** EE.C, EE.C.7, EE.C.8	**Unit 5:** F.A, F.A.1, F.A.2, F.A.3, F.B, F.B.4, F.B.5, G.C, G.C.9 **Unit 6:** SP.A, SP.A.1, SP.A.2, SP.A.3, SP.A.4	**Unit 7:** EE.A.1, EE.A.3, EE.A.4 **Unit 8:** EE.A, EE.A.2, F.B, G.B, G.B.6, G.B.7, G.B.8, NS.A, NS.A.1, NS.A.2

G07 Math

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Scale Drawings **Unit 2:** Introducing Proportional Relationships	**Unit 3:** Measuring Circles **Unit 4:** Proportional Relationships and Percentages	**Unit 5:** Rational Number Arithmetic **Unit 6:** Expressions, Equations and Inequalities	**Unit 7:** Angles, Triangles and Prisms **Unit 8:** Probability and Sampling
Learning Targets	**1a.** Understand and use appropriate vocabulary for scale diagrams, and identify when two figures are scaled copies of each other. **1b.** Make, interpret, and reason about scale drawings. **2a.** Understand and use correct vocabulary for proportional relationships, and recognize when a relationship is or is not proportional. **2b.** Represent proportional relationships with tables, equations, and graphs. **2c.** Reason about situations that involve constant speed, unit pricing, and measurement conversions.	**3a.** Mathematically define a circle and its key features. **3b.** Investigate relationships between features of a circle, and relate these relationships back to proportionality. **3c.** Use the relationships of circumference, radius, diameter, and area of a circle to find lengths and areas, expressed both in terms of pi and as numerical approximations. **4a.** Use ratios, scale factors, unit rates and proportional relationships to solve multi-step, real-world problems that involve fractions and percentages. **4b.** Use long division to write fractions presented in the form a/b as decimals, and apply correct vocabulary in this process. **4c.** Represent amounts and corresponding percent rates with double number line diagrams and tables. **4d.** Use equations to represent proportional relationships in which the constant of proportionality arises from a percentage.	**5a.** Interpret signed numbers in contexts together with their sums, differences, products, and quotients. **5b.** Use tables and number line diagrams to represent sums and differences of signed numbers or changes in quantities. **5c.** Compute sums and differences of signed numbers. **5d.** Plot points in the plane with signed number coordinates. **6a.** Use a variety of diagrams together with expressions and equations to represent situations with one unknown quantity. **6b.** Learn algebraic methods for simplifying expressions and solving equations. **6c.** Solve basic linear inequalities in one variable and represent their solutions on the number line. **6d.** Formulate and solve basic linear equations and inequalities that represent real-world situations.	**7a.** Investigate which sets of angle and side length measurements determine unique triangles. **7b.** Study and apply angle relationships, learning to understand and use key vocabulary. **7c.** Analyze and describe cross-sections of prisms, pyramids, and polyhedra. **7d.** Understand and use the formula for the volume of a right rectangular prism, and solve problems involving area, surface area, and volume. **8a.** Understand and use correct vocabulary related to probability and sampling. **8b.** Design and use simulations to estimate probabilities of outcomes. **8c.** Represent sample spaces in tables and tree diagrams and as lists. **8d.** Calculate the number of outcomes in a given sample space to find the probability of a given event. **8e.** Generate samples from two populations and use their distributions to analyze the populations.
Standards *Grade 7 CCSS Math*	**Unit 1:** G.A.1, G.B.4, G.B.6, RP.A, RP.A.2, RP.A.3 **Unit 2:** EE.A, G.A.1, G.B.6, RP.A, RP.A.1, RP.A.2	**Unit 3:** EE.B.3, G.A, G.A.1, G.A.2, G.B, G.B.4, G.B.6, RP.A.2, RP.A.3 **Unit 4:** EE.A.1, NS.A.2, RP.A, RP.A.1, RP.A.2, RP.A.3	**Unit 5:** EE.B, EE.B.3, EE.B.4, NS.A, NS.A.1, NS.A.2, NS.A.3, RP.A, RP.A.2 **Unit 6:** EE.A.1, EE.A.2, EE.B, EE.B.3, EE.B.4, NS.A.1	**Unit 7:** EE.A, EE.B.4, G.A, G.A.2, G.A.3, G.B, G.B.5, G.B.6, NS.A.1, RP.A **Unit 8:** NS.A.2, RP.A, SP.A, SP.A.1, SP.A.2, SP.B, SP.B.3, SP.B.4, SP.C.5, SP.C.6, SP.C.7, SP.C.8

G06 Math

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Area and Surface Area **Unit 2:** Introducing Ratios	**Unit 3:** Unit Rates and Percentages **Unit 4:** Dividing Fractions	**Unit 5:** Arithmetic in Base 10 **Unit 6:** Expressions and Equations	**Unit 7:** Rational Numbers **Unit 8:** Data Sets and Distributions
Learning Targets	**1a.** Find areas of polygons by decomposing, rearranging, and composing shapes. **1b.** Understand and use the terms base and height, and find areas of parallelograms and triangles. **1c.** Approximate areas of non-polygonal regions by polygonal regions. **1d.** Represent polyhedra with nets and find their surface areas. **2a.** Understand and use the terms ratio, rate, equivalent ratios, per, at this rate, constant speed, and constant rate, and to recognize when two ratios are or are not equivalent. **2b.** Represent ratios as expressions, and represent equivalent ratios with double number line diagrams, tape diagrams, and tables. **2c.** Use these terms and representations to reason about situations involving color mixtures, recipes, unit pricing, and constant speed.	**3a.** Understand and use the terms unit rate, speed, pace, percent, and percentage, and recognize that equivalent ratios have equal unit rates. **3b.** Represent percentages with tables, tape diagrams, and double number line diagrams, and as expressions. **3c.** Use these terms and representations in reasoning about situations involving unit price, constant speed, and measurement conversion. **4a.** Examine how the relative sizes of numerator and denominator affect the size of their quotient when numerator or denominator (or both) is a fraction. **4b.** Compute quotients of fractions. **4c.** Solve problems involving length, area and volume of figures with fractional side lengths **4d.** Given a multiplication or division equation or expression with fractions, describe a situation that it could represent. **4e.** Use tape diagrams and equations in reasoning about situations that involve multiplication and division of fractions.	**5a.** Compute sums, differences, products, and quotients of multi-digit whole numbers and decimals, using efficient algorithms. **5b.** Use calculations with whole numbers and decimals to solve problems set in real-world contexts. **6a.** Understand and use correct vocabulary relating to expressions and equations. **6b.** Learn and use properties of exponents strategically to evaluate expressions. **6c.** Find solutions for linear equations in one variable and simple equations that include exponents. **6d.** Reason about real-world and geometrical situations. **6e.** Represent collections of equivalent ratios as equations and use and make connections between tables, graphs, and linear equations that represent the same relationships.	**7a.** Interpret signed numbers in contexts, and plot points with signed rational number coordinates on the number line. **7b.** Understand and use absolute value notation. **7c.** Graph inequalities in one variable on number line diagrams. **7d.** Solve and interpret solutions to simple inequalities. **7e.** Plot pairs of signed number coordinates in the plane, and use coordinates to calculate horizontal and vertical distances between two points. **8a.** Learn about populations and study variables and key vocabulary associated with a population. **8b.** Make and interpret histograms, bar graphs, tables of frequencies, and box plots. **8c.** Describe the shape of distributions using appropriate terms. **8d.** Identify and interpret measurements of center and variability in contexts.
Standards *Grade 6 CCSS Math*	**Unit 1:** EE.A.1, EE.A.2, G.A.1, G.A.2, G.A.4 **Unit 2:** RP.A.1, , RP.A.2, RP.A.3	**Unit 3:** G.A, RP.A, RP.A.2, RP.A.3, RP.A.3, RP.A.3 **Unit 4:** G.A.1, G.A.2, NS.A, NS.A.1	**Unit 5:** EE.A, EE.A.4, NS.B, NS.B.2, NS.B.3 **Unit 6:**, EE.A.1, EE.A.2, EE.A.4, EE.B, EE.B.5, EE.B.6, EE.B.7, EE.C.9, NS.B.3, RP.A.1, RP.A.3	**Unit 7:** G.A.3, EE.A.2., EE.B.6, EE.B.8, NS.B.4, NS.C.5, NS.C.6, NS.C.7, NS.C.8 **Unit 8:** NS.B.3, SP.A, SP.A.1, SP.A.2, SP.A.3, SP.B, SP.B.4, SP.B.5,

G05 Math

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Finding Volume **Unit 2:** Fractions and Quotients and Fraction Multiplication	**Unit 3:** Multiplying and Dividing Fractions **Unit 4:** Wrapping Up Multiplication and Division with Multi-Digit Numbers	**Unit 5:** Place Value Patterns and Decimal Operations **Unit 6:** More Decimal and Fraction Operations	**Unit 7:** Shapes on the Coordinate Plane **Unit 8:** Putting It All Together
Learning Targets	**1a.** Describe volume as the space taken up by a solid object and measure the volume of a rectangular prism by finding the number of unit cubes needed to fill it. **1b.** Describe the calculations from the previous section as length x width x height or area of the base x height and use them to find volume. **1c.** Find the volume of a figure composed of rectangular prisms. **2a.** Represent and explain the relationship between division and fractions, and use this knowledge to solve problems involving division of whole numbers leading to answers that are fractions. **2b.** Connect division to multiplication of a whole number by unit and non-unit fractions. **2c.** Find the area of rectangles when one side length is a whole number and the other side is a fraction or mixed number. **2c.** Write, interpret, and evaluate numerical expressions that represent multiplication of a whole number by a fraction or mixed number as well as representing and solving problems.	**3a.** Recognize that $\frac{a}{b} \times \frac{c}{d} = \frac{a \times c}{b \times d}$ and use this generalization to multiply fractions numerically as well as using area concepts. **3b.** Divide a unit fraction by a whole number, and vice versa, using whole-number division concepts. **3c.** Solve problems involving fraction multiplication and division. **4a.** Multiply multi-digit whole numbers using the standard algorithm. **4b.** Divide multi-digit whole numbers using strategies based on place value, properties of operations, and the relationship between multiplication and division. **4c.** Multiply and divide to solve real-world and mathematical problems involving area and volume.	**5a.** Read, write, and represent decimals to the thousands place as well as compare, round and order them based on the value of the digits in each place. **5b.** Add and subtract decimals to the hundredths using strategies based on place value. **5c.** Multiply decimals with products resulting in the hundredths using place value reasoning and properties of operations. **5d.** Divide decimals with quotients resulting in the hundredths using place value reasoning and properties of operations. **6a.** Solve multi-step problems involving measurement conversions. **6b.** Solve problems involving addition and subtraction of fractions with unlike denominators. Create line plots to display fractional measurement data, and use the information to solve problems. **6c.** Interpret multiplication as scaling (resizing) and recognize patterns about multiplying a whole number by a fraction greater than, less than and equal to 1.	**7a.** Locate points on a coordinate grid. **7b.** Classify triangles and quadrilaterals in a hierarchy based on angle measurements and side lengths. **7c.** Generate, identify, and graph relationships between corresponding terms in two patterns as well as represent and interpret real word and mathematical problems in a coordinate grid. **8a.** Fluently multiply and divide multi-digit whole numbers using place value strategies, properties of operations, or the standard algorithm. **8b.** Solve multi-step problems involving volume. **8c.** Strengthening their understanding of operations with fractions and decimals. **8d.** Review the major work of the grade by creating and designing instructional routines.
Standards *Grade 5 CCSS Math*	**Unit 1:** MD.C.3, MD.C.4, MD.C.5, OA.A.2, OA.A.1 **Unit 2:** NF.B.3, NF.B.4, OA.A.2, OA.A.1	**Unit 3:** NF.B.4, NF.B.6, NF.B.7 **Unit 4:** MD.C.3, MD.C.5, NBT.B.5, NF.B.4, OA.A.2 NBT.B.6, NF.B.3,	**Unit 5:** NBT.A.1, NBT.A.3, NBT.B.4, NBT.B.7, OA.A.1, OA.A.2 **Unit 6:** MD.A.1, NBT.A.1, NBT.A.2, MD.B.2, NF.A.1, NF.A.2, NBT.B.4, NF.B.5	**Unit 7:** G.A.1, G.B.3, G.B.4, G.A.2, NBT.B.7, OA.A.2, OA.B.3 **Unit 8:** G.B.3, G.B.4, NBT.B.5, NBT.B.6, MD.C.5, NBT.B.7, NF.A.1, NF.B.4,

G04 Math

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Factors and Multiples **Unit 2:** Fraction Equivalence and Comparison	**Unit 3:** Extending Operations to Fractions **Unit 4:** From Hundredths to Hundred-Thousands	**Unit 5:** Multiplicative Comparison and Measurement **Unit 6:** Multiplying and Dividing Multi-Digit Numbers	**Unit 7:** Angles and Angle Measurement **Unit 8:** Properties of Two-Dimensional Shapes **Unit 9:** Putting It All Together
Learning Targets	**1a.** Determine if a number is prime or composite and explain what it means to be a factor or a multiple of a whole number by relating it to the area of a rectangle. **1b.** Apply multiplication fluency within 100 and the relationship between multiplication and division to find factor pairs and multiples. **2a.** Make sense of fractions with denominators 2, 3, 4, 5, 6, 8, 10, and 12 through physical representations, diagrams, and reason about their location on the number line. **2b.** Generate equivalent fractions with the following denominators: 2, 3, 4, 5, 6, 8, 10, 12, & 100; using visual representations and benchmarks to reason about fraction equivalence. **2c.** Use visual representations or a numerical process to reason about fraction comparison.	**3a.** Recognize that $n \times \frac{a}{b} = \frac{(n \times a)}{b}$ and explain that a fraction a/b is a multiple of 1/b (a x 1/b). Using this understanding to solve problems involving multiplication of a fraction by a whole number. **3b.** Use various strategies to add and subtract fractions and mixed numbers with like denominators and solve word problems, including measurements represented in line plots. **3c.** Reason about equivalence to add tenths and hundredths and solve word problems. **4a.** Write tenths and hundredths in decimal notation, as well as represent, compare, and order decimals to the hundredths by reasoning about their size. **4b.** Recognize that in a multi-digit whole number, the value of a digit in one place represents ten times what it represents in the place to its right. **4c.** Compare, order, and round multi-digit whole numbers within a million. **4d.** Add and subtract multi-digit whole numbers using the standard algorithm.	**5a.** Analyze, describe, and represent multiplicative comparison situations and solve one-step and two-step problems involving multiplicative comparison. **5b.** Convert from larger units to smaller units within a system of measurement, understanding their relative sizes. **5c.** Solve multi-step problems involving multiplicative comparison and measurement. **6a.** Generate a number or shape pattern that follows a given rule and identify apparent features that were not explicit in the rule itself. **6b.** Multiply a whole number of up to four digits by a one-digit whole number, and 2 two-digit numbers using strategies based on place value and the properties of operations. **6c.** Divide numbers of up to four digits by one-digit divisors to find whole-number quotients and remainders, using strategies based on place value, properties of operations, and the relationship between multiplication and division. **6d.** Use the four operations to solve problems that involve multi-digit whole numbers and assess the reasonableness of answers.	**7a.** Draw and identify points, lines, rays, segments and angles in 2D figures. **7b.** Recognize that angles can be measured in degrees, and can be found using addition and subtraction or a protractor to measure. **7c.** Draw and identify acute, obtuse, right and straight angles in 2D figures. Write equations to represent angle relationships and find unknowns. **8a.** Classify triangles, parallelograms, rectangles, rhombuses, and squares based on the properties of their side lengths and angles. Identify and draw lines of symmetry in 2D shapes. **8b.** Solve problems involving unknown side lengths, perimeter, area, and angle measurements using the known attributes and properties of 2D shapes. **9a.** Solve problems involving fraction equivalence and operations. **9b.** Use the four operations with multi-digit numbers using place value understanding. **9c.** Solve problems involving measurement comparison. **9d.** Review the major work of the grade by creating and designing instructional routines.
Standards *Grade 4 CCSS Math*	**Unit 1:** OA.B.4, OA.C.5, OA.A.3 **Unit 2:** NF.A.1, NF.A.2	**Unit 3:** NF.B.4, MD.B.4, NF.B.3, NF.A.1, NF.A.2, NF.C.5 **Unit 4:** NF.C.4, NF.C.5, NF.C.6, NF.C.7, NBT.A.1, NBT.A.2, NBT.B.4, NBT.A.3	**Unit 5:** NBT.B.5, OA.A.1, OA.A.2, OA.A.3, MD.A.1, MD.A.2, MD.A.3, NBT.4 **Unit 6:** OA.C.5, MD.A.2, NBT.B.4, NBT.B.5, OA.A.3, NBT.B.6, OA.B.4, MD.A.3	**Unit 7:** G.A.1, MD.C.5, NBT.B.4, NBT.B.5, MD.C.6, MD.C.7, NBT.B.6, G.A.2 **Unit 8:** G.A.1, G.A.2, G.A.3, NBT.B.5, NF.B.2, NF.B.4

G03 Math

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Introducing Multiplication **Unit 2:** Area and Multiplication	**Unit 3:** Wrapping Up Addition and Subtraction within 1,000 **Unit 4:** Relating Multiplication to Division	**Unit 5:** Fractions as Numbers **Unit 6:** Measuring Length, Time, Liquid Volume and Weight	**Unit 7:** Two-Dimensional Shapes and Perimeter **Unit 8:** Putting It All Together
Learning Targets	**1a.** Interpret and represent data on scaled graphs. Solve one- and two-step story problems using addition and subtraction. **1b.** Understand, represent, and solve multiplication problems involving equal groups. **1c.** Represent and solve multiplication problems involving arrays. **2a.** Describe area as the number of unit squares that cover a plane figure without gaps and overlaps and being able to measure the area of rectangles by counting unit squares. **2b.** Explain why the area of a rectangle can be determined by multiplying the side lengths and solve problems involving the area of rectangles. **2c.** Find the area of figures composed of rectangles	**3a.** Fluently add within 1,000 using algorithms and use place value understanding to compose and decompose numbers. **3b.** Fluently subtract within 1,000 using algorithms and the relationship between addition and subtraction. **3c.** Round whole numbers to the nearest multiple of 10 and 100. **3d.** Solve two-step word problems using addition, subtraction, and multiplication and assessing the reasonableness of answers. **4a.** Make sense of division by representing and solving “how many groups?” and “how many in each group?” problems. **4b.** Understand division as a missing-factor problem and use properties of operations to develop fluency with single-digit multiplication facts and their related division facts. **4c.** Develop strategies to multiply within 100 and to multiply one-digit numbers by a multiple of 10. **4d.** Use place value understanding and the relationship between multiplication and division to divide within 100.	**5a.** Understand that unit fractions are formed by partitioning shapes into equal parts. **5b.** Understand a fraction as a number and represent fractions on the number line. **5c.** Explain equivalence of fractions, including expressing whole numbers as fractions and vice versa. **5d.** Compare two fractions with the same numerator or denominator, recording the results with the symbols >, =, or <. **6a.** Measure lengths using rulers marked with halves and fourths of an inch to generate data for making a line plot. **6b.** Measure and estimate weights and liquid volumes of objects. **6c.** Tell time to the minute and solve problems involving addition and subtraction of time intervals in minutes. **6d.** Solve problems involving the four operations and measurement contexts.	**7a.** Reason about shapes and their attributes. **7b.** Find the perimeter of two-dimensional shapes, including when all or some side lengths are given. **7c.** Solve problems involving perimeter and area. **7d.** Apply geometric understanding to solve problems. **8a.** Understand a fraction as a number and represent fractions on the number line. **8b.** Apply concepts of measurement and data to solve problems. **8c.** Develop fluency with single-digit multiplication facts and their related division facts. **8d.** Review the major work of the grade by creating and designing instructional routines.
Standards *Grade 3 CCSS Math*	**Unit 1:** MD.B.3, OA.A.1, OA.A.3, OA.A.4, OA.D.9, OA.B.5, OA.C.7, OA.D.9 **Unit 2:** MD.C.5, MD.C.6, OA.A.1, MD.C.7, OA.B.5, OA.D.9, NBT.A.2	**Unit 3:** NBT.A.2, OA.D.9, OA.B.5, NBT.A.1, OA.C.7, OA.D.8 **Unit 4:** NBT.A.2, OA.A.2, OA.A.3, MD.C.7, NBT.A.3, OA.B.6, OA.C.7, OA.D.9, OA.B.5, OA.A.4, OA.D.8	**Unit 5:** G.A.2, NF.A.1, OA.C.7, NF.A.2, NF.A.3, OA.B.5 **Unit 6:** MD.B.4, NF.A.3, OA.C.7, MD.A.2, MD.A.1 NBT.A.2, OA.A.3	**Unit 7:** G.A.1, NBT.A.3, OA.C.7, MD.D.8, NBT.A.2, OA.D.8

G02 Math

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Adding, Subtracting and Working with Data **Unit 2:** Adding and Subtracting within 100	**Unit 3:** Measuring Length **Unit 4:** Addition and Subtraction on the Number Line	**Unit 5:** Numbers to 1,000 **Unit 6:** Geometry, Time and Money	**Unit 7:** Adding and Subtracting within 1,000 **Unit 8:** Equal Groups ***Unit 9:*** *Putting It All Together*
Learning Targets	**1a.** Build toward fluency with adding within 100 and subtracting within 20. **1b.** Interpret and represent data using picture and bar graphs. Solve one- and two-step problems using addition and subtraction within 20. **1c.** Make sense of and interpret tape diagrams to represent and solve Compare Story Problems with unknowns within 100. **2a.** Add and subtract within 100 using strategies based on place value and the relationship between addition and subtraction (decomposing a ten is not required). **2b.** Subtract within 100, including decomposing a ten. **2c.** Represent and solve one- and two-step problems involving addition and subtraction within 100, including different problem types with unknowns in all positions.	**3a.** Measure length in centimeters and meters and solve one-step story problems within 100. **3b.** Measure length in feet and inches and solve one- and two-step story problems within 100. **3c.** Represent numerical data on a line plot. **4a.** Understand the structure of the number line and represent whole numbers within 100 as lengths from 0 on a number line. **4b.** Represent sums and differences on a number line.	**5a.** Read, write, and represent three-digit numbers using base-ten numerals and expanded form (using place value understanding to compose and decompose). **5b.** Compare and order three-digit numbers using the relative position of numbers on a number line. **6a.** Identify triangles, quadrilaterals, pentagons, hexagons, and cubes; draw these shapes having specified attributes. **6b.** Partition and name rectangles and circles into halves, thirds, and fourths and how they compose a whole. **6c.**Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m. **6d.** Find the value of a group of bills and coins and solve addition and subtraction word problems within 100.	**7a.** Add and subtract numbers within 1,000, using strategies that make sense to them. **7b.** Add numbers within 1,000, understanding that sometimes it is necessary to compose a hundred from 10 tens. **7c.** Subtract within 1,000 using strategies that involve decomposing a ten, a hundred, or both. **8a.** Determine whether a group of objects (up to 20) has an odd or even number of members, expressing even numbers as a sum of two equal addends. **8b.** Partition rectangles into rows and columns of equal size-squares and count to find the total number of squares, understanding arrays as a sum of equal addends. **9a.** Fluently add and subtract within 20. **9b.** Fluently add and subtract within 100, using strategies to add and subtract within 1,000. **9c.** Represent and solve one- and two-step story problems within 100.
Standards *Grade 2 CCSS Math*	**Unit 1:** NBT.B.5, OA.B.2, MD.D.10, NBT.A.2, OA.A.1 **Unit 2:** MD.D.10, NBT.A.2, NBT.B.5, NBT.B.9, OA.A1, OA.B.2 NBT.B.6	**Unit 3:** MD.A.1, MD.A.3, MD.A.4, MD.B.5, MD.B.6, NBT.A.2, NBT.B.5, OA.A.1, OA.B.2, MD.A.2, MD.D.9 **Unit 4:** MD.B.6, NBT.A.2, NBT.B.5, MD.B.5, OA.A.1	**Unit 5:** MD.B.6, NBT.A.1, NBT.A.2, NBT.A.3, NBT.B.5, OA.B.2, NBT.A.4, NBT.B.8 **Unit 6:** G.A.1, MD.A.1, NBT.A.3, NBT.B.5, G.A.3, NBT.A.1, NBT.A.2, MD.C.7, NBT.B.6, G.A.2, MD.C.8, NBT.B.8, OA.A.1	**Unit 7:** NBT.A.2, NBT.A.4, NBT.B.5, NBT.B.6, NBT.B.7, NBT.B.8, NBT.B.9 MD.D.10, NBT.A.1, NBT.A.3 **Unit 8:** NBT.A.2, NBT.B.7, NBT.B.8, OA.B.2, OA.C.3, G.A.2, OA.C.4

G01 Math

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Adding, Subtracting and Working with Data **Unit 2:** Addition and Subtraction Story Problems	**Unit 3:** Adding and Subtracting within 20 **Unit 4:** Numbers to 99	**Unit 5:** Adding within 100 **Unit 6:** Length Measurements within 120 Units	**Unit 7:** Geometry and Time **Unit 8:** Putting It All Together
Learning Targets	**1a.** Build toward fluency by adding and subtracting within 10. **1b.** Organize and represent data. **1c.** Interpret data representations to ask and answer questions. **2a.** Solve *Add to and Take From, Result Unknown* and *Add to, Change Unknown* story problems, understanding the meaning of equal signs. **2b.** Solve *Put Together/Take Apart* problems with the unknown in different positions, writing equations to represent problems. **2c.** Solve *Compare, Difference Unknown* problems, relating addition and subtraction. **2d.** Apply understanding of the meaning of the equal sign to make sense of equations with a symbol for the unknown, solving different types of story problems.	**3a.** Build toward fluency with adding and subtracting within 10. **3b.** Add and subtract one-digit numbers from teen numbers using ten as a unit; find the value that makes an addition or subtraction equation true involving 10. **3c.** Add within 20, including three addends. **3d.** Subtract within 20. **4a.** Add and subtract multiples of 10 using towers of 10, drawings, numbers, or words. **4b.** Add and subtract multiples of 10, understanding that the two digits of a two-digit number represent amounts of tens and ones. **4c.** Compare 2 two-digit numbers based on the values of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. **4d.** Represent two-digit numbers in different ways, using different amounts of tens and ones.	**5a.** Add within 100 without composing a ten, using equations. **5b.** Add a one-digit and two-digit number within 100 with composing a ten, using equations. **5c.** Add 2 two-digit numbers within 100 with composing a ten, using equations. **6a.** Compare the lengths of objects indirectly and order such objects by length. **6b.** Count groups of up to 120 objects and write a number to represent them. Lay length units end-to-end to determine length. **6c.** Solve addition and subtraction story problems with unknowns in all positions.	**7a.** Explore and reason about attributes of two- and three-dimensional shapes. **7b.** Partition circles and rectangles into two and four equal pieces and describe the pieces with words (halves and fourths). **7c.** Tell and write time in hours and half-hours. **8a.** Add and subtract within 20, fluently within 10. **8b.** Solve story problems including: *Add to and Take From, Change Unknown; Put Together and Take apart, Addend Unknown; Compare, Difference Unknown* **8c.** Apply place value understanding to represent a quantity with written numerals and expressions within 120.
Standards *Grade 1 CCSS Math*	**Unit 1:** OA.C.5, OA.C.6, MD.C.4, OA.B.4 **Unit 2:** MD.C.4, OA.A.1, OA.B.4, OA.C.5, OA.C.6, OA.D.7, NBT.A.1, OA.B.3, OA.D.8, OA.A.2	**Unit 3:** OA.A.1, OA.B.3, OA.B.4, OA.C.5, OA.C.6, OA.D.7, OA.D.8, NBT.A.1, NBT.B.2, OA.A.2 **Unit 4:** NBT.A.1, NBT.B.2, NBT.B.3, NBT.C.4, NBT.C.5, NBT.C.6, OA.A.1, OA.C.5, OA.C.6, OA.D.7, OA.D.8	**Unit 5:** NBT.A.1, NBT.B.2, NBT.B.3, NBT.C.4, NBT.C.5, NBT.C.6, OA.A.1, OA.C.5, OA.C.6, OA.D.7, OA.D.8 **Unit 6:** MD.A.1, NBT.B.3, NBT.C.4, NBT.C.5, OA.C.5, OA.C.6, MD.A.2, NBT.A.1, OA.A.1, OA.A.2, OA.B.4	**Unit 7:** G.A.1, G.A.2, NBT.C.4, OA.C.6. G.A.3, NBT.C.5, MD.B.3, NBT.A.1, OA.D.7

KG2 Math

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Unit 1:** Math in Our World **Unit 2:** Numbers 1 - 10	**Unit 3:** Flat Shapes All Around Us **Unit 4:** Understanding Addition and Subtraction	**Unit 5:** Composing and Decomposing Numbers 1 - 10 **Unit 6:** Numbers 0 - 20	**Unit 7:** Solid Shapes All Around Us **Unit 8:** Putting It All Together
Learning Targets	**1a.** Explore and use math tools; share mathematical ideas with a partner. **1b.** Recognize and name groups of up to 4 objects and images without counting. **1c.** Answer "are there enough" questions. **1d.** Count groups of up to 10 objects. **2a.** Count and compare up to 10 objects and know the number remains the same regardless of the arrangement of the objects. **2b.** Count and compare up to 10 images in organized arrangements and know the number remains the same regardless of the order in which the images are counted. **2c.** Understand the relationship between number and quantity. **2d.** Compare written numbers 1-10.	**3a.** Recognize, describe, and compare shapes and their attributes in the environment. **3b.** Explore shapes by putting shapes together to form larger shapes. **4a.** Understand addition as putting together and subtraction as taking from. **4b.** Represent and solve *Add To, Result Unknown and Take From, Result Unknown* story problems within 10. **4c.** Relate addition and subtraction expressions to story problems within 10 and find the value.	**5a.** Compose and decompose numbers up to 9 in more than 1 way, writing expressions to represent such decompositions. **5b.** Solve *Put Together, Total Unknown, Put Together/Take Apart, Both Addends Unknown, Add To, Result Unknown, and Take From, Result Unknown* story problems. **5c.** For any number from 1 to 9, find the number that makes 10 when added to the given number. **6a.** Count groups of up to 20 objects. **6b.** Understand numbers 11-19 as 10 ones and some more ones. **6c.** Count groups of images up to 20 and represent such quantities with a written number.	**7a.** Compose shapes from smaller shapes. Count and compare numbers, and solve story problems involving shapes. **7b.** Compare weight and capacity of objects. Compose, describe, and compare three-dimensional shapes. **8a.** Count and compare groups of objects and images, representing and writing numbers up to 20. **8b.** Represent and write quantities and numbers up to 20. **8c.** Fluently add and subtract within 5. **8d.** Use understanding of 10 to work with numbers to 20.
Standards *Kindergarten CCSS Math*	**Unit 1:** CC.A.1, CC.B.4 **Unit 2:** CC.A.1, CC.A.3, CC.B.4, CC.B.5, CC.C.6 CC.C.7	**Unit 3:** CC.A.1, CC.A.3, CC.B.5, G.A.1, G.A.2, G.B.4, G.B.5, MD.A.2, MD.B.3, CC.B.4, CC.C.6, G.B.6 **Unit 4:** CC.A.1, CC.B.5, OA.A.1, CC.A.3, OA.A2, CC.B.4	**Unit 5:** CC.A.1, CC.A.2, OA.A.2, OA.A.3, OA.A.5, OA.A.1, CC.A.3, CC.B.5, OA.A.4 **Unit 6:** CC.A.1, CC.A.2, CC.A.3, CC.B.4, CC.B.5, OA.A.1, OA.A.2, OA.A.5 NBT.A.1, OA.A.4	**Unit 7:** CC.A.1, CC.A.3, CC.B.5, CC.C.6, CC.C.7, G.B.5, G.B.6, NBT.A.1, OA.A.1, OA.A.2, OA.A.3, OA.A.4, OA.A.5, G.A.1, G.A.2, G.A.3, G.B.4, MD.A.1, MD.A.2, MD.B.3

KG1 Math (Engage New York curricular basis)

	Quarter 1	Quarter 2	Quarter 3	Quarter 4
Units	**Module 1:** Counting to 5	**Module 2:** Shapes **Module 3:** Counting to 10	**Module 4:** Comparison of Length, Weight and Capacity, and Numbers to 5	**Module 5:** Addition and Subtraction Stories and Counting to 20
Learning Targets	**1a.** Match 2 objects that *are exactly the same; are the same, but…; are used together.* **1b.** Make one group with given attributes and sort objects into different ways. **1c.** Solve *"how many"* questions with 1, 2, or 3 objects. **1d.** Matching numerals with up to 3 objects. **1e.** Solve "*how many"* questions with 4 or 5 objects. **1f.** Matching numerals with up to 5 objects. **1g.** Count 1, 2, 3, 4, 5 with stories and build a tower by putting 1 more cube/block at a time. **1h.** Count 5, 4, 3, 2, 1 using story problems and visuals.	**2a.** Find and describe circles, rectangles, squares, and triangles using informal language without naming. **2b.** Construct two-dimensional shapes (triangle, rectangle, square, and circles). **2c.** Find and describe solid shapes using informal language without naming. **3a.** Solve *"how many"* questions with up to 7 objects. **3b.** Matching numerals with up to 7 objects, composing and decomposing into two parts. **3c.** Solve *"how many"* questions with up to 8 objects. **3d.**Matching numerals with up to 8 objects, composing and decomposing into two parts. **3e.** Solve *"how many"* questions with 0 up to 9 objects. **3f.** Matching numerals with 0 up to 9 objects, composing and decomposing into two parts. **3g.** Solve *"how many"* questions with up to 10 objects. **3h.** Matching numerals with up to 10 objects, composing and decomposing into two parts.	**4a.** Identify attributes of length by describing objects as tall or short and compare such lengths using taller than or shorter than. **4b.** Identify attributes of weight by describing objects as heavy or light and compare such weights using heavier than, lighter than, or about the same as. **4c.** Identify the attribute of volume by describing containers as big or small and compare volume using more than or less than. **4d.** Identify the first and last in a scattered, linear, or circular configuration with 2-10 objects. **4e.** Solve "are there enough? Story problems by matching. **4f.** Count and match to compare using comparison statements of sets up to 5. **4g.** Count and match to compare using comparison statements of sets up to 5, including numerals.	**5a.** Write numerals 0 to 5. **5b.** Create and solve addition story problems using drawings (*add to with result unknown, and put together with total unknown)* **5c.** Create and solve subtraction story problems by drawing (*take from with result unknown).* **5d.** Solve addition story problems using fingers, objects, and drawings. **5e.** Solve subtraction story problems using fingers, objects, and drawings. **5f.** Identify, duplicate, and extend patterns with movement and objects.
Standards *Kindergarten CCSS Math*	**Module 1:** CC.1, CC.2, CC.3, CC.4, MD.2, OA.2	**Module 2:** G.1, G.2, G.3, G.4, CC.3, CC.4, MD.2 **Module 3:** CC.1, CC.3, CC.4	**Module 4:** MD.1, CC.5, CC.6, CC.3, CC.4	**Module 5:** CC.1, CC.2, OA.1, OA.2, CC.3, CC.4, MD.2