Mathematics I | North Carolina Standard Course of Study–Mathematics Correlation to *Eureka Math²®*

When the original *Eureka Math®* curriculum was released, it quickly became the most widely used K–5 mathematics curriculum in the country. Now, the Great Minds® teacher–writers have created *Eureka Math²®*, a groundbreaking new curriculum that helps teachers deliver exponentially better math instruction while still providing students with the same deep understanding of and fluency in math. *Eureka Math²* carefully sequences mathematical content to maximize vertical alignment—a principle tested and proven to be essential in students' mastery of math—from kindergarten through high school.

While this innovative new curriculum includes all the trademark *Eureka Math* aha moments that have been delighting students and teachers for years, it also boasts these exciting new features:

Teachability

Eureka Math² employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering high-quality instruction that meets the individual needs of their students. Differentiation suggestions, slide decks, digital interactives, and multiple forms of assessment are just a few of the resources built right into the teacher materials.

Accessibility

Eureka Math² incorporates Universal Design for Learning principles so all learners can access the mathematics and take on challenging math concepts. Student supports are built into the instructional design and are clearly identified in the *Teach* book. Further, the curriculum carries a focus on readability. By eliminating unnecessary words and using simple, clear sentences, the *Eureka Math²* teacher–writers have created one of the most readable mathematics curricula on the market. The curriculum's readability and accessibility help all students see themselves as mathematical thinkers and doers who are fully capable of owning their mathematics learning.

Digital Engagement

The digital elements of *Eureka Math²* add to students' engagement with the math. The curriculum provides teachers with digital slides for each lesson. In addition, each grade level includes wordless videos that spark students' interest and curiosity. Students at all levels work through mathematical explorations that help lead to their own mathematical discoveries. Digital lessons and videos provide opportunities for students to wonder, explore, and make sense of mathematics, which contributes to the development of a strong, positive mathematical identity.

Standards for Mathematical Practice	Aligned Components of *Eureka Math²*
MP.1 Make sense of problems and persevere in solving them.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.2 Reason abstractly and quantitatively.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.3 Construct viable arguments and critique the reasoning of others.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.4 Model with mathematics.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.5 Use appropriate tools strategically.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.6 Attend to precision.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.7 Look for and make use of structure.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.
MP.8 Look for and express regularity in repeated reasoning.	Lessons in every module engage students in mathematical practices. These are indicated in margin notes included with every lesson.

The Real Number System

Extend the properties of exponents to rational exponents.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.N-RN.2 Rewrite algebraic expressions with integer exponents using the properties of exponents.	*Supplemental material is necessary to address this standard.*

Seeing Structure in Expressions

Interpret the structure of expressions.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-SSE.1 Interpret expressions that represent a quantity in terms of its context.	*This standard is addressed by the lessons aligned to its subsections.*
NC.M1.A-SSE.1a Identify and interpret parts of a linear, exponential, or quadratic expression, including terms, factors, coefficients, and exponents.	Math 1 M1 Lesson 4: Interpreting Linear Expressions Math 1 M5 Lesson 7: Exponential Functions Math 1 M5 Lesson 8: Graphing Exponential Functions Math 1 M5 Lesson 12: Writing Equations for Exponential Functions from Tables or Graphs *Supplemental material is necessary to address quadratic expressions for this standard.*

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-SSE.1b Interpret a linear, exponential, or quadratic expression made of multiple parts as a combination of entities to give meaning to an expression.	Math 1 M5 Lesson 7: Exponential Functions Math 1 M5 Lesson 14: Exponential Growth Math 1 M5 Lesson 15: Exponential Decay Math 1 M5 Lesson 16: Modeling Populations Math 1 M5 Lesson 22: Modeling the Temperature of Objects Cooling Over Time *Supplemental material is necessary to address quadratic expressions for this standard.*

Seeing Structure in Expressions

Write expressions in equivalent forms to solve problems.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-SSE.3 Write an equivalent form of a quadratic expression $ax^2 + bx + c$, where a is an integer, by factoring to reveal the solutions of the equation or the zeros of the function the expression defines.	*Supplemental material is necessary to address this standard.*

Arithmetic with Polynomial Expressions

Perform arithmetic operations on polynomials.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-APR.1 Build an understanding that operations with polynomials are comparable to operations with integers by adding and subtracting quadratic expressions and by adding, subtracting, and multiplying linear expressions.	*Supplemental material is necessary to address this standard.*

Arithmetic with Polynomial Expressions

Understand the relationship between zeros and factors of polynomials.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-APR.3 Understand the relationships among the factors of a quadratic expression, the solutions of a quadratic equation, and the zeros of a quadratic function.	*Supplemental material is necessary to address this standard.*

Creating Equations

Create equations that describe numbers or relationships.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-CED.1 Create equations and inequalities in one variable that represent linear, exponential, and quadratic relationships and use them to solve problems.	Math 1 M1 Lesson 5: Printing Presses Math 1 M1 Lesson 9: Writing and Solving Equations in One Variable Math 1 M1 Lesson 11: Solving Linear Inequalities in One Variable Math 1 M1 Lesson 16: Applying Absolute Value Math 1 M5 Lesson 11: Solving Equations Containing Exponential Expressions *Supplemental material is necessary to address quadratic relationships for this standard.*
NC.M1.A-CED.2 Create and graph equations in two variables to represent linear, exponential, and quadratic relationships between quantities.	Math 1 M2 Lesson 1: Solution Sets of Linear Equations in Two Variables Math 1 M2 Lesson 2: Graphing Linear Equations in Two Variables Math 1 M2 Lesson 3: Creating Linear Equations in Two Variables Math 1 M2 Lesson 4: Proving Conditional Statements Math 1 M2 Lesson 5: Proving Biconditional Statements Math 1 M2 Lesson 8: Low-Flow Showerhead Math 1 M2 Lesson 15: Applications of Linear Inequalities Math 1 M4 Lesson 5: Proving the Perpendicular Criterion Math 1 M5 Topic B: Exponential Functions and Their Graphs Math 1 M5 Lesson 13: Calculating Interest Math 1 M5 Lesson 14: Exponential Growth Math 1 M5 Lesson 15: Exponential Decay Math 1 M5 Lesson 16: Modeling Populations Math 1 M5 Topic D: Comparing Linear and Exponential Models *Supplemental material is necessary to address quadratic relationships for this standard.*

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-CED.3 Create systems of linear equations and inequalities to model situations in context.	Math 1 M2 Lesson 12: Applications of Systems of Equations Math 1 M2 Lesson 18: Applications of Systems of Linear Inequalities Math 1 M6 Lesson 10: Designing a Fundraiser
NC.M1.A-CED.4 Solve for a quantity of interest in formulas used in science and mathematics using the same reasoning as in solving equations.	Math 1 M1 Lesson 10: Rearranging Formulas

Reasoning with Equations and Inequalities

Understand solving equations as a process of reasoning and explain the reasoning.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-REI.1 Justify a chosen solution method and each step of the solving process for linear and quadratic equations using mathematical reasoning.	Math 1 M1 Lesson 3: The Commutative, Associative, and Distributive Properties Math 1 M1 Lesson 7: Solving Linear Equations in One Variable Math 1 M1 Lesson 8: Some Potential Dangers When Solving Equations Math 1 M1 Lesson 9: Writing and Solving Equations in One Variable *Supplemental material is necessary to address quadratic equations for this standard.*

Reasoning with Equations and Inequalities

Solve equations and inequalities in one variable.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-REI.3 Solve linear equations and inequalities in one variable.	Math 1 M1 Lesson 5: Printing Presses Math 1 M1 Lesson 6: Solution Sets of Equations and Inequalities in One Variable Math 1 M1 Lesson 7: Solving Linear Equations in One Variable Math 1 M1 Lesson 8: Some Potential Dangers When Solving Equations Math 1 M1 Lesson 9: Writing and Solving Equations in One Variable Math 1 M1 Lesson 11: Solving Linear Inequalities in One Variable Math 1 M1 Lesson 13: Solving and Graphing Compound Inequalities Math 1 M1 Lesson 14: Solving Absolute Value Equations Math 1 M1 Lesson 15: Solving Absolute Value Inequalities
NC.M1.A-REI.4 Solve for the real solutions of quadratic equations in one variable by taking square roots and factoring.	*Supplemental material is necessary to address this standard.*

Reasoning with Equations and Inequalities

Solve systems of equations.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-REI.5 Explain why replacing one equation in a system of linear equations by the sum of that equation and a multiple of the other produces a system with the same solutions.	Math 1 M2 Lesson 10: A New Way to Solve Systems
NC.M1.A-REI.6 Use tables, graphs, or algebraic methods (substitution and elimination) to find approximate or exact solutions to systems of linear equations and interpret solutions in terms of a context.	Math 1 M2 Topic B: Systems of Linear Equations in Two Variables

Reasoning with Equations and Inequalities

Represent and solve equations and inequalities graphically.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-REI.10 Understand that the graph of a two variable equation represents the set of all solutions to the equation.	Math 1 M2 Lesson 1: Solution Sets of Linear Equations in Two Variables Math 1 M2 Lesson 2: Graphing Linear Equations in Two Variables

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.A-REI.11 Build an understanding of why the x-coordinates of the points where the graphs of two linear, exponential, and/or quadratic equations $y = f(x)$ and $y = g(x)$ intersect are the solutions of the equation $f(x) = g(x)$ and approximate solutions using graphing technology or successive approximations with a table of values.	Math 1 M3 Lesson 10: Using Graphs to Solve Equations Math 1 M5 Lesson 11: Solving Equations Containing Exponential Expressions Math 1 M5 Lesson 19: Comparing Growth of Functions *Supplemental material is necessary to address quadratic equations for this standard.*
NC.M1.A-REI.12 Represent the solutions of a linear inequality or a system of linear inequalities graphically as a region of the plane.	Math 1 M2 Lesson 13: Solution Sets of Linear Inequalities in Two Variables Math 1 M2 Lesson 14: Graphing Linear Inequalities in Two Variables Math 1 M2 Lesson 16: Solution Sets of Systems of Linear Inequalities Math 1 M2 Lesson 17: Graphing Solution Sets of Systems of Linear Inequalities Math 1 M2 Lesson 18: Applications of Systems of Linear Inequalities Math 1 M6 Lesson 10: Designing a Fundraiser

Interpreting Functions

Understand the concept of a function and use function notation.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.F-IF.1 Build an understanding that a function from one set (called the domain) to another set (called the range) assigns to each element of the domain exactly one element of the range by recognizing that: • If f is a function and x is an element of its domain, then $f(x)$ denotes the output of f corresponding to the input x. • The graph of f is the graph of the equation $y = f(x)$.	Math 1 M3 Topic A: Functions and Their Graphs
NC.M1.F-IF.2 Use function notation to evaluate linear, quadratic, and exponential functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	Math 1 M3 Lesson 2: Interpreting and Using Function Notation Math 1 M3 Lesson 3: Representing, Naming, and Evaluating Functions Math 1 M3 Lesson 7: Representations of Functions Math 1 M5 Lesson 1: Exploring Patterns Math 1 M5 Lesson 2: The Recursive Challenge Math 1 M5 Lesson 3: Recursive Formulas for Sequences Math 1 M5 Lesson 4: Explicit Formulas for Sequences *Supplemental material is necessary to address quadratic functions for this standard.*

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.F-IF.3 Recognize that recursively and explicitly defined sequences are functions whose domain is a subset of the integers, the terms of an arithmetic sequence are a subset of the range of a linear function, and the terms of a geometric sequence are a subset of the range of an exponential function.	Math 1 M5 Topic A: Arithmetic and Geometric Sequences Math 1 M5 Lesson 7: Exponential Functions Math 1 M5 Lesson 8: Graphing Exponential Functions

Interpreting Functions

Interpret functions that arise in applications in terms of the context.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.F-IF.4 Interpret key features of graphs, tables, and verbal descriptions in context to describe functions that arise in applications relating two quantities, including: intercepts; intervals where the function is increasing, decreasing, positive, or negative; and maximums and minimums.	Math 1 M3 Lesson 8: Exploring Key Features of a Function and Its Graph Math 1 M3 Lesson 9: Identifying Key Features of a Function and Its Graph Math 1 M3 Lesson 11: Comparing Functions Math 1 M3 Lesson 12: Sketching Graphs of Functions from Verbal Descriptions Math 1 M3 Lesson 13: Modeling Elevation as a Function of Time Math 1 M3 Lesson 15: Mars Curiosity Rover
NC.M1.F-IF.5 Interpret a function in terms of the context by relating its domain and range to its graph and, where applicable, to the quantitative relationship it describes.	Math 1 M3 Lesson 4: The Graph of a Function Math 1 M3 Lesson 13: Modeling Elevation as a Function of Time

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.F-IF.6 Calculate and interpret the average rate of change over a specified interval for a function presented numerically, graphically, and/or symbolically.	Math 1 M5 Lesson 17: Average Rate of Change Math 1 M5 Lesson 18: Analyzing Exponential Growth Math 1 M5 Lesson 19: Comparing Growth of Functions Math 1 M5 Lesson 23: Modeling an Invasive Species Population

Interpreting Functions

Analyze functions using different representations.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.F-IF.7 Analyze linear, exponential, and quadratic functions by generating different representations, by hand in simple cases and using technology for more complicated cases, to show key features, including: domain and range; rate of change; intercepts; intervals where the function is increasing, decreasing, positive, or negative; maximums and minimums; and end behavior.	Math 1 M3 Lesson 5: The Graph of the Equation $y = f(x)$ Math 1 M3 Lesson 6: Using Pseudocode to Compare Graphs of Functions and Graphs of Equations Math 1 M3 Lesson 7: Representations of Functions Math 1 M5 Lesson 8: Graphing Exponential Functions Math 1 M5 Lesson 9: Using Transformations to Graph Exponential Functions (Bases Greater Than 1) Math 1 M5 Lesson 10: Using Transformations to Graph Exponential Functions (Bases Between 0 and 1) *Supplemental material is necessary to address quadratic functions for this standard.*
NC.M1.F-IF.8 Use equivalent expressions to reveal and explain different properties of a function.	*Supplemental material is necessary to address this standard.*

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.F-IF.8a Rewrite a quadratic function to reveal and explain different key features of the function.	*Supplemental material is necessary to address this standard.*
NC.M1.F-IF.8b Interpret and explain growth and decay rates for an exponential function.	Math 1 M5 Lesson 14: Exponential Growth Math 1 M5 Lesson 15: Exponential Decay
NC.M1.F-IF.9 Compare key features of two functions (linear, quadratic, or exponential) each with a different representation (symbolically, graphically, numerically in tables, or by verbal descriptions).	Math 1 M3 Lesson 11: Comparing Functions *Supplemental material is necessary to address quadratic functions for this standard.*

Building Functions

Build a function that models a relationship between two quantities.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.F-BF.1 Write a function that describes a relationship between two quantities.	Math 1 M6 Lesson 3: Analyzing Paint Splatters Math 1 M6 Lesson 9: Solar System Models
NC.M1.F-BF.1a Build linear and exponential functions, including arithmetic and geometric sequences, given a graph, a description of a relationship, or two ordered pairs (include reading these from a table).	Math 1 M1 Lesson 2: Looking for Patterns Math 1 M5 Topic A: Arithmetic and Geometric Sequences Math 1 M5 Lesson 7: Exponential Functions Math 1 M5 Lesson 12: Writing Equations for Exponential Functions from Tables or Graphs Math 1 M5 Lesson 13: Calculating Interest

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.F-BF.1a *continued*	Math 1 M5: Lesson 14: Exponential Growth Math 1 M5 Lesson 15: Exponential Decay Math 1 M5 Topic D: Linear and Exponential Functions Math 1 M6 Lesson 3: Analyzing Paint Splatters Math 1 M6 Lesson 8: The Deal Math 1 M6 Lesson 9: Solar System Models
NC.M1.F-BF.1b Build a function that models a relationship between two quantities by combining linear, exponential, or quadratic functions with addition and subtraction or two linear functions with multiplication.	Math 1 M6 Lesson 8: The Deal *Supplemental material is necessary to address quadratic functions for this standard.*
NC.M1.F-BF.2 Translate between explicit and recursive forms of arithmetic and geometric sequences and use both to model situations.	Math 1 M5 Lesson 5: Arithmetic and Geometric Sequences Math 1 M5 Lesson 6: Representations of Arithmetic and Geometric Sequences Math 1 M6 Lesson 8: The Deal

Linear, Quadratic, and Exponential Models

Construct and compare linear and exponential models and solve problems.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.F-LE.1 Identify situations that can be modeled with linear and exponential functions, and justify the most appropriate model for a situation based on the rate of change over equal intervals.	Math 1 M5 Lesson 13: Calculating Interest Math 1 M5 Lesson 16: Modeling Populations Math 1 M5 Lesson 18: Analyzing Exponential Growth Math 1 M5 Lesson 20: World Population Prediction Math 1 M5 Lesson 21: A Closer Look at Populations Math 1 M5 Lesson 23: Modeling an Invasive Species Population Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data Math 1 M6 Lesson 3: Analyzing Paint Splatters Math 1 M6 Lesson 11: A Vanishing Sea
NC.M1.F-LE.3 Compare the end behavior of linear, exponential, and quadratic functions using graphs and tables to show that a quantity increasing exponentially eventually exceeds a quantity increasing linearly or quadratically.	Math 1 M5 Lesson 19: Comparing Growth of Functions *Supplemental material is necessary to address quadratic functions for this standard.*

Linear, Quadratic, and Exponential Models

Interpret expressions for functions in terms of the situation they model.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.F-LE.5 Interpret the parameters a and b in a linear function $f(x) = ax + b$ or an exponential function $g(x) = ab^x$ in terms of a context.	Math 1 M5 Lesson 16: Modeling Populations Math 1 M5 Lesson 18: Analyzing Exponential Growth Math 1 M5 Lesson 22: Modeling the Temperature of Objects Cooling Over Time Math 1 M5 Lesson 23: Modeling an Invasive Species Population

Expressing Geometric Properties with Equations

Use coordinates to prove simple geometric theorems algebraically.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.G-GPE.4 Use coordinates to solve geometric problems involving polygons algebraically. • Use coordinates to compute perimeters of polygons and areas of triangles and rectangles. • Use coordinates to verify algebraically that a given set of points produces a particular type of triangle or quadrilateral.	Math 1 M2 Lesson 4: Proving Conditional Statements Math 1 M2 Lesson 5: Proving Biconditional Statements Math 1 M2 Lesson 6: Proving the Parallel Criterion Math 1 M2 Lesson 19: The Distance Formula Math 1 M2 Lesson 20: Proving Geometric Theorems Algebraically Math 1 M2: Lesson 21: Using Coordinates to Determine Perimeters and Areas of Figures Math 1 M6: Lesson 11: A Vanishing Sea

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.G-GPE.5 Use coordinates to prove the slope criteria for parallel and perpendicular lines and use them to solve problems. • Determine if two lines are parallel, perpendicular, or neither. • Find the equation of a line parallel or perpendicular to a given line that passes through a given point.	Math 1 M2 Lesson 6: Proving the Parallel Criterion Math 1 M2 Lesson 7: Equations of Parallel and Perpendicular Lines Math 1 M2 Lesson 20: Proving Geometric Theorems Algebraically Math 1 M4 Lesson 5: Proving the Perpendicular Criterion
NC.M1.G-GPE.6 Use coordinates to find the midpoint or endpoint of a line segment.	*Supplemental material is necessary to address this standard.*

Interpreting Categorical and Quantitative Data

Summarize, represent, and interpret data on a single count or measurement variable.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.S-ID.1 Use technology to represent data with plots on the real number line (histograms, and box plots).	Math 1 M1 Lesson 17: Distributions and Their Shapes Math 1 M1 Lesson 18: Describing the Center of a Distribution Math 1 M1 Lesson 19: Using Center to Compare Data Distributions Math 1 M6 Lesson 1: Using Data to Edit Digital Photography

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.S-ID.2 Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets. Interpret differences in shape, center, and spread in the context of the data sets.	Math 1 M1 Topic D: Univariate Data Math 1 M6 Lesson 1: Using Data to Edit Digital Photography
NC.M1.S-ID.3 Examine the effects of extreme data points (outliers) on shape, center, and/or spread.	Math 1 M1 Topic D: Univariate Data

Interpreting Categorical and Quantitative Data

Summarize, represent, and interpret data on two categorical and quantitative variables.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.S-ID.6 Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.	Math 1 M2 Lesson 22: Relationships Between Quantitative Variables Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.S-ID.6a Fit a least squares regression line to linear data using technology. Use the fitted function to solve problems.	Math 1 M2 Lesson 23: Using Lines to Model Bivariate Quantitative Data Math 1 M2 Lesson 24: Modeling Relationships with a Line Math 1 M2 Lesson 25: Calculating and Analyzing Residuals Math 1 M2 Lesson 27: Interpreting Correlation Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data Math 1 M6 Lesson 3: Analyzing Paint Splatters Math 1 M6 Lesson 11: A Vanishing Sea
NC.M1.S-ID.6b Assess the fit of a linear function by analyzing residuals.	Math 1 M2 Lesson 25: Calculating and Analyzing Residuals Math 1 M2 Lesson 26: Analyzing Residuals Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data Math 1 M6 Lesson 3: Analyzing Paint Splatters
NC.M1.S-ID.6c Fit a function to exponential data using technology. Use the fitted function to solve problems.	Math 1 M6 Lesson 2: Using Residual Plots to Select Models for Data Math 1 M6 Lesson 3: Analyzing Paint Splatters Math 1 M6 Lesson 11: A Vanishing Sea

Interpreting Categorical and Quantitative Data

Interpret linear models.

North Carolina Standard Course of Study–Mathematics	Aligned Components of *Eureka Math²*
NC.M1.S-ID.7 Interpret in context the rate of change and the intercept of a linear model. Use the linear model to interpolate and extrapolate predicted values. Assess the validity of a predicted value.	Math 1 M2 Lesson 23: Using Lines to Model Bivariate Quantitative Data Math 1 M2 Lesson 24: Modeling Relationships with a Line Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data
NC.M1.S-ID.8 Analyze patterns and describe relationships between two variables in context. Using technology, determine the correlation coefficient of bivariate data and interpret it as a measure of the strength and direction of a linear relationship. Use a scatter plot, correlation coefficient, and a residual plot to determine the appropriateness of using a linear function to model a relationship between two variables.	Math 1 M2 Lesson 27: Interpreting Correlation Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data
NC.M1.S-ID.9 Distinguish between association and causation.	Math 1 M2 Lesson 27: Interpreting Correlation Math 1 M2 Lesson 28: Analyzing Bivariate Quantitative Data