EUREKA MATH².

7–8 | Nebraska's College and Career Ready Standards for Mathematics Correlation to *Eureka Math*^{2®}

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 Math*^{2®}, 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 Math*² 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* and moments that have been delighting students and teachers for years, it also boasts these exciting new features:

Teachability

*Eureka Math*² employs streamlined materials that allow teachers to plan more efficiently and focus their energy on delivering highquality 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 Math*² 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 Math*² 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 Math*² 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.

Nebraska Mathematical Processes	Aligned Components of Eureka Math ²
MP.1	Lessons in every module engage students in mathematical processes.
Make sense of problems and persevere in solving them.	These are indicated in margin notes included with every lesson.
MP.2	Lessons in every module engage students in mathematical processes.
Reason quantitatively and abstractly and consider the reasoning of others.	These are indicated in margin notes included with every lesson.
MP.3	Lessons in every module engage students in mathematical processes.
Create and use representations to organize, record, and communicate mathematical ideas.	These are indicated in margin notes included with every lesson.
MP.4	Lessons in every module engage students in mathematical processes.
Analyze mathematical relationships to connect mathematical ideas.	These are indicated in margin notes included with every lesson.
MP.5 Explain and justify mathematical ideas using precise mathematical language in written or oral communication.	Lessons in every module engage students in mathematical processes. These are indicated in margin notes included with every lesson.

Number: Students will solve problems and reason with number concepts using multiple representations, make connections within math and across disciplines, and communicate their ideas. 7.N.2 Operations: Students will compute with rational numbers accurately.

Nebraska's College and Career Ready Standards for Mathematics

Aligned Components of Eureka Math²

7.N.2.a Add, subtract, multiply, and divide rational numbers (e.g., positive and negative fractions, decimals, and integers).	 7-8 M1 Topic A: Add and Subtract Rational Numbers 7-8 M1 Lesson 6: Multiplying Integers and Rational Numbers 7-8 M1 Lesson 7: Exponential Expressions and Relating Multiplication to Division 7-8 M1 Lesson 8: Dividing Integers and Rational Numbers
7.N.2.b Apply properties of operations (commutative, associative, distributive, identity, inverse, zero) as strategies for problem solving with rational numbers.	7-8 M1 Topic A: Add and Subtract Rational Numbers 7-8 M1 Topic B: Multiply and Divide Rational Numbers

Number: Students will solve problems and reason with number concepts using multiple representations, make connections within math and across disciplines, and communicate their ideas.

8.N.1 Numeric Relationships: Students will demonstrate, represent, and show relationships among real numbers within the base-ten number system.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of Eureka Math ²
8.N.1.a	7-8 M1 Lesson 22: Rational and Irrational Numbers
Determine subsets of numbers as natural, whole, integer, rational, irrational, or real based on the definitions of these sets of numbers.	7-8 M1 Lesson 23: Revisiting Equations with Squares and Cubes Supplemental material is necessary to address all the subsets of real numbers.

Standards for Mathematics	Aligned Components of Eureka Math ²
8.N.1.b	7-8 M1 Lesson 10: Large and Small Positive Numbers
Represent numbers with positive and negative exponents and in scientific notation.	7-8 M1 Lesson 14: Writing Very Large and Very Small Numbers in Scientific Notation
	7-8 M1 Lesson 15: Operations with Numbers Written in Scientific Notation
	7-8 M1 Lesson 16: Applications with Numbers Written in Scientific Notation
	7-8 M1 Lesson 17: Get to the Point
8.N.1.c	7-8 M1 Lesson 22: Rational and Irrational Numbers
Describe the difference between a rational and irrational number.	7–8 M1 Lesson 23: Revisiting Equations with Squares and Cubes
8.N.1.d	7-8 M1 Lesson 20: Using the Pythagorean Theorem
Approximate, compare, and order real numbers, both rational and irrational, and locate them on the number line.	7-8 M1 Lesson 21: Approximating Values of Roots
	7-8 M1 Lesson 22: Rational and Irrational Numbers

Nebraska's College and Career Ready

Number: Students will solve problems and reason with number concepts using multiple representations, make connections within math and across disciplines, and communicate their ideas.

8.N.2 Operations: Students will compute with exponents and roots.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of Eureka Math ²
8.N.2.a	7-8 M1 Lesson 18: Solving Equations with Squares and Cubes
Evaluate the square roots of perfect squares less than or equal to 400 and cube roots of perfect cubes less than or equal to 125.	7-8 M1 Lesson 19: The Pythagorean Theorem 7-8 M1 Lesson 21: Approximating Values of Roots 7-8 M1 Lesson 23: Revisiting Equations with Squares and Cubes

Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
8.N.2.b	7-8 M1 Lesson 11: Products of Exponential Expressions with Positive Whole-Number Exponents
Simplify numerical expressions involving	7-8 M1 Lesson 12: More Properties of Exponents
integer exponents, square roots, and cube roots (e.g., 4^{-2} is the same as $\frac{1}{16}$).	7-8 M1 Lesson 13: Making Sense of Integer Exponents
	Supplemental material is necessary to address simplifying numerical expressions involving square roots and cube roots.
8.N.2.c	6 M3 Lesson 7: Absolute Value
Evaluate numerical expressions involving absolute value.	
8.N.2.d	7-8 M1 Lesson 15: Operations with Numbers Written in Scientific Notation
Multiply and divide numbers using scientific notation.	7-8 M1 Lesson 16: Applications with Numbers Written in Scientific Notation
	7-8 M1 Lesson 17: Get to the Point

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Ratios and Proportions: Students will understand ratio concepts and use ratio reasoning to solve problems.

7.R.1 Proportional Relationships: Students will understand the concept of proportions, use language to describe the relationship between two quantities, and use proportions to solve authentic situations.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
7.R.1.a	7-8 M2 Lesson 12: An Experiment with Ratios and Rates
Decide whether two quantities are in a proportional relationship (e.g., by testing for equivalent ratios in a table).	 7-8 M2 Lesson 13: Exploring Tables of Proportional Relationships 7-8 M2 Lesson 14: Exploring Graphs of Proportional Relationships 7-8 M2 Lesson 19: Proportional Reasoning and Percents

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Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
7.R.1.b	7-8 M2 Lesson 19: Proportional Reasoning and Percents
Represent and solve authentic problems with proportions.	7-8 M2 Lesson 20: Commissions, Fees, and Taxes
	7-8 M2 Lesson 21: Discount, Markup, Sales Tax, and Tip
7.R.1.c	7-8 M2 Topic D: Percents and Proportional Relationships
Use proportional relationships to solve authentic percent problems (e.g., percent change, sales tax, mark-up, discount, tip).	
7.R.1.d	7-8 M3 Topic D: Scale Drawings and Dilations
Solve authentic problems involving scale drawings.	

Nebraska's College and Career Peady

Algebra: Students will solve problems and reason with algebra using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.A.1 Algebraic Processes: Students will apply the operational properties when evaluating expressions, and solving equations and inequalities.

Nebraska's College and Career Ready **Standards for Mathematics**

7.Α.1.α	7-8 M2 Lesson 2: Using Equivalent Expressions to Solve Equations
Use factoring and properties of operations to create equivalent algebraic expressions (e.g., $2x + 6 = 2(x + 3)$).	7-8 M2 Lesson 21: Discount, Markup, Sales Tax, and Tip 7-8 M2 Lesson 22: Percent Increase and Percent Decrease

Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
7.A.1.b	6 M4 Lesson 8: Algebraic Expressions with Addition, Subtraction, Multiplication, and Division
Given the value of the variable(s),	6 M4 Lesson 11: Modeling Real-World Situations with Expressions
evaluate algebraic expressions, which may include absolute value.	6 M4 Lesson 12: Applying Properties to Multiplication and Division Expressions
which may include absolute value.	6 M4 Lesson 17: Equations and Solutions
	6 M5 Lesson 1: The Area of a Parallelogram
	6 M5 Lesson 3: The Area of a Triangle
	6 M5 Lesson 12: From Nets to Surface Area
	6 M5 Lesson 13: Surface Area in Real-World Situations
	6 M5 Lesson 14: Designing a Box
	6 M5 Lesson 16: Applying Volume Formulas
	Supplemental material is necessary to fully address evaluating algebraic expressions with absolute value.
7.A.1.c	6 M4 Lesson 17: Equations and Solutions
Solve one- and two-step equations	6 M4 Lesson 19: Solving Equations with Addition and Subtraction
involving rational numbers.	6 M4 Lesson 20: Solving Equations with Multiplication and Division
	6 M4 Lesson 21: Solving Problems with Equations
	7–8 M2 Lesson 1: Finding Unknown Angle Measures
	7–8 M2 Lesson 3: Solving Equations
	7-8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities
7.A.1.d	7–8 M2 Lesson 1: Finding Unknown Angle Measures
Solve equations using the distributive	7–8 M2 Lesson 3: Solving Equations
property and combining like terms.	7-8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities

Aligned Components of Eureka Math²

7.A.1.e	6 M4 Lesson 18: Inequalities and Solutions
Solve one- and two-step inequalities involving integers and represent solutions on a number line.	7-8 M2 Lesson 4: Using Equations to Solve Inequalities 7-8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities

Algebra: Students will solve problems and reason with algebra using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.A.2 Applications: Students will solve authentic problems with algebraic expressions, equations, and inequalities.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
7.A.2.a	6 M4 Lesson 21: Solving Problems with Equations
Write one- and two-step equations	7-8 M2 Lesson 1: Finding Unknown Angle Measures
involving rational numbers from words, tables, and authentic situations.	7–8 M2 Lesson 3: Solving Equations
tables, and authentic situations.	7-8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities
	7-8 M2 Lesson 15: Relating Representations of Proportional Relationships
	7–8 M2 Lesson 16: Applying Proportional Reasoning
	7-8 M2 Lesson 17: Using Proportional Reasoning to Solve Multi-Step Problems
	7–8 M2 Lesson 18: Handstand Sprint
	Supplemental material is necessary to address writing two-step equations from tables.
7.A.2.b	6 M4 Lesson 18: Inequalities and Solutions
Write one- and two-step inequalities to represent authentic situations involving integers.	7–8 M2 Lesson 5: Solving Problems Involving Equations and Inequalities

Algebra: Students will solve problems and reason with algebra using multiple representations, make connections within math and across disciplines, and communicate their ideas.

8.A.1 Algebraic Processes: Students will apply the operational properties when evaluating expressions and solving equations.

Nebraska's College and Career Ready Standards for Mathematics

8.A.1.a Describe single variable equations as having one solution, no solution, or infinitely many solutions.	 7-8 M2 Lesson 8: Solving Equations with Rational Coefficients 7-8 M2 Lesson 9: Linear Equations with More Than One Solution 7-8 M2 Lesson 10: Another Possible Number of Solutions
8.A.1.b Solve multi-step equations involving rational numbers with the same variable appearing on both sides of the equation.	7-8 M2 Topic B: Multi-Step Equations and Their Solutions
8.A.1.c Solve equations of the form $x^2 = k \ (k \le 400)$ and $x^3 = k \ (k \le 125)$, where k is a positive rational number, using square root and cube root symbols.	 7-8 M1 Lesson 18: Solving Equations with Squares and Cubes 7-8 M1 Lesson 19: The Pythagorean Theorem 7-8 M1 Lesson 20: Using the Pythagorean Theorem 7-8 M1 Lesson 21: Approximating Values of Roots 7-8 M1 Lesson 23: Revisiting Equations with Squares and Cubes

Algebra: Students will solve problems and reason with algebra using multiple representations, make connections within math and across disciplines, and communicate their ideas.

8.A.2 Applications: Students will solve authentic problems involving multi-step equations.

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Standards for Mathematics	

Aligned Components of Eureka Math²

8.A.2.a Write multi-step single variable equations from words, tables, and authentic situations.	7-8 M2 Topic B: Multi-Step Equations and Their Solutions Supplemental material is necessary to address writing multi-step single variable equations from tables.
8.A.2.b Determine and describe the rate of change for given situations through the use of tables and graphs.	 7-8 M2 Lesson 13: Exploring Tables of Proportional Relationships 7-8 M2 Lesson 14: Exploring Graphs of Proportional Relationships 7-8 M2 Lesson 15: Relating Representations of Proportional Relationships 7-8 M2 Lesson 16: Applying Proportional Reasoning
8.A.2.c Graph proportional relationships and interpret the rate of change.	7–8 M2 Lesson 14: Exploring Graphs of Proportional Relationships 7–8 M2 Lesson 15: Relating Representations of Proportional Relationships

Geometry: Students will solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.G.1 Attributes: Students will identify angle relationships and apply properties to determine angle measures.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
7.G.1.a	7–8 M2 Lesson 1: Finding Unknown Angle Measures
Apply properties of adjacent, complementary, supplementary, linear pair, and vertical angles to find missing angle measures.	7-8 M2 Lesson 2: Using Equivalent Expressions to Solve Equations 7-8 M2 Lesson 7: Solving Multi-Step Equations

Geometry: Students will solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.G.2 Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.

Nebraska's College and Career Ready Standards for Mathematics

Aligned Components of Eureka Math²

7.G.2.a Draw polygons in the coordinate plane given coordinates for the vertices.	6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane 6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane
7.G.2.b Calculate vertical and horizontal distances in the coordinate plane to find perimeter and area of rectangles.	6 M5 Lesson 5: Perimeter and Area in the Coordinate Plane 6 M5 Lesson 6: Problem Solving with Area in the Coordinate Plane

Geometry: Students will solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.G.3 Measurement: Students will identify geometric attributes that create two- and three-dimensional shapes in order to perform measurements and apply formulas to find area and volume.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
7.G.3.a	7 M4 Lesson 14: Composite Figures with Circular Regions
Solve authentic problems involving perimeter and area of composite shapes made from triangles and quadrilaterals.	7 M4 Lesson 16: Solving Area Problems by Composition and Decomposition 7-8 M3 Lesson 6: Watering a Lawn 7-8 M5 Lesson 11: Surface Areas of Prisms and Pyramids

Standards for Mathematics	Aligned Components of Eureka Math ²
7.G.3.b	7–8 M5 Lesson 11: Surface Areas of Prisms and Pyramids
Determine surface area and volume	7–8 M5 Lesson 16: Volume of Prisms
of composite rectangular and triangular prisms.	7–8 M5 Lesson 18: Designing a Fish Tank
	7-8 M5 Lesson 21: Volume of Composite Solids
7.G.3.c	7-8 M3 Lesson 3: Exploring and Constructing Circles
Determine the area and circumference	7-8 M3 Lesson 4: Area and Circumference of a Circle
of circles both on and off the coordinate plane using 3.14 for the value of Pi.	7-8 M3 Lesson 5: Area and Circumference of Circular Regions
plane using 5.14 for the value of 11.	7-8 M3 Lesson 6: Watering a Lawn
	Supplemental material is necessary to address determining the circumference of circles on the coordinate plane.

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Geometry: Students will solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas.

8.G.1 Attributes: Students will apply properties of angle relationships in triangles and with lines to determine angle measures.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of Eureka Math ²
8.G.1.a	7-8 M3 Lesson 13: Angle Sum of a Triangle
Determine and use the relationships of the interior angles of a triangle to solve for missing measures.	7-8 M3 Lesson 14: Exterior Angles of Triangles

Nebraska's College and Career Ready
Standards for MathematicsAligned Components of Eureka Math28.G.1.b7-8 M3 Lesson 12: Lines Cut by a TransversalIdentify and apply geometric properties
of parallel lines cut by a transversal and
the resulting corresponding same side
interior, alternate interior, and alternate
exterior angles to find missing measures.7-8 M3 Lesson 13: Angle Sum of a Triangle

Geometry: Students will solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas.

8.G.2 Coordinate Geometry: Students will determine location, orientation, and relationships on the coordinate plane.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
8.G.2.a	7-8 M3 Lesson 7: Motions of the Plane
Perform and describe positions and	7-8 M3 Lesson 8: Translations, Reflections, and Rotations
orientations of shapes under single transformations including rotations	7-8 M3 Lesson 9: Rigid Motions on the Coordinate Plane
in multiples of 90 degrees about the	7-8 M3 Lesson 22: Dilations
origin, translations, reflections, and	7-8 M3 Lesson 23: Using Lined Paper to Explore Dilations
dilations on and off the coordinate plane.	7-8 M3 Lesson 24: Figures and Dilations
	7-8 M3 Lesson 25: The Shadowy Hand
	7-8 M3 Lesson 26: Dilations on the Coordinate Plane

Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
8.G.2.b	7-8 M3 Lesson 10: Sequencing the Rigid Motions
Determine if two-dimensional figures are	7-8 M3 Lesson 11: Showing Figures Are Congruent
congruent or similar.	7-8 M3 Lesson 12: Lines Cut by a Transversal
	7–8 M3 Lesson 27: Similar Figures
	7–8 M3 Lesson 28: Exploring Angles in Similar Triangles
8.G.2.c	7-8 M3 Lesson 10: Sequencing the Rigid Motions
Perform and describe positions and	7-8 M3 Lesson 11: Showing Figures Are Congruent
orientations of shapes under a sequence of transformations on and off the coordinate plane.	7-8 M3 Lesson 26: Dilations on the Coordinate Plane

Nebraska's College and Career Peady

Geometry: Students will solve problems and reason with geometry using multiple representations, make connections within math and across disciplines, and communicate their ideas.

8.G.3 Measurement: Students will reason with formulas and context to determine and compare length, area, and volume.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
8.G.3.a	7-8 M1 Lesson 19: The Pythagorean Theorem
Explain a model of the Pythagorean Theorem.	7-8 M3 Lesson 15: Proving the Pythagorean Theorem
8.G.3.b	7-8 M1 Lesson 19: The Pythagorean Theorem
Apply the Pythagorean Theorem to find	7-8 M3 Lesson 16: Proving the Converse of the Pythagorean Theorem
side lengths of triangles and to solve authentic problems.	7-8 M3 Lesson 17: Applications of the Pythagorean Theorem
dutientic problems.	7-8 M3 Lesson 29: Using Similar Figures to Find Unknown Side Lengths
	7–8 M5 Lesson 19: Volumes of Pyramids and Cones

Aligned Components of Eureka Math²

8.G.3.c	7-8 M3 Lesson 17: Applications of the Pythagorean Theorem
Find the distance between any two points on the coordinate plane using the Pythagorean Theorem.	
8.G.3.d	7–8 M5 Topic D: Volume

Data: Students will solve problems and reason with data/probability using multiple representations, make connections within math and across disciplines, and communicate their ideas.

7.D.1 Data Collection and Statistical Methods: Students will formulate statistical investigative questions, collect data, and organize data.

Nebraska's College and Career Ready Standards for Mathematics

7.D.1.a	6 M6 Lesson 17: Developing a Statistical Project
Create an investigative question and collect data.	6 M6 Lesson 22: Presenting Statistical Projects
7.D.1.b	7–8 M6 Topic C: Random Sampling
Generate conclusions about a population based on a random sample.	
7.D.1.c	Supplemental material is necessary to address this standard.
Identify and critique biases in various data representations.	

Data: Students will solve problems and reason with data/probability using multiple representations, make connections within math and across disciplines, and communicate their ideas. 7.D.3 Probability: Students will interpret and apply concepts of probability.

Nebraska's College and Career Ready Standards for Mathematics

Aligned Components of Eureka Math²

7.D.3.a Find theoretical and experimental probabilities for compound independent and dependent events.	 7-8 M6 Lesson 4: Multistage Experiments 7-8 M6 Lesson 8: Probability Simulations 7-8 M6 Lesson 9: Simulations with Random Number Tables Supplemental material is necessary to address independent and dependent events.
7.D.3.b Identify complementary events and calculate their probabilities.	7-8 M6 Lesson 5: Outcomes That Are Not Equally Likely Supplemental material is necessary to address the term complementary events.

Data: Students will solve problems and reason with data/probability using multiple representations, make connections within math and across disciplines, and communicate their ideas.

8.D.2 Analyze Data and Interpret Results: Students will represent and analyze the data and interpret the results.

Nebraska's College and Career Ready Standards for Mathematics	Aligned Components of <i>Eureka Math</i> ²
8.D.2.a	7-8 M6 Lesson 18: Scatter Plots
Represent and interpret bivariate data (e.g., ordered pairs) using scatter plots.	7–8 M6 Lesson 19: Patterns in Scatter Plots

Standards for Mathematics	Alighed Components of Eureka Math ²
8.D.2.b	7–8 M6 Lesson 18: Scatter Plots
Describe patterns such as positive or negative association, linear or nonlinear association, clustering, and outliers when bivariate data is represented on a coordinate plane.	7–8 M6 Lesson 19: Patterns in Scatter Plots
8.D.2.c	7-8 M6 Lesson 20: Informally Fitting a Line to Data
Draw an informal line of best fit based on the closeness of the data points to the line.	7–8 M6 Lesson 21: Linear Models
8.D.2.d	7-8 M6 Lesson 20: Informally Fitting a Line to Data
Use a linear model to make predictions and interpret the rate of change and y-intercept in context.	7-8 M6 Lesson 21: Linear Models