
Grade 7 | North Carolina Standard Course of Study–Mathematics (2017) Correlation to *Eureka Math*²® (2027)

*Eureka Math*² is a research-proven math curriculum that empowers teachers to center instructional techniques on student success. Teachers can foster more “aha!” learning moments by providing the support needed for all learners to build a more confident math mindset.

This *Eureka Math*² edition builds on a strong foundation of effective instruction. It provides teachers with guidance on delivering rigorous instruction that honors student choice and encourages confident problem-solving.

*Eureka Math*² carefully sequences mathematical content to maximize vertical alignment from kindergarten through high school. This kind of sequencing has proven to be essential in students’ mastery of math.

Teachability

*Eureka Math*² 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 into the teacher materials.

Accessibility

*Eureka Math*² incorporates Universal Design for Learning (UDL) principles so all learners can access the mathematics and take on challenging math concepts. UDL, Differentiation, and Multilingual Learner supports are built into the instructional design and are clearly identified in the *Teach* book.

The curriculum also carries a focus on readability. By eliminating unnecessary words and using 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.

Math Confidence

*Eureka Math*² fosters a classroom culture of learning by encouraging student-led discourse and cognitive engagement that results in confident learners. By leveraging consistent models, routines, and progressions, teachers can remove barriers and allow all students an avenue to success. Within the digital platform, each grade includes wordless videos and digital interactives that spark students’ curiosity and help them make conceptual connections. Using the *Learn* books, students wonder, explore, and make sense of mathematics, which helps them develop a strong, positive mathematical identity.

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

Ratio and Proportional Relationships

Analyze proportional relationships and use them to solve real-world and mathematical problems.

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<p>NC.7.RP.1</p> <p>Compute unit rates associated with ratios of fractions to solve real-world and mathematical problems.</p>	<p>7 M1 Lesson 1: An Experiment with Ratios and Rates</p> <p>7 M1 Lesson 2: Exploring Tables of Proportional Relationships</p> <p>7 M1 Lesson 3: Identifying Proportional Relationships in Tables</p>
<p>NC.7.RP.2</p> <p>Recognize and represent proportional relationships between quantities.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>NC.7.RP.2.a</p> <p>Understand that a proportion is a relationship of equality between ratios.</p> <ul style="list-style-type: none"> • Represent proportional relationships using tables and graphs. • Recognize whether ratios are in a proportional relationship using tables and graphs. • Compare two different proportional relationships using tables, graphs, equations, and verbal descriptions. 	<p>7 M1 Lesson 1: An Experiment with Ratios and Rates</p> <p>7 M1 Lesson 2: Exploring Tables of Proportional Relationships</p> <p>7 M1 Lesson 3: Identifying Proportional Relationships in Tables</p> <p>7 M1 Lesson 4: Exploring Graphs of Proportional Relationships</p> <p>7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships</p> <p>7 M1 Lesson 6: Identifying Proportional Relationships in Written Descriptions</p> <p>7 M1 Lesson 14: Extreme Bicycles</p>

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<p>NC.7.RP.2.b</p> <p>Identify the unit rate (constant of proportionality) within two quantities in a proportional relationship using tables, graphs, equations, and verbal descriptions.</p>	<p>7 M1 Lesson 4: Exploring Graphs of Proportional Relationships</p> <p>7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships</p> <p>7 M1 Lesson 6: Identifying Proportional Relationships in Written Descriptions</p> <p>7 M1 Lesson 8: Relating Representations of Proportional Relationships</p> <p>7 M1 Lesson 9: Comparing Proportional Relationships</p> <p>7 M1 Lesson 11: Constant Rates</p> <p>7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1</p> <p>7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2</p> <p>7 M1 Lesson 16: Using a Scale Factor</p> <p>7 M1 Lesson 18: Relating Areas of Scale Drawings</p>
<p>NC.7.RP.2.c</p> <p>Create equations and graphs to represent proportional relationships.</p>	<p>7 M1 Lesson 2: Exploring Tables of Proportional Relationships</p> <p>7 M1 Lesson 3: Identifying Proportional Relationships in Tables</p> <p>7 M1 Lesson 8: Relating Representations of Proportional Relationships</p> <p>7 M1 Lesson 10: Applying Proportional Reasoning</p> <p>7 M1 Lesson 11: Constant Rates</p> <p>7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1</p> <p>7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2</p> <p>7 M5 Lesson 1: Proportionality and Scale Factor</p> <p>7 M5 Lesson 4: Proportion and Percent</p> <p>7 M5 Lesson 5: Common Denominators or Common Numerators</p>

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<p>NC.7.RP.2.d</p> <p>Use a graphical representation of a proportional relationship in context to:</p> <ul style="list-style-type: none"> • Explain the meaning of any point (x, y). • Explain the meaning of $(0, 0)$ and why it is included. • Understand that the y-coordinate of the ordered pair $(1, r)$ corresponds to the unit rate and explain its meaning. 	<p>7 M1 Lesson 4: Exploring Graphs of Proportional Relationships</p> <p>7 M1 Lesson 5: Analyzing Graphs of Proportional Relationships</p> <p>7 M1 Lesson 9: Comparing Proportional Relationships</p>
<p>NC.7.RP.3</p> <p>Use scale factors and unit rates in proportional relationships to solve ratio and percent problems.</p>	<p>7 M1 Lesson 7: Handstand Sprint</p> <p>7 M1 Lesson 10: Applying Proportional Reasoning</p> <p>7 M1 Lesson 11: Constant Rates</p> <p>7 M1 Lesson 12: Multi-Step Ratio Problems, Part 1</p> <p>7 M1 Lesson 13: Multi-Step Ratio Problems, Part 2</p> <p>7 M5 Lesson 2: Racing for Percents</p> <p>7 M5 Lesson 3: Percent as a Rate per 100</p> <p>7 M5 Lesson 4: Proportion and Percent</p> <p>7 M5 Lesson 5: Common Denominators or Common Numerators</p> <p>7 M5 Lesson 6: Finding Commission</p> <p>7 M5 Lesson 7: Finding Discounts</p> <p>7 M5 Lesson 8: Determining Fees</p> <p>7 M5 Lesson 9: Tax as a Fee</p> <p>7 M5 Lesson 10: Percent Increase</p> <p>7 M5 Lesson 11: Percent Decrease</p> <p>7 M5 Lesson 12: More Discounts</p>

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NC.7.RP.3 <i>continued</i>	
	7 M5 Lesson 13: What Is the Best Deal?
	7 M5 Lesson 15: Tips and Taxes
	7 M5 Lesson 16: Markups and Discounts
	7 M5 Lesson 17: Simple Interest and Proportionality
	7 M5 Lesson 18: Simple Interest—Solving for Unknown Values
	7 M5 Lesson 19: Applying Percent Error
	7 M5 Lesson 20: Making Money, Day 1
	7 M5 Lesson 21: Making Money, Day 2
	7 M5 Lesson 22: Making Mixtures
	7 M5 Lesson 23: Percents of Percents

The Number System

Apply and extend previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers.

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<p>NC.7.NS.1</p> <p>Apply and extend previous understandings of addition and subtraction to add and subtract rational numbers, using the properties of operations, and describing real-world contexts using sums and differences.</p>	<p>7 M2 Lesson 2: Adding Integers</p> <p>7 M2 Lesson 3: Adding Integers Efficiently</p> <p>7 M2 Lesson 4: KAKOOMA[®]</p> <p>7 M2 Lesson 5: Decomposing Rational Numbers to Make Addition More Efficient</p> <p>7 M2 Lesson 6: Adding Rational Numbers</p> <p>7 M2 Lesson 8: Subtracting Integers, Part 1</p> <p>7 M2 Lesson 9: Subtracting Integers, Part 2</p> <p>7 M2 Lesson 10: Subtracting Rational Numbers, Part 1</p> <p>7 M2 Lesson 11: Subtracting Rational Numbers, Part 2</p> <p>7 M2 Lesson 12: The Integer Game</p> <p>7 M2 Lesson 23: Properties of Operations with Rational Numbers</p> <p>7 M2 Lesson 24: Order of Operations with Rational Numbers</p>
<p>NC.7.NS.2</p> <p>Apply and extend previous understandings of multiplication and division.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>NC.7.NS.2.a</p> <p>Understand that a rational number is any number that can be written as a quotient of integers with a non-zero divisor.</p>	<p>7 M2 Lesson 18: Understanding Negative Divisors</p> <p>7 M2 Lesson 21: Comparing and Ordering Rational Numbers</p>

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<p>NC.7.NS.2.b</p> <p>Apply properties of operations as strategies, including the standard algorithms, to multiply and divide rational numbers and describe the product and quotient in real-world contexts.</p>	<p>7 M2 Lesson 13: Understanding Multiples of Negative Numbers</p> <p>7 M2 Lesson 14: Understanding the Product of Two Negative Numbers</p> <p>7 M2 Lesson 15: Multiplying Rational Numbers</p> <p>7 M2 Lesson 16: Exponential Expressions with Rational Numbers</p> <p>7 M2 Lesson 17: Understanding Negative Dividends</p> <p>7 M2 Lesson 18: Understanding Negative Divisors</p> <p>7 M2 Lesson 22: Multiplication and Division Expressions</p> <p>7 M2 Lesson 24: Order of Operations with Rational Numbers</p>
<p>NC.7.NS.2.c</p> <p>Use division and previous understandings of fractions and decimals.</p> <ul style="list-style-type: none"> • Convert a fraction to a decimal using long division. • Understand that the decimal form of a rational number terminates in 0s or eventually repeats. 	<p>7 M2 Lesson 19: Rational Numbers as Decimals, Part 1</p> <p>7 M2 Lesson 20: Rational Numbers as Decimals, Part 2</p> <p>7 M2 Lesson 21: Comparing and Ordering Rational Numbers</p>
<p>NC.7.NS.3</p> <p>Solve real-world and mathematical problems involving numerical expressions with rational numbers using the four operations.</p>	<p>7 M2 Lesson 25: Writing and Evaluating Expressions with Rational Numbers, Part 1</p> <p>7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p>

Expressions and Equations

Use properties of operations to generate equivalent expressions.

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<p>NC.7.EE.1</p> <p>Apply properties of operations as strategies to:</p> <ul style="list-style-type: none"> • Add, subtract, and expand linear expressions with rational coefficients. • Factor linear expression with an integer GCF. 	<p>7 M3 Lesson 1: Equivalent Expressions</p> <p>7 M3 Lesson 2: The Distributive Property and the Tabular Model</p> <p>7 M3 Lesson 3: The Distributive Property and Combining Like Terms</p> <p>7 M3 Lesson 4: Adding and Subtracting Expressions</p> <p>7 M3 Lesson 5: Factoring Expressions</p> <p>7 M3 Lesson 6: Comparing Expressions</p>
<p>NC.7.EE.2</p> <p>Understand that equivalent expressions can reveal real-world and mathematical relationships. Interpret the meaning of the parts of each expression in context.</p>	<p>7 M3 Lesson 2: The Distributive Property and the Tabular Model</p> <p>7 M3 Lesson 4: Adding and Subtracting Expressions</p> <p>7 M3 Lesson 5: Factoring Expressions</p> <p>7 M3 Lesson 6: Comparing Expressions</p> <p>7 M3 Lesson 9: Solving Equations to Determine Unknown Angle Measures</p> <p>7 M5 Lesson 10: Percent Increase</p> <p>7 M5 Lesson 11: Percent Decrease</p> <p>7 M5 Lesson 12: More Discounts</p> <p>7 M5 Lesson 14: Scale Factor–Percent Increase and Decrease</p> <p>7 M5 Lesson 15: Tips and Taxes</p> <p>7 M5 Lesson 16: Markups and Discounts</p> <p>7 M5 Lesson 23: Percents of Percents</p>

Expressions and Equations

Solve real-world and mathematical problems using numerical and algebraic expressions, equations, and inequalities.

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<p>NC.7.EE.3</p> <p>Solve multi-step real-world and mathematical problems posed with rational numbers in algebraic expressions.</p> <ul style="list-style-type: none"> • Apply properties of operations to calculate with positive and negative numbers in any form. • Convert between different forms of a number and equivalent forms of the expression as appropriate. 	<p>7 M2 Lesson 25: Writing and Evaluating Expressions with Rational Numbers, Part 1</p> <p>7 M2 Lesson 26: Writing and Evaluating Expressions with Rational Numbers, Part 2</p> <p>7 M3 Lesson 9: Solving Equations to Determine Unknown Angle Measures</p> <p>7 M3 Lesson 10: Problem Solving with Unknown Angle Measures</p> <p>7 M3 Lesson 11: Dominoes and Dominoes</p> <p>7 M3 Lesson 16: Using Equations to Solve Rate Problems</p> <p>7 M3 Lesson 17: Using Equations to Solve Problems</p>
<p>NC.7.EE.4</p> <p>Use variables to represent quantities to solve real-world or mathematical problems.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>NC.7.EE.4.a</p> <p>Construct equations to solve problems by reasoning about the quantities.</p> <ul style="list-style-type: none"> • Fluently solve multistep equations with the variable on one side, including those generated by word problems. • Compare an algebraic solution to an arithmetic solution, identifying the sequence of the operations used in each approach. • Interpret the solution in context. 	<p>7 M3 Lesson 11: Dominoes and Dominoes</p> <p>7 M3 Lesson 12: Solving Equations Algebraically and Arithmetically</p> <p>7 M3 Lesson 13: Solving Equations—Puzzles</p> <p>7 M3 Lesson 16: Using Equations to Solve Rate Problems</p> <p>7 M3 Lesson 17: Using Equations to Solve Problems</p>

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<p>NC.7.EE.4.b</p> <p>Construct inequalities to solve problems by reasoning about the quantities.</p> <ul style="list-style-type: none"> • Fluently solve multi-step inequalities with the variable on one side, including those generated by word problems. • Compare an algebraic solution process for equations and an algebraic solution process for inequalities. • Graph the solution set of the inequality and interpret in context. 	<p>7 M3 Lesson 18: Understanding Inequalities and Their Solutions</p> <p>7 M3 Lesson 19: Using Equations to Solve Inequalities</p> <p>7 M3 Lesson 20: Preserving and Reversing</p> <p>7 M3 Lesson 21: Solving Two-Step Inequalities</p> <p>7 M3 Lesson 22: Solving Problems Involving Inequalities</p> <p>7 M3 Lesson 23: Inequalities vs. Equations</p>
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Geometry

Draw, construct, and describe geometrical figures and describe the relationships between them.

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<p>NC.7.G.1</p> <p>Solve problems involving scale drawings of geometric figures by:</p> <ul style="list-style-type: none"> • Building an understanding that angle measures remain the same and side lengths are proportional. • Using a scale factor to compute actual lengths and areas from a scale drawing. • Creating a scale drawing 	<p>7 M1 Lesson 15: Scale Drawings</p> <p>7 M1 Lesson 16: Using a Scale Factor</p> <p>7 M1 Lesson 17: Finding Actual Distances from a Scale Drawing</p> <p>7 M1 Lesson 18: Relating Areas of Scale Drawings</p> <p>7 M1 Lesson 19: Scale and Scale Factor</p> <p>7 M1 Lesson 20: Creating Multiple Scale Drawings</p> <p>7 M5 Lesson 1: Proportionality and Scale Factor</p> <p>7 M5 Lesson 14: Scale Factor–Percent Increase and Decrease</p> <p><i>Supplemental material is needed to address building an understanding that angle measures remain the same when solving problem involving scale drawings of geometric figures.</i></p>
<p>NC.7.G.2</p> <p>Understand the characteristics of angles and side lengths that create a unique triangle, more than one triangle or no triangle. Build triangles from three measures of angles and/or sides.</p>	<p>7 M4 Lesson 1: Sketching, Drawing, and Constructing Geometric Figures</p> <p>7 M4 Lesson 2: Constructing Parallelograms and Other Quadrilaterals</p> <p>7 M4 Lesson 3: Side Lengths of a Triangle</p> <p>7 M4 Lesson 4: Angles of a Triangle</p> <p>7 M4 Lesson 5: Constructing Quadrilaterals and Triangles</p> <p>7 M4 Lesson 6: Unique Triangles</p> <p>7 M4 Lesson 7: Two Angles and One Side</p> <p>7 M4 Lesson 8: Two Sides and One Angle</p> <p>7 M4 Lesson 9: Constructing a Circle</p>

Geometry

Solve real-world and mathematical problems involving angle measure, area, surface area, and volume.

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<p>NC.7.G.4</p> <p>Understand area and circumference of a circle.</p> <ul style="list-style-type: none"> Understand the relationships between the radius, diameter, circumference, and area. Apply the formulas for area and circumference of a circle to solve problems. 	<p>7 M4 Lesson 10: The Outside of a Circle</p> <p>7 M4 Lesson 11: The Inside of a Circle</p> <p>7 M4 Lesson 12: Exploring the Area and Circumference of a Circle</p> <p>7 M4 Lesson 13: Finding Areas of Circular Regions</p> <p>7 M4 Lesson 14: Composite Figures with Circular Regions</p> <p>7 M4 Lesson 15: Watering a Lawn</p>
<p>NC.7.G.5</p> <p>Use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve equations for an unknown angle in a figure.</p>	<p>7 M3 Lesson 7: Angle Relationships and Unknown Angle Measures</p> <p>7 M3 Lesson 8: Strategies to Determine Unknown Angle Measures</p> <p>7 M3 Lesson 10: Problem Solving with Unknown Angle Measures</p>

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<p>NC.7.G.6</p> <p>Solve real-world and mathematical problems involving:</p> <ul style="list-style-type: none"> • Area and perimeter of two-dimensional objects composed of triangles, quadrilaterals, and polygons. • Volume and surface area of pyramids, prisms, or three-dimensional objects composed of cubes, pyramids, and right prisms. 	<p>7 M4 Lesson 14: Composite Figures with Circular Regions</p> <p>7 M4 Lesson 16: Solving Area Problems by Composition and Decomposition</p> <p>7 M4 Lesson 17: Surface Area of Right Rectangular and Right Triangular Prisms</p> <p>7 M4 Lesson 18: Surface Area of Right Prisms</p> <p>7 M4 Lesson 20: Surface Areas of Right Pyramids</p> <p>7 M4 Lesson 21: Surface Area of Other Solids</p> <p>7 M4 Lesson 24: Volume of Prisms</p> <p>7 M4 Lesson 25: Volume of Composite Solids</p> <p>7 M4 Lesson 26: Designing a Fish Tank</p> <p><i>Supplementary material is needed to address solving real-world and mathematical problems involving perimeter of two-dimensional objects.</i></p>
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Statistics and Probability

Use random sampling to draw inferences about a population.

North Carolina Standard Course of Study–Mathematics	Aligned Components of <i>Eureka Math</i> ²
<p>NC.7.SP.1</p> <p>Understand that statistics can be used to gain information about a population by:</p> <ul style="list-style-type: none"> Recognizing that generalizations about a population from a sample are valid only if the sample is representative of that population. Using random sampling to produce representative samples to support valid inferences. 	<p>7 M6 Lesson 11: Populations and Samples</p> <p>7 M6 Lesson 12: Selecting a Sample</p> <p>7 M6 Lesson 13: Variability Between Samples</p> <p>7 M6 Lesson 14: Sampling Variability When Estimating a Population Mean</p>
<p>NC.7.SP.2</p> <p>Generate multiple random samples (or simulated samples) of the same size to gauge the variation in estimates or predictions, and use this data to draw inferences about a population with an unknown characteristic of interest.</p>	<p>7 M6 Lesson 13: Variability Between Samples</p> <p>7 M6 Lesson 14: Sampling Variability When Estimating a Population Mean</p> <p>7 M6 Lesson 15: Sampling Variability and the Effect of Sample Size</p> <p>7 M6 Lesson 16: Sampling Variability When Estimating a Population Proportion</p>

Statistics and Probability

Make informal inferences to compare two populations.

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<p>NC.7.SP.3</p> <p>Recognize the role of variability when comparing two populations.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>

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<p>NC.7.SP.3.a</p> <p>Calculate the measure of variability of a data set and understand that it describes how the values of the data set vary with a single number.</p> <ul style="list-style-type: none"> • Understand the mean absolute deviation of a data set is a measure of variability that describes the average distance that points within a data set are from the mean of the data set. • Understand that the range describes the spread of the entire data set. • Understand that the interquartile range describes the spread of the middle 50% of the data. 	<p>7 M6 Lesson 17: Comparing Sample Means</p> <p>7 M6 Lesson 18: Comparing Population Means</p> <p>7 M6 Lesson 19: Memory Games</p>
<p>NC.7.SP.3.b</p> <p>Informally assess the difference between two data sets by examining the overlap and separation between the graphical representations of two data sets.</p>	<p>7 M6 Lesson 17: Comparing Sample Means</p> <p>7 M6 Lesson 18: Comparing Population Means</p> <p>7 M6 Lesson 19: Memory Games</p>
<p>NC.7.SP.4</p> <p>Use measures of center and measures of variability for numerical data from random samples to draw comparative inferences about two populations.</p>	<p>7 M6 Lesson 17: Comparing Sample Means</p> <p>7 M6 Lesson 18: Comparing Population Means</p> <p>7 M6 Lesson 19: Memory Games</p>

Statistics and Probability

Investigate chance processes and develop, use, and evaluate probability models.

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<p>NC.7.SP.5</p> <p>Understand that the probability of a chance event is a number between 0 and 1 that expresses the likelihood of the event occurring.</p>	<p>7 M6 Lesson 1: What Is Probability?</p>
<p>NC.7.SP.6</p> <p>Collect data to calculate the experimental probability of a chance event, observing its long-run relative frequency. Use this experimental probability to predict the approximate relative frequency.</p>	<p>7 M6 Lesson 2: Empirical Probability</p> <p>7 M6 Lesson 3: Outcomes of Chance Experiments</p> <p>7 M6 Lesson 6: Outcomes That Are Not Equally Likely</p> <p>7 M6 Lesson 8: Picking Blue</p>
<p>NC.7.SP.7</p> <p>Develop a probability model and use it to find probabilities of simple events.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>NC.7.SP.7.a</p> <p>Develop a uniform probability model by assigning equal probability to all outcomes, and use the model to determine probabilities of events.</p>	<p>7 M6 Lesson 4: Theoretical Probability</p> <p>7 M6 Lesson 7: The Law of Large Numbers</p>
<p>NC.7.SP.7.b</p> <p>Develop a probability model (which may not be uniform) by repeatedly performing a chance process and observing frequencies in the data generated.</p>	<p>7 M6 Lesson 7: The Law of Large Numbers</p> <p>7 M6 Lesson 8: Picking Blue</p>

<p style="text-align: center;">North Carolina Standard Course of Study–Mathematics</p>	<p style="text-align: center;">Aligned Components of <i>Eureka Math</i>²</p>
<p>NC.7.SP.7.c</p> <p>Compare theoretical and experimental probabilities from a model to observed frequencies; if the agreement is not good, explain possible sources of the discrepancy.</p>	<p>7 M6 Lesson 7: The Law of Large Numbers</p>
<p>NC.7.SP.8</p> <p>Determine probabilities of compound events using organized lists, tables, tree diagrams, and simulation.</p>	<p><i>This standard is fully addressed by the lessons aligned to its subsections.</i></p>
<p>NC.7.SP.8.a</p> <p>Understand that, just as with simple events, the probability of a compound event is the fraction of outcomes in the sample space for which the compound event occurs.</p>	<p>7 M6 Lesson 5: Multistage Experiments</p>
<p>NC.7.SP.8.b</p> <p>For an event described in everyday language, identify the outcomes in the sample space which compose the event, when the sample space is represented using organized lists, tables, and tree diagrams.</p>	<p>7 M6 Lesson 5: Multistage Experiments</p>
<p>NC.7.SP.8.c</p> <p>Design and use a simulation to generate frequencies for compound events.</p>	<p>7 M6 Lesson 9: Probability Simulations</p> <p>7 M6 Lesson 10: Simulations with Random Number Tables</p>