



Summer Intensive Series

Zearn Summer Intensive Series include a curated set of lessons by grade for rising 1st through 8th graders designed to help students catch-up on grade-level learning, boosted with built-in foundational math support. Summer Intensive Series can be used by students new to Zearn as well as students who have used Zearn throughout the school year. Each Intensive Series can also be used by districts and schools for targeted Spring 2021 intervention programs for students that have missed grade-level work due to COVID-19 learning disruptions. Each Series includes a ~12-week program of priority content. For each grade, additional recommended content is provided should time allow.

Content for Rising 1st Graders			
K Digital Activities	Complete all Kindergarten Digital Activities <i>Kindergarten is all about learning to count with deep understanding. Completing all Kindergarten Digital Activities will enable students to practice counting, addition, embedded numbers, and decomposing and composing numbers up to 20 using interactive five frames, ten frames, number bonds, and more.</i>	Kindergarten Digital Activities are short, engaging, and designed to build number sense. Each Activity takes ~10 minutes	Numbers to 5 - 50 activities Numbers to 10 - 50 activities Numbers to 15 - 35 activities Numbers to 20 - 35 activities

Content for Rising 2nd Graders				
Mission	Mission Title	Standards	Lessons*	Topics
G1M1	Add and Subtract Small Numbers PRIORITY <i>First grade is all about counting! Zearn Math kicks off first grade by moving students from counting all (3+2 is solved by counting one, two, three...four, five) to counting on (3+2 is solved by counting threeee...four, five) and by teaching students different ways to break apart numbers. As tempting as it might be, don't rush through these ideas. Students will come back to them throughout this year (and in the future)!</i>	1.OA.1 1.OA.5 1.OA.6 1.OA.8 1.OA.3 1.OA.7	32	Topic A: Embedded Numbers and Decompositions Topic B: Counting On from Embedded Numbers Topic C: Addition Word Problems Topic D: Strategies for Counting On Topic E: The Commutative Property of Addition and the Equal Sign Topic F: Development of Addition Fluency Within 10 Topic G: Subtraction as an Unknown Addend Problem Topic H: Subtraction Word Problems Topic I: Decomposition Strategies for Subtraction Topic J: Development of Subtraction Fluency Within 10

G1M2	<p>Meet Place Value PRIORITY</p> <p><i>Mission 2 tackles larger numbers—all the way up to 100. To be able to work with such large numbers, two key things happen in Mission 2. First, students move from counting on to more sophisticated decomposition and composition strategies (meaning students learn how to make problems easier for themselves). Second, students will identify a 10 as one unit. This signals a shift toward working with numbers themselves, rather than representing them concretely (e.g. linking cubes) or with pictures (e.g. drawing circles).</i></p>	<p>1.OA.1 1.OA.3 1.OA.4 1.OA.6 1.OA.5 1.OA.7 1.OA.8 1.NBT.2a 1.NBT.2b 1.NBT.5</p>	23	<p>Topic A: Counting On or Making Ten to Solve Result Unknown and Total Unknown Problems Topic B: Counting On or Taking from Ten to solve Result Unknown and Total Unknown Problems Topic C: Strategies for Solving Change or Addend Unknown Problems Topic D: Varied Problems with Decompositions of Teen Numbers as 1 Ten and Some Ones</p>
G1M4	<p>Add and Subtract Bigger Numbers</p> <p><i>This Mission builds on the foundations of counting on, decomposing, and counting strategies that were established in Mission 1 and Mission 2. This gives students the opportunity to work with numbers up to 40. Students will learn many new strategies to identify tens and ones, and they'll compare, add, and subtract numbers up to 40. Reinforce this new content by using the provided word problem each day.</i></p>	<p>1.NBT.1 1.NBT.2 1.NBT.5 1.NBT.3 1.NBT.4 1.NBT.6 1.OA.1</p>	23	<p>Topic A: Tens and Ones Topic B: Comparison of Pairs of Two-Digit Numbers Topic C: Addition and Subtraction of Tens Topic D: Addition of Tens or Ones to a Two-Digit Number Topic E: Varied Problem Types Within 20 Topic F: Addition of Tens and Ones to a Two-Digit Number</p>
	Lessons: Intensive Summer Series PRIORITY Complete Summer Series		55 78	

*Refers to the number of Zearn Math Digital Lessons

Content for Rising 3rd Graders				
Mission	Mission Title	Standards	Lessons*	Topics
G2M3	<p>Counting and Place Value PRIORITY</p> <p><i>Most children begin to understand place value using physical objects that can be counted (like grapes or fingers). This Mission expands that understanding to more abstract concepts, like centimeters, ones, and tens. Students will also expand their understanding of the base ten system with hundreds and learn counting up to 1,000.</i></p>	<p>2.NBT.1 2.NBT.2 2.NBT.3 2.MD.8 2.NBT.A 2.NBT.4 2.OA.1 2.NBT.8</p>	19	<p>Topic A: Forming Base Ten Units of Ten, a Hundred, and a Thousand Topic B: Understanding Place Value Units of One, Ten, and a Hundred Topic C: Three-Digit Numbers in Unit, Standard, Expanded, and Word Forms Topic D: Modeling Base Ten Numbers Within 1,000 with Money Topic E: Modeling Numbers Within 1,000 with Place Value Disks Topic F: Comparing Two Three-Digit Numbers Topic G: Finding 1, 10, and 100 More or Less than a Number</p>

G2M4	Add, Subtract, and Solve PRIORITY <i>Equipped with a solid understanding of base ten from Mission 3, students will dive into decomposing and composing in addition and subtraction for numbers up to 200.</i>	2.OA.1 2.NBT.5 2.NBT.8 2.NBT.9 2.NBT.7 2.NBT.6	29	Topic A: Sums and Differences Within 100 Topic B: Strategies for Composing a Ten Topic C: Strategies for Decomposing a Ten Topic D: Strategies for Composing Tens and Hundreds Topic E: Strategies for Decomposing Tens and Hundreds Topic F: Student Explanations of Written Methods
G2M5	Add and Subtract Big Numbers <i>Students are now well on their way to mastering flexible addition and subtraction. This Mission builds on those skills, now using numbers up to 1,000 and increasing the focus on efficiency and checking their work.</i>	2.NBT.7 2.NBT.8 2.NBT.9	20	Topic A: Strategies for Adding and Subtracting Within 1,000 Topic B: Strategies for Composing Tens and Hundreds Within 1,000 Topic C: Strategies for Decomposing Tens and Hundreds Within 1,000 Topic D: Student Explanations for Choice of Solution Methods
	Lessons: Intensive Summer Series PRIORITY Complete Summer Series		48 68	

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Content for Rising 4th Graders				
Mission	Mission Title	Standards	Lessons*	Topics
G3M3	Multiply and Divide Tricky Numbers PRIORITY <i>This Mission extends multiplication and division to all factors between 0 and 10. Students work deeply with the commutative, distributive, and associative properties, and they'll have problem-solving opportunities at the close of each topic.</i>	3.OA.4 3.OA.5 3.OA.7 3.OA.9 3.OA.1 3.OA.2 3.OA.3 3.OA.6 3.OA.8 3.NBT.3	21	Topic A: The Properties of Multiplication and Division Topic B: Multiplication and Division Using Units of 6 and 7 Topic C: Multiplication and Division Using Units up to 8 Topic D: Multiplication and Division Using Units of 9 Topic E: Analysis of Patterns and Problem Solving Including Units of 0 and 1 Topic F: Multiplication of Single-Digit Factors and Multiples of 10
G3M5	Fractions as Numbers PRIORITY <i>This Mission builds a deep understanding of fractions as a single number. Students begin concretely interacting with fractions by folding strips of paper to create equal parts. By the end of the Mission, students will be able to evaluate equivalence and compare size pictorially.</i>	3.G.2 3.NF.1 3.NF.3c 3.NF.3d 3.NF.3a 3.NF.3b 3.NF.2a 3.NF.2b	29	Topic A: Partitioning a Whole into Equal Parts Topic B: Unit Fractions and Their Relation to the Whole Topic C: Comparing Unit Fractions and Specifying the Whole Topic D: Fractions on the Number Line Topic E: Equivalent Fractions Topic F: Comparison, Order, and Size of Fractions

G3M1	Multiply and Divide Friendly Numbers <i>This Mission introduces multiplication and division with friendly numbers, 2–5 and 10. Students move gradually from skip-counting and arrays to using the distributive property as a strategy for multiplying and dividing larger factors.</i>	3.OA.1 3.OA.3 3.OA.2 3.OA.6 3.OA.4 3.OA.5 3.OA.7 3.OA.8	21	Topic A: Multiplication and the Meaning of Factors Topic B: Division as an Unknown Factor Problem Topic C: Multiplication Using Units of 2 and 3 Topic D: Division Using Units of 2 and 3 Topic E: Multiplication and Division Using Units of 4 Topic F: Distributive Property and Problem Solving Using Units of 2–5 and 10
	Lessons: Intensive Summer Series PRIORITY Complete Summer Series		50 71	

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Content for Rising 5th Graders				
Mission	Mission Title	Standards	Lessons*	Topics
G4M3	Multiply and Divide Big Numbers PRIORITY <i>This Mission teaches students the lifelong skills of multiplying and dividing big numbers. Students learn strategies that will allow them to multiply and divide on paper and in their heads.</i>	4.OA.1 4.OA.2 4.MD.3 4.OA.3 4.OA.4 4.NBT.5 4.NBT.1 4.NBT.6	34	Topic A: Multiplicative Comparison Word Problems Topic B: Multiplication by 10, 100, and 1,000 Topic C: Multiplication of up to Four Digits by Single-Digit Numbers Topic D: Multiplication Word Problems Topic E: Division of Tens and Ones with Successive Remainders Topic F: Reasoning with Divisibility Topic G: Division of Thousands, Hundreds, Tens, and Ones Topic H: Multiplication of Two-Digit by Two-Digit Numbers
G4M5	Equivalent Fractions PRIORITY <i>This Mission teaches students how to manipulate fractions. Students compare fractions, evaluate equivalence, and learn that the same methods they used for whole number operations can be used to add, subtract, and multiply fractions.</i>	4.NF.3b 4.NF.4a 4.NF.3a 4.NF.1 4.NF.2, 4.NF.3ad 4.MD.2 4.NF.3 4.MD.4 4.NBT.6 4.NF.3c 4.NF.4, 4.OA.2	38	Topic A: Decomposition and Fraction Equivalence Topic B: Fraction Equivalence Using Multiplication and Division Topic C: Fraction Comparison Topic D: Fraction Addition and Subtraction Topic E: Extending Fraction Equivalence to Fractions Greater Than 1 Topic F: Addition and Subtraction of Fractions by Decomposition Topic G: Repeated Addition of Fractions as Multiplication Topic H: Exploring a Fraction Pattern

G4M1	Add, Subtract, & Round <i>This Mission takes number sense and place value understanding from 2nd and 3rd grade a step further. Students start by noticing patterns when bundling and unbundling groups of 10s, 100s, and 1,000s, and they conclude by estimating and finding precise answers to addition and subtraction problems using the standard algorithm.</i>	4.NBT.1 4.NBT.2 4.OA.1 4.NBT.3 4.OA.3 4.NBT.4	18	Topic A: Place Value of Multi-Digit Whole Numbers Topic B: Comparing Multi-Digit Whole Numbers Topic C: Rounding Multi-Digit Whole Numbers Topic D: Multi-Digit Whole Number Addition Topic E: Multi-Digit Whole Number Subtraction Topic F: Addition and Subtraction Word Problems
	Lessons: Intensive Summer Series PRIORITY Complete Summer Series		72 90	

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Content for Rising 6th Graders				
Mission	Mission Title	Standards	Lessons*	Topics
G5M2	Base Ten Operations PRIORITY <i>Mission 1 introduced students to decimal fractions, and Mission 2 will introduce them to similar conceptual work (mental math, reasoning, conceptual models, and algorithms), but with whole numbers. Students will multiply multi-digit whole numbers in the first part of the Mission and divide them in the end. Each operation concludes with application work and measurement word problems.</i>	5.NBT.1 5.NBT.2 5.OA.1 5.OA.2 5.NBT.5 5.NBT.7 5.MD.1 5.NBT.6	29	Topic A: Mental Strategies for Multi-Digit Whole Number Multiplication Topic B: The Standard Algorithm for Multi-Digit Whole Number Multiplication Topic C: Decimal Multi-Digit Multiplication Topic D: Measurement Word Problems with Whole Number and Decimal Multiplication Topic E: Mental Strategies for Multi-Digit Whole Number Division Topic F: Partial Quotients and Multi-Digit Whole Number Division Topic G: Partial Quotients and Multi-Digit Decimal Division Topic H: Measurement Word Problems with Multi-Digit Division
G5M4	Multiply and Divide Fractions and Decimals PRIORITY Students tackled equivalency in adding and subtracting fractions in Mission 3, and now they're ready to focus on multiplying and dividing fractions. Their understanding will be deeply rooted in multiple concrete examples and pictures before they generalize to more abstract methods.	5.MD.2 5.NF.3 5.NF.4a 5.MD.1 5.OA.1 5.OA.2 5.NF.6 5.NBT.7 5.NF.4b 5.NF.5 5.NF.7	32	Topic A: Line Plots of Fraction Measurements Topic B: Fractions as Division Topic C: Multiplication of a Whole Number by a Fraction Topic D: Fraction Expressions and Word Problems Topic E: Multiplication of a Fraction by a Fraction Topic F: Multiplication with Fractions and Decimals as Scaling and Word Problems Topic G: Division of Fractions and Decimal Fractions Topic H: Interpretation of Numerical Expressions

G5M3	Add and Subtract Fractions In this Mission, students will develop flexibility with addition and subtraction of fractions so they can mentally or numerically solve, reason, and estimate their calculations. The Mission begins with concrete and pictorial work (using area models and number lines) and moves to numeric work with word problems by the end.	4.NF.1 4.NF.3c 4.NF.3d 5.NF.1 5.NF.2	16	Topic A: Equivalent Fractions Topic B: Making Like Units Pictorially Topic C: Making Like Units Numerically Topic D: Further Applications
	Lessons: Intensive Summer Series PRIORITY Complete Summer Series		61 77	

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Content for Rising 7th Graders				
Mission	Mission Title	Standards	Lessons*	Topics
G6M2	Introducing Ratios PRIORITY In this mission, students learn to 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. They represent ratios as expressions, and represent equivalent ratios with double number line diagrams, tape diagrams, and tables. They use these terms and representations in reasoning about situations involving color mixtures, recipes, unit pricing, and constant speed.	6.RP.1 6.RP.2 6.RP.3 6.RP.3a 6.RP.3b	16	Topic A: What are ratios? Topic B: Equivalent Ratios Topic C: Representing Equivalent Ratios Topic D: Solving Ratio and Rate Problems Topic E: Part-Part-Whole Ratios Topic F: Equivalent Ratios
G6M3	Unit Rates and Percentages PRIORITY In this Mission, students learn to understand and use the terms “unit rate,” “speed,” “pace,” “percent,” and “percentage,” and recognize that equivalent ratios have equal unit rates. They represent percentages with tables, tape diagrams, and double number line diagrams, and as expressions. They use these terms and representations in reasoning about situations involving unit price, constant speed, and measurement conversion.	6.RP.2 6.RP.3 6.RP.3b 6.RP.3c 6.RP.3d	14	Topic A: Using Unit Rate to Solve Problems Topic B: Unit Conversion Topic C: Rates Topic D: Percentages Topic E: Let’s Put It to Work

G6M4	<p>Dividing Fractions</p> <p>In this Mission, students examine how the relative sizes of numerator and denominator affect the size of their quotient when numerator or denominator (or both) is a fraction. They acquire the understanding that dividing by $\frac{a}{b}$ has the same outcome as multiplying by b, then by $\frac{1}{a}$. They compute quotients of fractions. They solve problems involving lengths and areas of figures with fractional side lengths and extend the formula for the volume of a right rectangular prism to prisms with fractional edge lengths and use it to solve problems. They use tape diagrams, equations, and expressions to represent situations involving partitive or quotitive interpretations of division with fractions. Given a multiplication or division equation or expression with fractions, they describe a situation that it could represent. They use tape diagrams and equations in reasoning about situations that involve multiplication and division of fractions.</p>	6.NS.1 6.G.1, 6.G.2	16	<p>Topic A: Making Sense of Division</p> <p>Topic B: Meanings of Fraction Division</p> <p>Topic C: Algorithm for Fraction Division</p> <p>Topic D: Fractions in Lengths, Areas, and Volumes</p> <p>Topic E: Let's Put It to Work</p>
G6M5	<p>Arithmetic in Base Ten</p> <p>In this Mission, students compute sums, differences, products, and quotients of multi-digit whole numbers and decimals, using efficient algorithms. They use calculations with whole numbers and decimals to solve problems set in real-world contexts.</p>	6.NS.2 6.NS.3 6.EE.4	14	<p>Topic A: Warming up to Decimals</p> <p>Topic B: Adding and Subtracting Decimals</p> <p>Topic C: Multiplying Decimals</p> <p>Topic D: Dividing Decimals</p> <p>Topic E: Let's Put It to Work</p>
	<p>Lessons: Intensive Summer Series PRIORITY Complete Summer Series</p>		46 60	

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Content for Rising 8th Graders				
Mission	Mission Title	Standards	Lessons*	Topics
G7M2	<p>Introducing Proportional Relationships PRIORITY</p> <p><i>In this Mission, students learn to understand and use the terms “proportional,” “constant of proportionality,” and “proportional relationship,” and recognize when a relationship is or is not proportional. They represent proportional relationships with tables, equations, and graphs. Students use these terms and representations in reasoning about situations that involve constant speed, unit pricing, and measurement conversions.</i></p>	7.RP.1 7.RP.2 7.RP.2a 7.RP.2b 7.RP.2c 7.RP.2d 7.G.1 7.G.6	14	<p>Topic A: Representing Proportional Relationships with Tables</p> <p>Topic B: Representing Proportional Relationships with Equations</p> <p>Topic C: Comparing Proportional and Nonproportional Relationships</p> <p>Topic D: Representing Proportional Relationships with Graphs</p> <p>Topic E: Let's Put It To Work</p>
G7M5	<p>Rational Number Arithmetic PRIORITY</p>	7.NS.1 7.NS.1a	15	<p>Topic A: Interpreting Negative Numbers</p> <p>Topic B: Adding and Subtracting Rational Numbers</p>

	<p>In this Mission, students interpret signed numbers in contexts (e.g., temperature, elevation, deposit and withdrawal, position, direction, speed and velocity, percent change) together with their sums, differences, products, and quotients. (“Signed numbers” include all rational numbers, written as decimals or in the form $\frac{a}{b}$.) Students use tables and number line diagrams to represent sums and differences of signed numbers or changes in quantities represented by signed numbers such as temperature or elevation, becoming more fluent in writing different numerical addition and subtraction equations that express the same relationship. They compute sums and differences of signed numbers. They plot points in the plane with signed number coordinates, representing and interpreting sums and differences of coordinates. They view situations in which objects are traveling at constant speed (familiar from previous Missions) as proportional relationships. For these situations, students use multiplication equations to represent changes in position on number line diagrams or distance traveled, and interpret positive and negative velocities in context. They become more fluent in writing different numerical multiplication and division equations for the same relationship. Students extend their use of the “next to” notation (which they used in expressions such as $5x$ and $6(3+2)$ in grade 6) to include negative numbers and products of numbers, e.g., writing $-5x$ and $(-5)(-10)$ rather than $(-5) \cdot (x)$ and $(-5) \cdot (-10)$. They extend their use of the fraction bar to include variables as well as numbers, writing $-8.5 \div x$ as well as $\frac{-8.5}{x}$.</p>	<p>7.NS.1b 7.NS.1c 7.NS.1d 7.NS.2 7.NS.2a 7.NS.2b 7.NS.2c 7.NS.3 7.EE.4 7.EE.4a</p>		<p>Topic C: Multiplying and Dividing Rational Numbers Topic D: Four Operations with Rational Numbers Topic E: Solving Equations Where There are Negative Numbers Topic F: Let’s Put It to Work</p>
G7M6	<p>Expressions, Equations, and Inequalities PRIORITY</p> <p>In this Mission, students solve equations of the forms $px + q = r$ and $p(x + q) = r$ where p, q, and r are rational numbers. They draw, interpret, and write equations in one variable for balanced “hanger diagrams,” and write expressions for sequences of instructions, e.g., “number puzzles.” They use tape diagrams together with equations to represent situations with one unknown quantity. They learn algebraic methods for solving equations. Students solve linear inequalities in one variable and represent their solutions on the number line. They understand and use the terms “less than or equal to” and “greater than or equal to,” and the corresponding symbols. They generate expressions that are equivalent to a given numerical or linear expression. Students formulate and solve linear equations and inequalities that represent real-world situations.</p>	<p>7.NS.1 7.NS.1c 7.EE.1 7.EE.2 7.EE.3 7.EE.4 7.EE.4a 7.EE.4b</p>	22	<p>Topic A: Representing Situations of the Form $px + q = r$ and $p(x + q) = r$ Topic B: Solving Equations of the Form $px + q = r$ and $p(x + q) = r$ and Problems That Lead to Those Equations Topic C: Inequalities Topic D: Writing Equivalent Expressions</p>
G7M4	<p>Proportional Relationships and Percentages</p> <p>In this Mission, students use ratios, scale factors, unit rates (also called constants of proportionality), and proportional relationships to solve multi-step, real-world problems that involve fractions and percentages. They use long division to write fractions presented in the form $\frac{a}{b}$ as decimals, e.g., $\frac{11}{30} = 0.36$. They learn to understand and use the terms “repeating decimal,” “terminating decimal,” “percent increase,” “percent decrease,” “percent error,” and “measurement error.” They represent amounts and corresponding percent rates with double number line diagrams and tables. They use these terms and representations in reasoning about situations involving sales taxes, tips, markdowns, markups, sales commissions, interest,</p>	<p>7.RP.1 7.RP.2 7.RP.2d 7.RP.3</p>	14	<p>Topic A: Proportional Relationships with Fractions Topic B: Percent Increase and Decrease Topic C: Applying Percentages Topic D: Let’s Put It to Work</p>

	<i>depreciation, and scaling a picture. Students use equations to represent proportional relationships in which the constant of proportionality arises from a percentage, e.g., relationship between price paid and amount of sales tax paid.</i>			
	Lessons: Intensive Summer Series PRIORITY Complete Summer Series		51 65	

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