



Mathematics

Grade 4 – Year at a Glance

2018 - 2019



Q1

Q2

Q3

Q4

Module 1 Aug. 6 – Sept. 7	Module 2 Sept. 11- 18	Module 3 Sept. 18 – Nov.15	Module 4 Nov. 16 – Dec. 17	Module 5 Jan. 7 – Mar. 1	Module 6 Mar. 4 – Apr. 9	Module 7 Apr.10-18 Lessons 1-8 only	Module 7 (con't) Apr. 22 - May23
Place Value, Rounding and Algorithms for Addition and Subtraction	Unit Conversion and Problem Solving with Metric Measurements	Multi-Digit Multiplication and Division	Angle Measure and Plane Figures	Fraction Equivalence, Order and Operations	Decimal Fractions	Exploring Measurement with Multiplication	Material covered after April 9 th is an extension of 4 th grade standards or review of previously taught skills
4.OA.A.3	4.MD.A.1	4.OA.A.1	4.MD.C.5	4.NF.A.1	4.NF.C.5	4.OA.A.1	4.OA.A.1
4.NBT.A.1	4.MD.A.2	4.OA.A.2	4.MD.C.6	4.NF.A.2	4.NF.C.6	4.OA.A.2	4.OA.A.2
4.NBT.A.2		4.OA.A.3	4.MD.C.7	4.NF.A.3	4.NF.C.7	4.OA.A.3	4.OA.A.3
4.NBT.A.3		4.OA.B.4	4.G.A.1	4.NF.A.4	4.MD.A.2	4.MD.A.1	
4.NBT.B.4		4.NBT.B.5	4.G.A.2	4.OA.C.5		4.MD.A.2	
		4.NBT.B.6	4.G.A.3	4.MD.B.4			
		4.MD.A.3					*Additional standards – see curriculum map

Key:

Major Content	Supporting Content
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Introduction

Destination 2025, Shelby County Schools' 10-year strategic plan, is designed not only to improve the quality of public education, but also to create a more knowledgeable, productive workforce and ultimately benefit our entire community.

What will success look like?



In order to achieve these ambitious goals, we must collectively work to provide our students with high quality, college and career ready aligned instruction. The Tennessee State Standards provide a common set of expectations for what students will know and be able to do at the end of a grade. The State of Tennessee provides two sets of standards, which include the Standards for Mathematical Content and The Standards for Mathematical Practice. The Content Standards set high expectations for all students to ensure that Tennessee graduates are prepared to meet the rigorous demands of mathematical understanding for college and career. The eight Standards for Mathematical Practice describe the varieties of expertise, habits of mind, and productive dispositions that educators seek to develop in all students. The Tennessee State Standards also represent three fundamental shifts in mathematics instruction: **focus, coherence and rigor.**

Instructional Shifts for Mathematics





Curriculum and Instruction – Mathematics

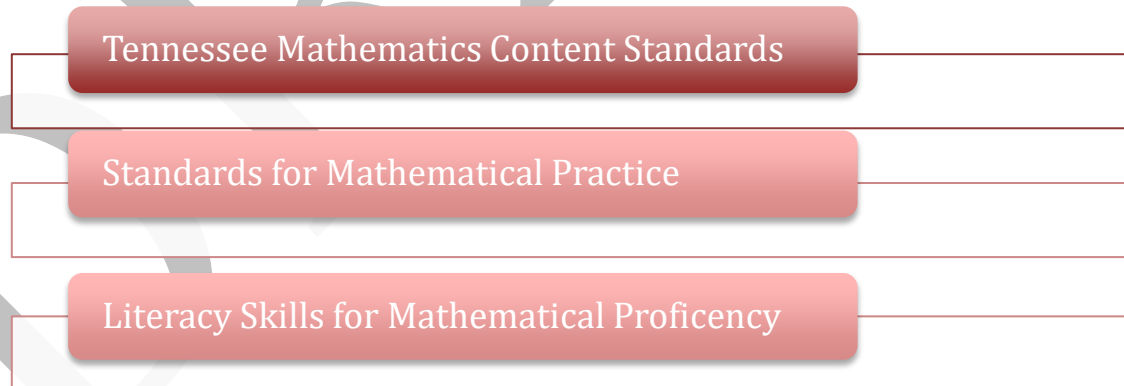
Quarter 3

Grade 4

The **Standards for Mathematical Practice** describe varieties of expertise, habits of minds and productive dispositions that mathematics educators at all levels should seek to develop in their students. These practices rest on important National Council of Teachers of Mathematics (NCTM) “processes and proficiencies” with longstanding importance in mathematics education. Throughout the year, students should continue to develop proficiency with the eight Standards for Mathematical Practice. The following are the eight Standards for Mathematical Practice:

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

This curriculum map is designed to help teachers make effective decisions about what mathematical content to teach so that ultimately our students can reach Destination 2025. Throughout this curriculum map, you will see resources as well as links to tasks that will support you in ensuring that students are able to reach the demands of the standards in your classroom. In addition to the resources embedded in the map, there are some high-leverage resources around the content standards and mathematical practice standards that teachers should consistently access. For a full description of each, click on the links below.





Structure of the Standards

Structure of the TN State Standards include:

- **Content Standards** - Statements of what a student should know, understand, and be able to do.
- **Clusters** - Groups of related standards. Cluster headings may be considered as the big idea(s) that the group of standards they represent are addressing. They are therefore useful as a quick summary of the progression of ideas that the standards in a domain are covering and can help teachers to determine the focus of the standards they are teaching.
- **Domains** - A large category of mathematics that the clusters and their respective content standards delineate and address. For example, Number and Operations – Fractions is a domain under which there are a number of clusters (the big ideas that will be addressed) along with their respective content standards, which give the specifics of what the student should know, understand, and be able to do when working with fractions.
- **Conceptual Categories** – The content standards, clusters, and domains in the 9th-12th grades are further organized under conceptual categories. These are very broad categories of mathematical thought and lend themselves to the organization of high school course work. For example, Algebra is a conceptual category in the high school standards under which are domains such as Seeing Structure in Expressions, Creating Equations, Arithmetic with Polynomials and Rational Expressions, etc.



How to Use the Maps

Overview

An overview is provided for each quarter and includes the topics, focus standards, intended rigor of the standards and foundational skills needed for success of those standards.

Your curriculum map contains four columns that each highlight specific instructional components. Use the details below as a guide for information included in each column.

Tennessee State Standards

TN State Standards are located in the left column. Each content standard is identified as Major Content or Supporting Content. A key can be found at the bottom of the map.

Content

This section contains learning objectives based upon the TN State Standards. Best practices tell us that clearly communicating measurable objectives lead to greater student understanding. Additionally, essential questions are provided to guide student exploration and inquiry.

Instructional Support

District and web-based resources have been provided in the Instructional Support column. You will find a variety of instructional resources that align with the content standards. The additional resources provided should be used as needed for content support and scaffolding.

Vocabulary and Fluency

The inclusion of vocabulary serves as a resource for teacher planning and for building a common language across K-12 mathematics. One of the goals for Tennessee State Standards is to create a common language, and the expectation is that teachers will embed this language throughout their daily lessons. In order to aid your planning, we have also included a list of fluency activities for each lesson. It is expected that fluency practice will be a part of your daily instruction. (Note: Fluency practice is not intended to be speed drills, but rather an intentional sequence to support student automaticity. Conceptual understanding must underpin the work of fluency.

Instructional Calendar

As a support to teachers and leaders, an instructional calendar is provided *as a guide*. Teachers should use this calendar for effective planning and pacing, and leaders should use this calendar to provide *support* for teachers. Due to variances in class schedules and differentiated support that may be needed for students adjustment to the calendar may be required.



Grade 4 Quarter 3 Overview

Module 5: Fraction Equivalence, Ordering and Operations

The chart below includes the standards that will be addressed in this quarter, the type of rigor the standards address, and foundational skills needed for mastery of these standards. Consider using these foundational standards to address student gaps during intervention time as appropriate for students.

Focus Grade Level Standard	Explicit Components of Rigor	Foundational Standards
4.NF.A.1	Conceptual Understanding and Procedural Skill and Fluency	3.NF.A.3, 4.OA.A.2, 3.NF.A.1, 3.NF.A.2, 3.OA.A.3
4.NF.A.2	Conceptual Understanding	4.NF.A.1, 3.NF.A.3, 4.OA.A.2
4.NF.B.3	Conceptual Understanding, Procedural Skill and Fluency	3.NF.A.1, 3.NF.A.2, 4.NF.A.1, 1.OA.B.3., 2.OA.A.1
4.NF.B.4	Procedural Skill and Fluency	3.NF.A.1, 3.OA.A.1, 4.OA.A.2, 3.OA.A.3, 3.OA.A.4
4.OA.C.5	Conceptual Understanding	3.OA.D.9, 3.OA.B.5, 2.OA.C.3
4.MD.B.4	Procedural and Application	3.MD.B.4



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
Module 5:			
<p>Domain: Number and Operations- Fractions Cluster: Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</p> <p>4.NF.B.3b Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.</p> <p>b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., $3/8 = 1/8 + 1/8 + 1/8$; $3/8 = 1/8 + 2/8$; $2\ 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8$.</p> <p>4.NF.B.4a Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.</p> <p>a. Understand a fraction a/b as a multiple of $1/b$. For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.</p>	<p>Module 5: Fraction Equivalence, Ordering and Operations</p> <p>Essential Questions</p> <ol style="list-style-type: none"> How can you show parts of a region? How can you estimate parts? How can you find 2 fractions that name the same part of a whole? How do you write a fraction in simplest form? How can you use benchmark fractions to compare fractions? How do you write a good mathematical explanation? How can you add and subtract fractions with like denominators? What operation is needed to solve a problem with fractions? <p>Topic A: Decomposition and Fraction Equivalence</p> <p>Lesson Objectives/Learning Targets:</p> <p>1-2: <i>I can</i> decompose fractions as a sum of unit fractions using tape diagrams. (4.NF.B.3b)</p> <p>Lesson 3: <i>I can</i> decompose non-unit fractions and represent them as a whole number times a unit fraction using tape diagrams. (4.NF.B.4a)</p> <p>Lesson 4: <i>I can</i> decompose fractions into sums of smaller unit fractions using tape</p>	<p>Eureka Parent Newsletter- Topic A Optional Quiz-Topic A</p> <p>Pacing considerations: Study the lessons and sequence of problems within lessons 1,2 and 3 and then consolidate the 3 lessons. Omit lesson 4.</p> <p>Additional instructional resources for enrichment/remediation:</p> <p>Remediation Guide</p> <p>Ready teacher-toolbox aligned lessons</p> <ul style="list-style-type: none"> Understand Fraction Addition and Subtraction <p>Zearn Lessons</p> <p>Lesson 1: Decompose. Compose. Repeat. Lesson 2: Decompose and Group Lesson 3: Decompose and Multiply Lesson 4: Different Decomposition Lesson 5: Same Share Lesson 6: Area Model- Breakdown!</p> <p>embarc.online- Module 5</p> <p>Videos:</p> <ul style="list-style-type: none"> Multiply fractions by fractions: finding a part of a part Write a fraction to describe a set Decompose a fraction into a sum of fractions 	<p>Vocabulary =, <, or, >, compose, decompose, equivalent Fractions, fraction, fractional unit, multiple, Non-unit fractions, unit fractions, unit interval, Whole</p> <p>Terminology Benchmark, common denominator, Fraction Greater than 1, line plot, mixed number, numerator</p> <p>Fluency Practice</p> <p>Lesson 1: Read Tape Diagrams Addition of Fractions in Unit Form 3</p> <p>Lesson 2: Read Tape Diagrams Break Apart Fractions</p> <p>Lesson 3: Multiply Mentally Repeated Addition as Multiplication Add Fractions</p> <p>Lesson 4:</p>



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
	<p>diagrams. (4.NF.B.3b)</p> <p>Lesson 5: <i>I can</i> decompose unit fractions using area models to show equivalence. (4.NF.B.4a)</p> <p>Lesson 6: <i>I can</i> decompose fractions using area models to show equivalence. (4.NF.B.4a)</p>	<p>I-Ready Lessons:</p> <ul style="list-style-type: none"> Fractions as Division Multiplying a Whole Number and a Fraction Multiply Fractions to Find Area <p>Videos:</p> <ul style="list-style-type: none"> Add fractions by joining parts Represent fractions as the sum of unit fractions using pictures <p>Task Bank:</p> <ul style="list-style-type: none"> Making 22 Seventeenths in Different Ways 	<p>Break Apart Fractions Count by Equivalent Fractions</p> <p>Lesson 5: Count by Equivalent Fractions Add Fractions Break Apart the Unit Fraction</p> <p>Lesson 6: Sprint: Multiply Whole Numbers Times Fractions Find Equivalent Fractions</p>
<p>Domain: Number and Operations - Fractions Cluster: Extend understanding of fraction equivalence and ordering.</p> <p>■ 4.NF.A.1 Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.</p>	<p>Topic B: Fraction Equivalence Using Multiplication and Division</p> <p>Objectives/Learning Targets:</p> <p>Lesson 7-8: <i>I can</i> use the area model and multiplication to show the equivalence of two fractions. (4.NF.A.1)</p> <p>Lesson 9-10: <i>I can</i> use the area model and division to show the equivalence of two fractions. (4.NF.A.1)</p> <p>Lesson 11: <i>I can</i> explain fraction equivalence using a tape diagram and the number line, and relate that to the use of multiplication and division. (4.NF.A.1)</p>	<p>Eureka Parent Newsletter- Topic B Optional Quiz- Topic B</p> <p>Pacing Considerations: No pacing considerations at this time.</p> <p>Additional instructional resources for enrichment/remediation:</p> <p>Remediation Guide</p> <p>Ready teacher-toolbox aligned lessons</p> <ul style="list-style-type: none"> Understand Equivalent Fractions <p>Zearn lessons- Mission 5</p> <p>Lesson 7: Same Area Lesson 8: Multiply for Equality Lesson 9: Same Fraction, Fewer Parts Lesson 10: Same Fraction, Fewer Parts Lesson 11: Fraction Line Up!</p>	<p>Fluency Practice:</p> <p>Lesson 7: Break Apart Fractions Count by Equivalent Fractions, Draw Equivalent Fractions</p> <p>Lesson 8: Break Apart Fractions Count by Equivalent Fractions Draw Equivalent Fractions</p> <p>Lesson 9: Add and Subtract Find Equivalent Fractions Draw Equivalent Fractions</p> <p>Lesson 10: Add and Subtract</p>



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
		<p>embarc.online- Module 5</p> <p>Videos:</p> <ul style="list-style-type: none"> • Making equivalent fractions using multiplication • Recognize equivalent fractions using area models <p>I-Ready Lessons</p> <ul style="list-style-type: none"> • Equivalent Fractions <p>Task Bank:</p> <p>Explaining Fraction Equivalence with Pictures</p> <p>Fractions and Rectangles</p>	<p>Find Equivalent Fractions Draw Equivalent Fractions</p> <p>Lesson 11: Find the Quotient and Remainder Find Equivalent Fractions Draw Equivalent Fractions</p>
<p>Domain: Number and Operations - Fractions Cluster: Extend understanding of fraction equivalence and ordering.</p> <p>■ 4.NF.A.2 Compare two fractions with different numerators e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p>	<p>Topic C: Fraction Comparison</p> <p>Objectives/Learning Targets:</p> <p>Lesson 12-13: <i>I can</i> reason using benchmarks to compare two fractions on the number line. (4.NF.A.2)</p> <p>Lesson 14-15: <i>I can</i> find common units or number of units to compare two fractions. (4.NF.A.2)</p>	<p>Eureka Parent Newsletter- Topic C</p> <p>Optional Quiz- Topic C</p> <p>Pacing Considerations: No pacing considerations at this time.</p> <p>Additional instructional resources for enrichment/remediation:</p> <p>Remediation Guide</p> <p>Ready teacher-toolbox aligned lessons</p> <ul style="list-style-type: none"> • Compare Fractions <p>Zearn Lessons -Mission 5</p> <p>Lesson 12: benchmark Bonanza Lesson 13: Benchmark to Compare Lesson 14: Make the Same to Compare Lesson 15: United Units</p> <p>embarc.online- Module 5</p>	<p>Fluency Practice:</p> <p>Lesson 12: Add and Subtract Find Equivalent Fractions Construct a Number Line with Fractions</p> <p>Lesson 13: Divide 3 Different Ways Count by Equivalent Fractions, Plot Fractions on a Number Line</p> <p>Lesson 14: Add and Subtract Compare Fractions Construct a Number Line with Fractions</p> <p>Lesson 15: Count by Equivalent Fraction Find Equivalent Fractions Compare Fractions</p>



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
		<p>Videos:</p> <ul style="list-style-type: none"> Compare fractions to a benchmark of one half using number lines <p>Task Bank:</p> <ul style="list-style-type: none"> Listing fractions in increasing size Using Benchmarks to Compare Fractions 	
<p>Domain: Number and Operations- Fractions Cluster: Build fractions from unit fractions by applying and extending previous understandings of whole numbers.</p> <p>Domain: Number and Operations - Fractions Cluster (4.NF.B): Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</p> <p>■ 4.NF.B.3: Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$.</p> <p>■ 4.NF.B.3a: Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.</p> <p>■ 4.NF.B.3.d: Solve contextual word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem</p>	<p>Topic D: Fraction Addition and Subtraction</p> <p>Objectives/Learning Targets:</p> <p>Lesson 16: <i>I can</i> use visual models to add and subtract two fractions with the same units. (4.NF.B.3ad)</p> <p>Lesson 17: <i>I can</i> use visual models to add and subtract two fractions with the same units, including subtracting from one whole. (4.NF.B.3ad)</p> <p>Lesson 18: <i>I can</i> add and subtract two fractions with the same units. (4.NF.B.3ad)</p> <p>Lesson 19: <i>I can</i> solve word problems involving addition and subtraction of fractions. (4.NF.B.3ad)</p> <p>Lesson 20-21: <i>I can</i> use visual models to add two fractions with related units using the denominators 2,3,4,5,6,8,10, and 12. (4.NF.B.3ad)</p>	<p>Eureka Parent Newsletter- Topic D Optional Quiz- Topic D</p> <p>Pacing Considerations: Omit lesson 20 and 21</p> <p>Additional instructional resources for enrichment/remediation:</p> <p>Remediation Guide</p> <p>Ready teacher-toolbox aligned lessons</p> <ul style="list-style-type: none"> Lesson 17 - Add and Subtract Mixed Numbers <p>Zearn Lessons -Mission 5</p> <p>Lesson 16: Like Units Make It Work Lesson 17: Whole Use Lesson 18: Three's Company Lesson 19: Word Play Lesson 20: Like Units, Like Sum Lesson 21: Sum it Up</p>	<p>Fluency Practice:</p> <p>Lesson 16: Count by Equivalent Fractions Compare Fractions</p> <p>Lesson 17: Count by Equivalent Fractions Take out the Whole Number Draw Tape Diagrams</p> <p>Lesson 18: Count by Equivalent Fractions Subtract Fractions</p> <p>Lesson 19: Count by Equivalent Fractions Add and Subtract Fractions</p> <p>Lesson 20: Count by Equivalent Fractions Add Fractions,</p>



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
	<p style="color: red;">Mid Module Assessment</p>	<p>embarc.online- Module 5</p> <p>I-Ready Lessons</p> <ul style="list-style-type: none"> Add and Subtract Fractions Understand Fraction Multiplication <p>Videos:</p> <ul style="list-style-type: none"> Add fractions by joining parts Decompose mixed numbers into a sum of fractions using tape diagrams Add and subtract fractions and mixed numbers with like denominators using number lines <p>Task Bank:</p> <ul style="list-style-type: none"> Plastic Building Blocks Extending Multiplication From Whole Numbers to Fractions Comparing Sums of Unit Fractions 	<p>Subtract Fractions</p> <p>Lesson 21: Sprint: Subtract Fractions Add Fractions</p>
<p>Domain: Number and Operations - Fractions Cluster: Extend understanding of fraction equivalence and ordering</p> <p>■ 4.NF.A.2 Compare two fractions with different numerators e.g., by creating</p>	<p>Topic E: Extending Fraction Equivalence to Fractions Greater Than 1</p> <p>Objectives/Learning Targets :</p> <p>Lesson 22: <i>I can</i> add a fraction less than 1 to, or subtract a fraction less than 1 from, a whole</p>	<p>Eureka Parent Newsletter- Topic E Optional Quiz- Topic E</p> <p>Pacing Considerations: No pacing considerations at this time.</p>	<p>Fluency Practice:</p> <p>Lesson 22: Sprint: Add Fractions Count by Equivalent Fractions</p>



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
<p>common denominators or numerators, or by comparing to a benchmark fraction such as $\frac{1}{2}$. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>Domain: Number and Operations - Fractions Cluster (4.NF.B): Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</p> <p>■ 4.NF.B.3: Understand a fraction $\frac{a}{b}$ with $a > 1$ as a sum of fractions $\frac{1}{b}$.</p> <p>■ 4.NF.B.3a: Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.</p> <p>■ 4.NF.B.3b: Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: $\frac{3}{8} = \frac{1}{8} + \frac{1}{8} + \frac{1}{8}$; $\frac{3}{8} = \frac{1}{8} + \frac{2}{8}$; $2 \frac{1}{8} = 1 + 1 + \frac{1}{8} = \frac{8}{8} + \frac{8}{8} + \frac{1}{8}$. Justify decompositions by using a visual fraction model.</p> <p>■ 4.NF.B.3c: Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using</p>	<p>number using decomposition and visual models. (4.NF.B.3)</p> <p>Lesson 23: <i>I can</i> add and multiply unit fractions to build fractions greater than 1 using visual models. (4.NF.B.3)</p> <p>Lesson 24-25: <i>I can</i> decompose and compose fractions greater than 1 to express them in various forms. (4.NF.B.3)</p> <p>Lesson 26: <i>I can</i> compare fractions greater than 1 by reasoning using benchmark fractions. (4.NF.A.2)</p> <p>Lesson 27: <i>I can</i> compare fractions greater than 1 by creating common numerators or denominators. (4.NF.A.2)</p> <p>Lesson 28: <i>I can</i> solve word problems with line plots. (4.MD.B.4)</p>	<p>Additional instructional resources for enrichment/remediation:</p> <p>Remediation Guide</p> <p>Ready teacher-toolbox aligned lessons</p> <ul style="list-style-type: none"> Lesson 17 - Add and Subtract Mixed Numbers <p>Zearn Lessons -Mission 5</p> <p>Lesson 22: Fraction To/Fraction From Lesson 23: Fraction Build Up Lesson 24: Beyond the Whole Lesson 25: Form Follows Function Lesson 26: Benchmark Boogie Lesson 27: We Like Units</p> <p>embarc.online- Module 5</p> <p>Videos:</p> <ul style="list-style-type: none"> Compare fractions to a benchmark of one half using number lines Add mixed numbers using an area model (Lesson 1 of 2) Add and subtract fractions and mixed numbers with like denominators using number lines <p>I-Ready Lessons</p> <ul style="list-style-type: none"> Add and Subtract Fractions Understand Adding and Subtracting 	<p>Lesson 23: Add and Subtract Count by Equivalent Fractions Add and Subtract Fractions Subtract from a whole</p> <p>Lesson 24: Add and Subtract Count by Equivalent Fractions Add and Subtract Fractions Multiply Fractions on a Number Line</p> <p>Lesson 25: How Many Ones?, Add and Subtract Fractions Change Fractions to Mixed Numbers</p> <p>Lesson 26: Compare Fractions Greater than 1 by Reasoning Using Benchmark Fractions</p> <p>Lesson 27: Add and Subtract Fractions Change Fractions to Mixed Numbers Change Mixed Numbers to Fractions</p> <p>Lesson 28: Change Mixed Numbers to Fractions, Compare Fractions</p>



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
<p>properties of operations and the relationship between addition and subtraction</p> <p>■ 4.NF.B.3.d: Solve contextual word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem</p> <p>Domain: Measurement and Data Cluster 4.MD.B Represent and interpret data.</p> <p>➤ 4.MD.B.4 Make a line plot to display a data set of measurements in fractions of a unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). Solve problems involving addition and subtraction of fractions by using information presented in line plots.</p>		<p>Fractions</p> <p>Task Bank Cynthia's Perfect Punch Comparing two different pizzas</p>	
<p>Domain: Number and Operations - Fractions Cluster (4.NF.B): Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</p> <p>■ 4.NF.B.3c Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction</p>	<p>Topic F: Addition and Subtraction of Fractions by Decomposition</p> <p>Objectives/Learning Targets:</p> <p>Lesson 29: I can estimate sums and differences using benchmark numbers. (4.NF.B.3c)</p> <p>Lesson 30: I can I can add a mixed number and a fraction. (4.NF.B.3c)</p> <p>Lesson 31: I can add mixed numbers. (4.NF.B.3c)</p> <p>Lesson 32: I can subtract a fraction from a</p>	<p>Eureka Parent Newsletter-Topic F Optional Quiz- Topic F</p> <p>Pacing Considerations: Omit lesson 29</p> <p>Additional instructional resources for enrichment/remediation: Remediation Guide</p> <p>Ready teacher-toolbox aligned lessons</p> <ul style="list-style-type: none"> • Lesson17 - Add and Subtract Mixed Numbers 	<p>Fluency Practice:</p> <p>Lesson 29: Count by Equivalent Fractions Change Fractions to Mixed Numbers</p> <p>Lesson 30: Sprint: Change Fractions to Mixed Numbers, Compare Fractions</p> <p>Lesson 31: Sprint: Change Fractions to Mixed Numbers, Compare Fractions</p> <p>Lesson 32: Count by Equivalent Fractions</p>



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
	<p>mixed number. (4.NF.B.3c)</p> <p>Lesson 33: <i>I can</i> subtract a mixed number from a mixed number. (4.NF.B.3c)</p> <p>Lesson 34: <i>I can</i> subtract mixed numbers. (4.NF.B.3c)</p>	<p>Zearn Lessons -Mission 5</p> <p>Lesson 29: Estimation Station Lesson 30: Sum Mixed, Sum Not Lesson 31: Mixed Sums Lesson 32: Count Back to Subtract Lesson 33: Break Down to Subtract</p> <p>embarc.online- Module 5</p> <p>Videos:</p> <ul style="list-style-type: none"> Add mixed numbers using an area model (Lesson 1 of 2) <p>I-Ready Lessons:</p> <ul style="list-style-type: none"> Understanding Adding and Subtracting Fractions <p>Task Bank:</p> <p>Peaches Plastic Building Blocks</p>	<p>Change Mixed Numbers to Fractions Add Mixed Numbers</p> <p>Lesson 33: Sprint: Change Mixed Numbers to Fractions Subtract Fractions from Whole Numbers</p> <p>Lesson 34: Sprint: Change Mixed Numbers to Fractions, Subtract Fractions from Whole Numbers</p>
<p>Domain: Number and Operations - Fractions Cluster (4.NF.B): Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.</p> <p>■ 4.NF.B.4.a Understand a fraction a/b as a multiple of $1/b$. For example, use a visual fraction model to represent $5/4$ as the product $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.</p> <p>■ 4.NF.B.4.b Understand a multiple of a/b as</p>	<p>Topic G: Repeated Addition of Fractions as Multiplication</p> <p>Objectives/Learning Targets:</p> <p>Lesson 35-36: I can represent the multiplication of n times a/b as $(n \times a)/b$ using the associative property and visual models. (4.NF.B.4)</p> <p>Lesson 37-38: I can find the product of a whole number and a mixed number using the distributive property. (4.NF.B.4)</p>	<p>Eureka Parent Newsletter- Topic G Optional Quiz: Topic G</p> <p>Pacing Considerations: Combine lesson 39 and 40 Omit lesson 41</p> <p>Additional instructional resources for enrichment/remediation: Remediation Guide</p>	<p>Fluency Practice:</p> <p>Lesson 35: Add and Subtract Count by Equivalent Fractions Add and Subtract Mixed Numbers</p> <p>Lesson 36: Count by Equivalent Fractions Multiply Fractions</p>



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
<p>a multiple of $1/b$, and use this understanding to multiply a fraction by a whole number. For example, use a visual fraction model to express $3 \times (2/5)$ as $6 \times (1/5)$, recognizing this product as $6/5$. (In general, $n \times (a/b) = (n \times a)/b$.)</p> <p>■ 4.NF.B.4.c Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. For example, if each person at a party will eat $3/8$ of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?</p>	<p>Lesson 39: I can solve multiplicative comparison word problems involving fractions. (4.NF.B.4)</p> <p>Lesson 40: I can solve word problems involving the multiplication of a whole number and a fraction including those involving line plots. (4.NF.B.4, 4.MD.B.4)</p>	<p>Ready teacher-toolbox aligned lessons</p> <ul style="list-style-type: none"> • Lesson 18 - Understand Fraction Multiplication • Lesson 19 - Multiply Fractions • Lesson 27 - Line Plots <p>Zearn Lessons -Mission 5</p> <p>Lesson 35: Associate How You Like Lesson 36: Fast Times Lesson 37: Multiply Mix Lesson 39: Prepare to Compare Lesson 40: Plotting Along</p> <p>embarc.online- Module 5</p> <p>Videos:</p> <ul style="list-style-type: none"> • Represent fractions as the sum of unit fractions using pictures • Multiply fractions by whole numbers: using models • Represent fractions as the sum of unit fractions using pictures <p>Task Bank: Sugar in six cans of soda</p>	<p>Lesson 37: Add and Subtract Multiply Fractions</p> <p>Lesson 38: Multiply fractions Multiply Mixed Numbers</p> <p>Lesson 39: Sprint: Multiply Whole Numbers Times Fractions Multiply Mixed Numbers</p> <p>Lesson 40: Make a Whole Count by Equivalent Fractions Multiply Mixed Numbers</p>
<p>Domain: Order and Operations Cluster: Generate and Analyze Patterns</p> <p>■ 4.OA.C.5: Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not</p>	<p>Topic H: Exploring a Fraction Pattern</p> <p>Objectives/Learning Targets:</p> <p>Lesson 41: <i>I can</i> find and use a pattern to calculate the sum of all fractional parts</p>	<p>Eureka Parent Newsletter- Topic H No optional quiz available</p> <p>Pacing Considerations: No pacing considerations at this time.</p>	<p>Fluency Practice:</p> <p>Lesson 41: Add and Subtract Multiply Mixed Numbers Make a Whole</p>



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
<p>explicit in the rule itself. For example, given the rule "Add 3" and the starting number 1, generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers. Explain informally why the numbers will continue to alternate in this way.</p>	<p>between 0 and 1. Share and critique peer strategies. (4.OA.C.5)</p> <p style="color: red; text-align: center;">End of Module Assessment</p>	<p>Additional instructional resources for enrichment/remediation:</p> <p>Remediation Guide</p> <p>Ready teacher-toolbox aligned lessons</p> <ul style="list-style-type: none"> Lesson 8 - Number and Shape Patterns <p>embarc.online- Module 5</p> <p>Videos:</p> <ul style="list-style-type: none"> Find the rule for a function machine using a vertical table <p>I-Ready Lessons</p> <ul style="list-style-type: none"> Using a Function Table Number and Shape Patterns Applying a Function Rule to Complete a Table <p>Task Bank:</p> <p>Double Plus One</p>	



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
RESOURCE TOOLBOX The Resource Toolbox provides additional support for comprehension and mastery of grade-level skills and concepts. These resources were chosen as an accompaniment to modules taught within this quarter. Incorporated materials may assist educators with grouping, enrichment, remediation, and differentiation.			
NWEA MAP Resources: https://teach.mapnwea.org/assist/help_map/ApplicationHelp.htm#UsingTestResults/MAPReportsFinder.htm - Sign in and Click the Learning Continuum Tab – this resources will help as you plan for intervention, and differentiating small group instruction on the skill you are currently teaching. (Four Ways to Impact Teaching with the Learning Continuum) https://support.nwea.org/khanrit - These Khan Academy lessons are aligned to RIT scores.			
Textbook Resources Great Minds' Eureka Math	CCSS Tennessee Math Standards Achieve the Core - Tasks	Videos NCTM Common Core Videos TN Tools – Edutoolbox Grade 3- LearnZillion CCSS Video Series	
	Interactive Manipulatives Multiplying by Repeated Addition Related Repeated Addition to Multiplication Multiplication Games Multiplication Fluency	Additional Sites http://www.k-5matteachingresources.com/3rd-grade-number-activities.html https://www.illustrativemathematics.org/content-standards/3 http://www.edutoolbox.org/tntools/list/grade/819/955/3#960	
Other Parent Roadmap: Supporting Your Child in Grade Three Mathematics Illustrated Mathematics Dictionary for Kids *Use this guide as you prepare to teach a module for additional guidance in planning, pacing, and suggestions for omissions. Pacing and Preparation Guide (Omissions)			



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

January 2019						
Lessons for the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:
		1	2	3	4	
	Winter Break		Professional Development/Admin			
Module 5 Topic A: Lessons 1-6 (Combine lesson 1-3 over 2 days) (Omit Lesson 4) Topic B: Lesson 7	7 <i>Begin 3rd Nine Weeks</i>	8	9	10	11	Combine lesson 1-3 over a 2-day period Omit lesson 4 Optional Quizzes: Module 5 Topic A Topic B Topic C Topic D
Module 5 Topic B: Lessons 8-11 Topic C: Lesson 12	14	15	16	17	18	(Quizzes should not take more than 15 minutes to administer)
Module 5 Topic C: Lesson 13-15 Topic D: Lesson 16	21 <i>Martin Luther King Jr. Day (Out)</i>	22	23	24	25	
Module 5 Topic D: Lessons 17-19 (Omit Lessons 20 and 21) 1-day Review Mid Module Assessment	28	29	30	31	1	Omit lesson 20 and 21



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

February 2019						
Lessons for the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:
Module 5 Topic D: Lessons 17-19 (Omit Lessons 20 and 21) 1-day Review Mid Module Assessment					1 Module 5: Mid Module Assessment Complete	Optional Quizzes: Module 5 Topic E Topic F Topic G
Module 5 Topic E: Lessons 22-26	4	5	6	7 <i>Parent Conferences</i>	8	(Quizzes should not take more than 15 minutes to administer)
Module 5 Topic E: Lessons 27-28 (Omit Lesson 29) Topic F: Lessons 30-32	11	12	13	14	15	Omit lesson 29
Module 5 Topic F: Lessons 33-34 Topic G: Lessons 35-37	18 <i>President's Day (In)</i>	19	20	21	22	
Module 5 Topic G: Lessons 38-40 (Combine 39/40) (Omit Lesson 41) 1-day Review End of Module Assessment	25	26	27	28	1	Combine lesson 39 and 40 Omit lesson 41



Curriculum and Instruction – Mathematics

Quarter 3

Grade 4

March 2019							
Lessons for the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:	
Module 5 Topic G: Lessons 38-40 (Combine 39/40) (Omit Lesson 41) 1-day Review End of Module Assessment					1 Module 5: End of Module Assessment Complete	Optional Quizzes: Module 6 Topic A Topic B Topic C (Quizzes should not take more than 15 minutes to administer) Note: <i>Flex days</i> are included in the instructional calendar to allow opportunities for review, district testing, tasks and other school-based activities. (See curriculum map for Task Bank)	
Flex (NWEA) Day Module 6 Topic A: Lessons 1-3 Flex (Task) Day	4	5	6	7	8		
	11	12	13	14	15		
Spring Break							
Module 6 Topic B: Lessons 4-8	18	19	20	21	22		
Module 6 1-day Review Mid Module Assessment Topic C: Lessons 9-11	25	26	27	28	29		