Mathematics
Grade 3 – Year at a Glance
2019-2020

Q1		Q2		Q3		Q4		
Module 1 **Aug 19- Sept 12**	**Module 2** **Sept 16- Oct 10**	**Module 3** **Oct 21- Nov 18**	**Module 4** **Nov 19-Dec 18**	**Module 5** **Jan 6- Feb 19**	**Module 7** **Feb 20- Apr 7**	**Module 6** **Apr 8- Apr 16**	**TN READY APR 13-May 8**	**Module 7** **Apr 23- May 22**
Properties of Multiplication & Division and Solving Problems with Units 2-5 and 10	**Place Value and Problem Solving with Units of Measure**	**Multiplication and Division with Unit of 0,1,6,9 and Multiples of 10**	**Multiplication and Area**	**Fractions as numbers on the Number Line**	**Word Problems with Geometry and Measurement**	**Collecting and Displaying Data**		**Word Problems with Geometry and Measurement**
3.OA.A.1	3.NBT.A.1	3.OA.A.3	3.MD.C.5	3.NF.A.1	3.OA.D.8	3.MD.B.3		3.MD.B.4
3.OA.A.2	3.NBT.A.2	3.OA.A.4	3.MD.C.6	3.NF.A.2	3.MD.B.4	3.MD.B.4		3.MD.D.8
3.OA.A.3	3.MD.A.1	3.OA.B.5	3.MD.C.7	3.NF.A.3	3.MD.D.8			3.G.A.1
3.OA.A.4	3.MD.A.2	3.OA.C.7		3.G.A.2	3.G.A.1			
3.OA.B.5		3.OA.D.8						
3.OA.B.6		3.OA.D.9						
3.OA.C.7		3.NBT.A.3						
3.OA.D.8								Please see curriculum map for specific task and lessons

Key: **Major Content** | **Supporting Content**

Note: Please use this suggested pacing as a guide. It is understood that teachers may be up to 1 week ahead or 1 week behind depending on the needs of their students. Use the instructional map and Digital Suite resources as you prepare to teach a module for additional guidance in planning, pacing, and suggestions for omissions
Pacing and Preparation Guide (Omissions)

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**.

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.

Tennessee Mathematics Content Standards

Standards for Mathematical Practice

Literacy Skills for Mathematical Proficency

■Major Work ➢Supporting

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 3 Quarter 2 Overview

Module 3: Multiplication and Division with Units of 0, 1, 6-9, and Multiples of 10

Module 4: Multiplication and Area

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.

Grade Level Standard	Type of Rigor	Foundational Standards
3.OA.A.3	Application	3.OA.A1, 3.OA.A2
3.OA.A.4	Procedural Skill and Fluency	Introductory
3.OA.B.5	Conceptual Understanding	3.OA.A.1, 3.OA.A.2
🔌 3.OA.C.7	Procedural Skill and Fluency	3.OA.B.5, 3.OA.B.6
3.OA.D.8	Application, Conceptual Understanding	2.OA.A.1, 3.OA.A.3
3.OA.D.9	Conceptual Understanding	2.OA.C.3, 3.OA.A.5
3.NBT.A.3	Conceptual Understanding	2.NBT.A.1, 3.OA.B.5
🔌 3.MD.A.1	Procedural Skill and Fluency	Introductory
3.MD.C.5	Conceptual Understanding	1.G.A.2, 2. MD.A.1,
3.MD.C.6	Conceptual Understanding	2.G.A.2, 3.MD.C.5,
3.MD.C.7	Conceptual Understanding	3.MD.C.5, 3. MD.C.6
3.MD. C. 7a	Conceptual Understanding and Procedural Skill and Fluency	3.MD.C.5, 3. MD.C.6
3.MD.C.7b	Conceptual Understanding, Procedural Skill and Fluency, Application	3.MD.C.5, 3. MD.C.6
3.MD.C.7c	Conceptual Understanding	3.MD.C.5, 3. MD.C.6
3.MD.C.7d	Conceptual Understanding, Application	3.MD.C.5, 3. MD.C.6
🔌 **Indicates Power Standard (2017-2018)**		
Instructional Focus Documents- **Grade 3**		

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
Module 3: Multiplication and Division with Units of 0, 1, 6-9, and Multiples of 10			
Domain: Operations and Algebraic Thinking **Cluster:** Represent and solve Problems involving multiplication and division. ■ **3.OA.A.4** Determine the unknown whole number in a multiplication or division equation relating three whole numbers within 100. For example, determine the unknown number that makes the equation true in each of the equations: 8 x ? = 48, 5 =? ÷ 3, 6 x 6 =? **Domain**: Operations and Algebraic Thinking **Cluster:** Understand properties of multiplication and the relationship between multiplication and division. ■ **3.OA.B.5** Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) Examples: If 6 x 4 = 24 is known, then 4 x 6 = 24 is also known (Commutative property of multiplication). 3x 5 x 2 can be solved by (3 x 5) x 2 or 3 x (5 x 2) (Associative property of multiplication). One way to find 8 x 7 is by using 8 x (5 + 2) = (8 x 5) + (8 x 2). By knowing that 8 x 5 = 40 and 8 x 2 = 16, then 8 x 7 = 40 + 16 = 56 (Distributive property of multiplication over addition).	**Essential Questions** 1. How are multiplication and division facts related? 2. How can you use multiplication to help you divide? **Topic A: The Properties of Multiplication and Division** **Objectives/Learning Targets:** **Lesson 1:** I can study commutativity to find known facts of 6, 7, 8, and 9**. (3.0A.B.5, 3.OA.C.7, 3.OA.D.9**) **Lesson 2**: I can apply the distributive and commutative properties to relate multiplication facts 5 × *n* + *n* to 6 × *n* and *n* × 6 where *n* is the size of the unit. **(3.0A.B.5, 3.OA.C.7, 3.OA.D.9**) **Lesson 3:** I can multiply and divide with familiar facts using a letter to represent the unknown. **(3.OA.A.4, 3.OA.C.7**)	Eureka Parent Newsletter- Topic A Optional Quiz- Topic A **Pacing Considerations:** No pacing considerations at this time.	**Vocabulary** Multiple, Product Familiar Terms and Symbols Array, Commutative Property, Equal groups, Distribute, Divide/Division, Factors, Multiplication/Multiply, Number of Groups, Parentheses, Quotient, Row/Column, Unit, Unknown, Equation, Number Sentence, Even Number, Odd Number, Factors, Expression, Number bond, Units of one, two, or three, Tape Diagram, Value **Additional resources for enrichment/ remediation:** Remediation Guide Ready teacher-toolbox aligned lessons • Lesson 6- Multiplication and Division Facts Zearn Lessons- Mission 1 Lesson 1: Multiplication Madness Lesson 2: Super Five to the Rescue Lesson 3: Math A through Z embarc.online- **Module 3** **Videos:** • Solve multiplication problems: using repeated addition • Use the distributive property of multiplication to solve unfamiliar

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
Domain: Operations and Algebraic Thinking **Cluster:** Multiply and divide within 100. ■ **3.OA.C.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 x 5 = 40, one knows 40 ÷ 5 =8) or properties of operations. By the end of 3rd grade, know from memory all products of two one-digit numbers and related division facts. **Domain**: Operations and Algebraic Thinking **Cluster:** Solve problems involving the four operations, and identify and explain patterns in arithmetic. ■ **3.OA.D.9** Identify arithmetic patterns (including patterns in the addition and multiplication tables) and explain them using properties of operations. For example, analyze patterns in the multiplication table and observe that 4 times a number is always even (because 4 x 6 = (2 x 2) x 6 = 2 x (2 x 6), which uses the associative property of multiplication)			facts • Solve multiplication problems: using associative property **I-Ready Lessons** • Equations and Numerical Relationships • Break Apart a Number to Multiply • Using Area for Multiplication: Facts for 6,7 and 8 • Using Fact Families to Solve Division Problems • Understand Patterns **Task Bank** • Finding the unknown in a division equation • The Stamp Collection • Patterns in the Multiplication Table • Valid Equalities (Part 2)
Domain: Operations and Algebraic Thinking **Cluster:** Represent and solve Problems involving multiplication and division. ■ **3.OA.A.3** Multiply and divide within 100 to solve contextual problems, with unknowns in all positions, in situations involving equal groups, arrays, and measurement quantities using strategies based on place value, the properties of operations, and the relationship between multiplication and division (e.g.,	**Topic B: Multiplication and Division Using Units of 6 and 7** **Objectives/Learning Targets:** **Lesson 4:** I can count by units of 6 to multiply and divide using number bonds to decompose. **(3.OA.A.4, 3.OA.B.6, 3.OA.C.7)** **Lesson 5:** I can count by units of 7 to multiply	Eureka Parent Newsletter- Topic B Optional Quiz- Topic B **Pacing Considerations:** Combine lessons 4 and 5. Omit Lessons 6. This lesson involves using the distributive property with multiplication and division, a recurring objective in Module 3. Within later distributive property lessons, incorporate units of 6 and 7.	**Additional instructional resources for enrichment/ remediation:** Remediation Guide Ready teacher-toolbox aligned lessons: • Lesson 3: Split Numbers to Multiply Zearn Lessons- Module 3 Lesson 4: Hop from 6 to 10 Lesson 5: Skip from 7 to 10 Lesson 6: Super Five Returns

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
contexts including computations such as 3 x ? = 24, 6 x 16 =?,? ÷ 8 = 3, or 96 ÷ 6 =?) ■ **3.OA.A.4** Determine the unknown whole number in a multiplication or division equation relating three whole numbers within 100. For example, determine the unknown number that makes the equation true in each of the equations: 8 x ? = 48, 5 =? ÷ 3, 6 x 6 =? **Domain**: Operations and Algebraic Thinking **Cluster:** Understand properties of multiplication and the relationship between multiplication and division. ■ **3.OA.B.5** Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) Examples: If 6 x 4 = 24 is known, then 4 x 6 = 24 is also known (Commutative property of multiplication). 3x 5 x 2 can be solved by (3 x 5) x 2 or 3 x (5 x 2) (Associative property of multiplication). One way to find 8 x 7 is by using 8 x (5 + 2) = (8 x 5) + (8 x 2). By knowing that 8 x 5 = 40 and 8 x 2 = 16, then 8 x 7 = 40 + 16 = 56 (Distributive property of multiplication over addition). **Domain**: Operations and Algebraic Thinking **Cluster:** Multiply and divide within 100. ■ **3.OA.C.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 x 5 = 40, one	and divide using number bonds to decompose. **(3.OA.A.4, 3.OA.B.5,3.OA.C.6 3.OA.C.7)** **Lesson 6:** I can use the distributive property as a strategy to multiply and divide using units of 6 and 7**. (3.OA.B.5, 3.OA.C.7) (Can be omitted)** **Lesson 7:** I can interpret the unknown in multiplication and division to model and solve problems using units of 6 and 7**. (3.OA.A.3, 3.OA.A.4, 3.OA.C.7)**	**Suggestions for combining:** **Lessons 4 and 5** **Fluency (11 minutes)** Multiply using the Distributive property Make Ten Game Make Seven Game **Application Problem (5 minutes)** Lesson 5 **Concept Development (30 minutes)** Lesson 4: 1,3 Lesson 5: Part 1 **Problem Set (10 minutes)** Lesson 4: 1, 3 Lesson 5: 1,4 **Debrief/Exit Ticket (10 minutes)** Exit Ticket 4: 1 Exit Ticket 5: 1	Lesson 7: Savvy Sixes and Sevens **embarc.online- Module 3** **Videos:** • **Find the missing quotient in a division problem** • **Interpret division as an unknown factor problem using arrays** **I-Ready Lessons**: • Multiplication and Division Fact Families • Equations and Numerical Relationships • Division Concepts: Are and Facts for 3,4 and 5 • Division Concepts: Area and Facts for 6,7 and 8 **Task Bank:** • **Analyzing Word Problems Involving Multiplication** • **Two Interpretations of Division**

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
knows 40 ÷ 5 =8) or properties of operations. By the end of 3rd grade, know from memory all products of two one-digit numbers and related division facts.			
Domain: Operations and Algebraic Thinking **Cluster:** Represent and solve Problems involving multiplication and division. ■ **3.OA.A.3** Multiply and divide within 100 to solve contextual problems, with unknowns in all positions, in situations involving equal groups, arrays, and measurement quantities using strategies based on place value, the properties of operations, and the relationship between multiplication and division (e.g., contexts including computations such as 3 x ? = 24, 6 x 16 =?,? ÷ 8 = 3, or 96 ÷ 6 =?) ■ **3.OA.A.4** Determine the unknown whole number in a multiplication or division equation relating three whole numbers within 100. For example, determine the unknown number that makes the equation true in each of the equations: 8 x ? = 48, 5 =? ÷ 3, 6 x 6 =? **Domain**: Operations and Algebraic Thinking **Cluster:** Understand properties of multiplication and the relationship between multiplication and division. ■ **3.OA.B.5** Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) Examples: If 6 x 4 = 24	**Topic C: Multiplication and Division Using Units up to 8** **Objectives/Learning Targets:** **Lesson 8:** I can understand the function of parentheses and apply to solving problems. **3.OA.A.3, 3.OA.A.4, 3.OA.B.5, 3.OA.C.7)** **Lesson 9:** I can model the associative property as a strategy to multiply. **3.OA.3, 3.OA.A.4, 3.OA.B.5, 3.OA.C.7)** **Lesson 10:** I can use the distributive property as a strategy to multiply and divide. **3.OA.A.3, 3.OA.A.4, 3.OA.B.5, 3.OA.C.7) (Can be omitted)** **Lesson 11:** I can interpret the unknown in multiplication and division to model and solve problems. **3.OA.A.3, 3.OA.A.4, 3.OA.B.5, 3.OA.C.7) (Can be omitted)** **Mid Module Assessment**	Eureka Parent Newsletter- Topic C Optional Quiz- Topic C **Pacing Considerations:** Omit lesson 10. This lessons involves using the distributive property with multiplication and division, a recurring objective in Module 3. Within later distributive property lessons, incorporate units of 6 and 7. Omit Lesson 11, a problem-solving lesson involving multiplication and division. Lesson 11 shares an objective with Lesson 15 and is also similar to Lesson 7.	**Additional instructional resources for enrichment/ remediation**: Remediation Guide Ready teacher-toolbox aligned lessons • Lesson 2: Use Order and grouping to Multiply Zearn Lessons- Mission 3 Lesson 8: Do this First Lesson 9: Make it Easy Peasy Lesson 10: Super Five Strikes Again Lesson 11: Figure Out Eights embarc.online -Module 3 **Videos:** Solve multiplication problems: using associative property **I-Ready Lessons:** • Multiplication and Division Fact Families • Solving One-Step Word Problems Using Multiplication and Division

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
is known, then 4 x 6 = 24 is also known (Commutative property of multiplication). 3x 5 x 2 can be solved by (3 x 5) x 2 or 3 x (5 x 2) (Associative property of multiplication). One way to find 8 x 7 is by using 8 x (5 + 2) = (8 x 5) + (8 x 2). By knowing that 8 x 5 = 40 and 8 x 2 = 16, then 8 x 7 = 40 + 16 = 56 (Distributive property of multiplication over addition). **Domain**: Operations and Algebraic Thinking **Cluster:** Multiply and divide within 100. ■ **3.OA.C.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 x 5 = 40, one knows 40 ÷ 5 =8) or properties of operations. By the end of 3rd grade, know from memory all products of two one-digit numbers and related division facts.			**Task Bank:** • Finding the unknown in a division equation • The Stamp Collection • Analyzing Word Problems involving Multiplication
Domain: Operations and Algebraic Thinking **Cluster:** Represent and solve Problems involving multiplication and division. ■ **3.OA.A.3** Multiply and divide within 100 to solve contextual problems, with unknowns in all positions, in situations involving equal groups, arrays, and measurement quantities using strategies based on place value, the properties of operations, and the relationship between multiplication and division (e.g., contexts including computations such as 3 x ? = 24, 6 x 16 =?,? ÷ 8 = 3, or 96 ÷ 6 =?) ■ **3.OA.A.4** Determine the unknown whole number in a multiplication or division	**Objectives/Learning Targets:** **Topic D: Multiplication and Division Using Units of 9** **Lesson 12:** I can apply the distributive property and the fact 9 = 10 – 1 as a strategy to multiply**. (3.OA.B.5, 3.OA.C.7)** **Lesson 13-14:** I can identify and /use arithmetic patterns to multiply**.(3.OA.C.7, 3.OA.D.9) (can be omitted)** **Lesson 15:** I can interpret the unknown in multiplication and division to model and solve problems. (**3.OA.A.3, 3.OA.A.4, 3.OA.D.8)**	Eureka Parent Newsletter- Topic D Optional Quiz- Topic D **Pacing Considerations:** Lesson 11 shares an objective with Lesson 15 and is also similar to Lesson 7. Omit Lesson 13. Study its essential understandings and embed them into the delivery of Lesson 14's Concept Development. Modify Lesson 14 by omitting Part 1 of the Concept Development, a part which relies on the foundation of Lesson 13.	**Additional instructional resources for enrichment/remediation:** Remediation Guide Ready teacher-toolbox aligned lessons • Lesson 3- Split Numbers to Multiply • Lesson 12- Model Two-Step Word Problems Using the Four Operations Zearn Lessons- Mission 3 Lesson 12: Teamwork 10 Lesson 13: Neat-o Nines Lesson 14: Nines Made Handy

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
equation relating three whole numbers within 100. For example, determine the unknown number that makes the equation true in each of the equations: 8 x ? = 48, 5 =? ÷ 3, 6 x 6 =? **Domain**: Operations and Algebraic Thinking **Cluster:** Understand properties of multiplication and the relationship between multiplication and division. ■ **3.OA.B.5** Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) Examples: If 6 x 4 = 24 is known, then 4 x 6 = 24 is also known (Commutative property of multiplication). 3x 5 x 2 can be solved by (3 x 5) x 2 or 3 x (5 x 2) (Associative property of multiplication). One way to find 8 x 7 is by using 8 x (5 + 2) = (8 x 5) + (8 x 2). By knowing that 8 x 5 = 40 and 8 x 2 = 16, then 8 x 7 = 40 + 16 = 56 (Distributive property of multiplication over addition). **Domain**: Operations and Algebraic Thinking **Cluster:** Multiply and divide within 100. ■**3.OA.C.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 x 5 = 40, one knows 40 ÷ 5 =8) or properties of operations. By the end of 3rd grade, know from memory all products of two one-digit numbers and related division facts. **Domain**: Operations and Algebraic Thinking			Lesson 15: Riddle Me Nines embarc.online- Module 3 **Videos:** • Understand multiplication problems: using equal groups • Identify patterns on multiplication chart • Understand the commutative property of multiplication in word problems • Solve multiplication problems: using associative property **I-Ready Lessons:** • Multiplication and Division Fact Families • Solve One-Step Word Problems Using Multiplication and Division • **Task Bank:** • Gifts from Grandma, Variation 1 • Two Interpretations of Division • Finding an Unknown in a Division Problem

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
Cluster: Solve problems involving the four operations, and identify and explain patterns in arithmetic. ■ **3.OA.D.9** Identify arithmetic patterns (including patterns in the addition and multiplication tables) and explain them using properties of operations. For example, analyze patterns in the multiplication table and observe that 4 times a number is always even (because 4 x 6 = (2 x 2) x 6 = 2 x (2 x 6), which uses the associative property of multiplication)			
Domain: Operations and Algebraic Thinking **Cluster:** Represent and solve Problems involving multiplication and division. ■ **3.OA.A.3** Multiply and divide within 100 to solve contextual problems, with unknowns in all positions, in situations involving equal groups, arrays, and measurement quantities using strategies based on place value, the properties of operations, and the relationship between multiplication and division (e.g., contexts including computations such as 3 x ? = 24, 6 x 16 =?,? ÷ 8 = 3, or 96 ÷ 6 =?) **Domain**: Operations and Algebraic Thinking **Cluster:** Multiply and divide within 100. ■ **3.OA.C.7** Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 x 5 = 40, one knows 40 ÷ 5 =8) or properties of operations. By the end of 3rd grade, know from memory all products of two one-digit numbers and related division facts.	**Objectives/Learning Targets:** **Topic E: Analysis of Patterns and Problem Solving Including Units of 0 and 1** **Lesson 16:** I can reason about and explain arithmetic patterns using units of 0 and 1 as they relate to multiplication and division. (**3.OA.A.3, 3.OA.C.7, 3.OA.D.8, 3.OA.D.9)** **Lesson 17:** I can identify patterns in multiplication and division facts using the multiplication table. (**3.OA.A.3, 3.OA.C.7, 3.OA.D.8, 3.OA.D.9)** **Lesson 18**: I can solve two-step word problems involving all four operations and assess the reasonableness of solutions. (**3.OA.A.3, 3.OA.C.7, 3.OA.D.8, 3.OA.D.9)**	Eureka Parent Newsletter- Topic E **Optional Quiz: Topics E and F** **Pacing Considerations:** Combine lessons 16 and 17. **Suggestions for combining:** **Lessons 16 and 17** **Fluency (10 minutes)** Multiply and divide by 9 and 10 **Application Problem (5 minutes)** Lesson 17 **Concept Development (32 minutes)** Lesson 16: Problem 1 and 2 Lesson 17: Completed during Concept Development **Problem Set (5 minutes)**	**Additional instructional resources for enrichment/ remediation:** **Remediation Guide** **Ready teacher-toolbox aligned lessons:** • Lesson 13: Solve Two-Step Word Problems Using the Four Operations **Zearn Lessons-Mission 3** Lesson 16: Big and Small Lesson 17: Even and Odds Lesson 18: Sensible Solutions **embarc.online- Module 3** **Videos** • **Solve two step problems multiplying one- digit numbers by multiples of 10** • **Solving two -step word problems using a model**

■Major Work ➢ Supporting

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
Domain: Operations and Algebraic Thinking **Cluster:** Solve problems involving the four operations, and identify and explain patterns in arithmetic. ■ **3.OA.D.8** Solve two-step contextual problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. **Domain:** Operations and Algebraic Thinking **Cluster:** Solve problems involving the four operations, and identify and explain patterns in arithmetic ■ **3.OA.D.9** Identify arithmetic patterns (including patterns in the addition and multiplication tables) and explain them using properties of operations. For example, analyze patterns in the multiplication table and observe that 4 times a number is always even (because 4 x 6 = (2 x 2) x 6 = 2 x (2 x 6), which uses the associative property of multiplication)		Lesson 16: 2, 3 Lesson 17: Completed during the Concept Development **Debrief/Exit Ticket (10 minutes)** Exit Ticket 16: 1a ,e, f Exit Ticket 17: 1	• Solve multiplication problems using associative property **Task Bank** • Gifts from Grandma, Variation 1 • Two Interpretations of Division • The Class Trip
Domain: Number and Operation in Base Ten **Cluster:** Use place value understanding and properties of operations to perform multi-digit arithmetic ➢ **3.NBT.A.3** Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.	**Topic F: Multiplication of Single-Digit Factors and Multiples of 10** **Objectives/Learning Targets:** **Lesson 19:** I can multiply by multiples of 10 using the place value chart. (**3.OA.B.5, 3.OA.D.8, 3.OA.D.9, 3.NBTA..3**) **Lesson 20:** I can use place value strategies	Optional Quiz: Topics E and F **Pacing Considerations:** No pacing adjustments recommended	**Additional instructional resources for enrichment/remediation:** Remediation Guide Ready teacher-toolbox aligned lessons • Lesson 2: Use Order and Grouping to Multiply • Lesson 7: Understand Patterns • Lesson10: Use Place Value to Multiply

■Major Work ➢ Supporting

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
Domain: Operations and Algebraic Thinking **Cluster:** Understand properties of multiplication and the relationship between multiplication and division ■ **3.OA.B.5** Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) Examples: If 6 x 4 = 24 is known, then 4 x 6 = 24 is also known (Commutative property of multiplication). 3x 5 x 2 can be solved by (3 x 5) x 2 or 3 x (5 x 2) (Associative property of multiplication). One way to find 8 x 7 is by using 8 x (5 + 2) = (8 x 5) + (8 x 2). By knowing that 8 x 5 = 40 and 8 x 2 = 16, then 8 x 7 = 40 + 16 = 56 (Distributive property of multiplication over addition). **Domain**: Operations and Algebraic Thinking **Cluster:** Solve problems involving the four operations, and identify and explain patterns in arithmetic. ■ **3.OA.D.8** Solve two-step contextual problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. **Domain:** Operations and Algebraic Thinking **Cluster:** Solve problems involving the four operations, and identify and explain patterns in arithmetic ■ **3.OA.D.9** Identify arithmetic patterns (including patterns in the addition and	and the associative property $n \times (m \times 10) = (n \times m) \times 10$ (where n and m are less than 10) to multiply by multiples of 10. **3.OA.B.5, 3.OA.D.8, 3.OA.D.9, 3.NBT.A.3)** **Lesson 21:** I can solve two-step word problems involving multiplying single-digit factors and multiples of 10. **3.OA.B.5, 3.OA.D.8, 3.OA.D.9, 3.NBTA..3)** **End of Module Assessment**		**Zearn Lessons- Mission 3** Lesson 19: Know your Place Lesson 20: Do What You Want to Do Lesson 21: Tackle the Tens **embarc.online- Module 3** **Videos:** • **Solve two step problems multiplying one- digit numbers by multiples of 10** • **Solving two -step word problems using a model** • **Solve multiplication problems: using associative property** **I-Ready Lessons:** • Lesson 2-Use Order and Grouping to Multiply • Lesson 13-Solve Two-Step Word Problems Using the Four Operations • Lesson 7- Understand Patterns **Task Bank** • **How Many Colored Pencils?** • **Valid Equalities (Part 2)** • **The Stamp Collection**

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
multiplication tables) and explain them using properties of operations. For example, analyze patterns in the multiplication table and observe that 4 times a number is always even (because 4 x 6 = (2 x 2) x 6 = 2 x (2 x 6), which uses the associative property of multiplication)			
Module 4: Multiplication and Area			
Domain: Measurement and Data **Cluster:** Geometric measurement: understand and apply concepts of area and relate area to multiplication and to addition. ■ **3.MD.C.5** Recognize that plane figures have an area and understand concepts of area measurement. a. Understand that a square with side length 1 unit, called "a unit square," is said to have "one square unit" of area and can be used to measure area. b. Understand that a plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units. ■ **3.MD.6** Measure areas by counting unit squares (square centimeters, square meters, square inches, square feet, and improvised units).	**Essential Questions** • How do you find area? • How can you use the distributive property to find the area of a rectangle? • How do you estimate to find the area of an irregular shape? **Objectives/Learning Targets:** **Topic A: Foundations for Understanding Area** **Lesson 1**: I can understand area as an attribute of plane figures. **(3. MD.C.5)** **Lesson 2:** I can decompose and recompose shapes to compare areas. **(3. MD.C.5, 3.MD.C.6)** **Lesson 3**: I can model tiling with centimeter and inch unit squares as a strategy to measure area. **(3.MD.C.5)** **Lesson 4**: I can relate side lengths with the number of tiles on a side. **(3.MD.C.5)**	Eureka Parent Newsletter- Topic A Optional Quiz- Topic A **Pacing Considerations:** Combine Lessons 2 and 3, both of which involve measuring and comparing area. From Lesson 3, omit the use of square centimeter tiles and the Application Problem. Have students establish square inches as units, and then tile with them as a strategy to measure area. **Suggestions for combining:** **Lessons 2 and 3** **Fluency (14 minutes)** Multiply by 4 Find the Common Products **Application Problem (5 minutes)** Lesson 2 **Concept Development (30 minutes)** Use both 1inch and 1 centimeter units using Lesson 2 concept development	**Additional instructional resources for enrichment/ remediation:** Remediation Guide Ready teacher-toolbox aligned lessons: • Lesson 27: Understand Area Zearn Lesson- Mission 4 Lesson 1: Unit, Square Unit Lesson 2: Shape Shifter Lesson 3: Range of Rectangles Lesson 4: Opposites are Equal embarc.online- Module 4 **I-Ready Lessons** • Understand Area

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
		Problem Set (10 minutes) Lesson 2: Complete 1,2 and 3 during the concept development Lesson 3: 2 a, b **Debrief/Exit Ticket (5 minutes)** Exit Ticket2: 1 Exit Ticket 3: 1,3a	
Domain: Measurement and Data **Cluster:** Geometric measurement: understand and apply concepts of area and relate area to multiplication and to addition. ■ **3.MD.C.5** Recognize that plane figures have an area and understand concepts of area measurement a. Understand that a square with side length 1 unit, called "a unit square," is said to have "one square unit" of area and can be used to measure area. b. Understand that a plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units. ■ **3.MD.6** Measure areas by counting unit squares (square centimeters, square meters, square inches, square feet, and improvised units). ■ **3.MD.C.7** Relate area of rectangles to the operations of multiplication and addition.	**Topic B: Concepts of Area Measurement** **Objectives/Learning Targets:** **Lesson 5**: I can form rectangles by tiling with unit squares to make arrays. **(3.MD.C.6, 3.MD.C.7a)** **Lesson 6:** I can draw rows and columns to determine the area of a rectangle given an incomplete array (**3. MD.C.5, 3. MD.C.6, 3. MD.C.7a)** **Lesson 7**: I can interpret area models to form rectangular arrays. **(3.MD.C.6, 3.MD.C.7a)** **Lesson 8**: I can find the area of a rectangle through multiplication of the side lengths. (**3.MD.C.7a,3.MD.C.7b)** **Mid-Module Assessment**	Eureka Parent Newsletter -Topic B Optional Quiz-Topic B **Pacing Considerations:** No pacing adjustments at this time.	**Additional instructional resources for enrichment/remediation:** Remediation Guide Ready toolbox- aligned lessons • Lesson 28: Multiply to Find Area Zearn Lessons- Mission 4 Lesson 5: Tile It Lesson 6: Clever Calculations Lesson 7: Off the Grid Lesson 8: All You Need Are Side Length embarc.online- Module 4 **Videos:** • Finding the Area of a square of rectangle by counting unit squares • Relate area to arrays **Task Bank** • Introducing the Distributive Property • Finding Area of Polygons

■Major Work ➢ Supporting

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
a. Find the area of a rectangle with whole-number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real-world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning. c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of a x b and a x c. Use area models to represent the distributive property in mathematical reasoning. For example, in a rectangle with dimensions 4 by 6, students can decompose the rectangle into 4 x 3 and 4 x 3 to find the total area of 4x 6. (See Table 3 - Properties of Operations) d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping			

■Major Work ➢ Supporting

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
Domain: Measurement and Data **Cluster:** Geometric measurement: understand and apply concepts of area and relate area to multiplication and to addition. ■ **3.MD.C.5** Recognize that plane figures have an area and understand concepts of area measurement a. Understand that a square with side length 1 unit, called "a unit square," is said to have "one square unit" of area and can be used to measure area. b. Understand that a plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units. ■ **3.MD.C.7** Relate area of rectangles to the operations of multiplication and addition. a. Find the area of a rectangle with whole-number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of	**Topic C: Arithmetic Properties Using Area Models** **Objectives/Learning Targets:** **Lesson 9**: Analyze different rectangles and reason about their area. **(3.MD.C.7a, 3.MD.C.7c)** **Lesson 10**: Apply the distributive property as a strategy to find the total area of a large rectangle by adding two products. **(3.MD.C.7a, 3.MD.C.7c)** **Lesson 11**: Demonstrate the possible whole number side lengths of rectangles with areas of 24, 36, 48, or 72 square units using the associative property. **(3.MD. C.7b)**	Eureka Parent Newsletter- Topic C Optional Quiz- Topic C **Pacing Considerations:** No pacing considerations at this time.	**Additional instructional resources for enrichment/remediation:** Remediation Guide Ready teacher-toolbox aligned lessons • Lesson 28: Multiply to Find Area Zearn Lessons- Mission 4 Lesson 9: Area Awareness Lesson 10: Piece It Together Lesson 11: All the Possibilities Embarc.online- Module 4 **Videos:** • Relate Area to Arrays • Given the area, find missing side lengths of a rectangle • **Task Bank** • India's Bathroom Tiles • Three hidden Triangles

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
rectangles with whole number side lengths in the context of solving real-world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning. c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and b + c is the sum of a x b and a x c. Use area models to represent the distributive property in mathematical reasoning. For example, in a rectangle with dimensions 4 by 6, students can decompose the rectangle into 4 x 3 and 4 x 3 to find the total area of 4x 6. (See Table 3 - Properties of Operations) d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real-world problems.			
Domain: Measurement and Data **Cluster:** Geometric measurement: understand and apply concepts of area and relate area to multiplication and to addition. ■ **3.MD.C.7** Relate area of rectangles to the operations of multiplication and addition. b. Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real-world and mathematical problems and represent whole-number products as rectangular areas in mathematical	**Topic D: Applications of Area Using Sides Lengths of Figures** **Objectives/Learning Targets** **Lesson 12**: Solve word problems involving area. **(3.MD.C.7b, 3.MD.C.7d)** **Lessons 13-14**: Find areas by decomposing into rectangles or completing composite figures to form rectangles. **(3.MD.C.7b, 3.MD.C.7d)** **Lessons 15-16**: Apply knowledge of area to determine areas of rooms in a given floor plan. **(3.MD.7b, 3.MD.7d) (Can be omitted until later in the year)**	Eureka Parent Newsletter- Topic D Optional Quiz: Topic D **Pacing Considerations:** Omit Lessons 15 and 16. These lessons guide students through a project involving floor plans. Skip the application of area that these lessons provide.	**Additional instructional resources for enrichment/remediation:** Remediation Guide Ready teacher- toolbox aligned lessons • Lesson 29: Add Areas Zearn Lessons- Mission 4 Lesson 12: A Space Odyssey Lesson 13: Cut It Out Lesson 14: Cut and Compose Lesson 15: Ara Architect Lesson 16: Area Remix

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
reasoning. d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real-world problems.	End of Module Assessment		embarc.online- Module 4 **Videos:** • Relate Area to Arrays • Given the area, find missing side lengths of a rectangle **I-Ready Lessons** • Add and Multiply to Find Area • Multiplication Fact Review • Using Area for Multiplication: Facts for 6,7, and 8 **Task Bank** • India's Bathroom Tiles • Three hidden Triangles

RESOURCE TOOLKIT 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.		
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	**Additional Sites** http://www.k-5mathteachingresources.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)		

SHELBY COUNTY SCHOOLS 2018-2019 MATHEMATICS INSTRUCTIONAL CALENDAR – GRADE 3

October 2019

Module	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:
	30	1	2	3	4	**Flex Day Options Include:** ***Standard***- Suggested standard(s) to review for the day (*-denotes a Power Standard) ***Pacing*** – Use this time to adjust instruction to stay on pace. ***Other***- This includes assessments, review, re-teaching, etc.
	7	8	9	10	11 *½ day students* *End of Quarter 1*	
	14	15	16	17	18	
	Fall Break					
Module 3 **Omit Lesson 6**	21 *Quarter 2 begins* **Topic A** **Lesson 1**	21 **Topic A** **Lesson 2**	23 **Topic A** **Lesson 3**	24 **Topic B** **Combine Lessons 4 and 5**	25 **Flex Day Options** **3.OA.A.4** **3.OA.B.5** **Pacing** **Other**	Optional Quizzes: Module 3 **Topic A** **Topic B** **Topic C** (Quizzes should not take more than 15 minutes to administer)
Module 3 **Omit 10 and 11**	28 **Topic B** **Lesson 7**	29 **Topic C** **Lesson 8**	30 **Topic C** **Lesson 9**	31 **Mid Module Assessment** *Halloween*	1	

Note: Please use this suggested pacing as a guide. It is understood that teachers may be up to 1 week ahead or 1 week behind depending on their individual class needs.

SHELBY COUNTY SCHOOLS 2018-2019 MATHEMATICS INSTRUCTIONAL CALENDAR – GRADE 3

November 2019

Module	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:
					1 **Flex Day Options** **3.OA.A.4** **3.OA.C.7** **Pacing** **Other**	**Flex Day Options Include:** ***Standard***- Suggested standard(s) to review for the day (*-denotes a Power Standard) ***Pacing*** – Use this time to adjust instruction to stay on pace. ***Other***- This includes assessments, review, re-teaching, etc. Optional Quizzes- Module 3 Topic D Topic E and F (Quizzes should not take more than 15 minutes to administer) Optional Quizzes: Module 4 Topic A (Quizzes should not take more than 15 minutes to administer)
Module 3 **Omit Lesson 13**	**4** **Topic D** **Lesson 12**	**5** **Topic D** **Lesson 14**	**6** **Topic D** **Lesson 15**	**7** **Topic E** **Combine lessons 16 and 17**	**8** *1/2 day students* **Flex Day Options** **3.OA.B.5** **3.OA.D.8*** **Pacing** **Other**	
Module 3	**11** ***Veteran's Day (Out)***	**12** **Topic E** **Lesson18**	**13** **Topic F** **Lesson 19**	**14** **Topic F** **Lesson 20**	**15** **Topic F** **Lesson 21**	
Module 4	**18** **End of Module Assessment**	**19** **Topic A** **Lesson 1**	**20** **Topic A** **Combine lessons 2 and 3**	**21** **Topic A** **Lesson 4**	**22** **Flex Day Options** **3.OA.D.8** **3.NBT.A.3** **3.MD.C.5** **Pacing** **Other**	
	25 PD FLEX DAYS	**26**	**27** Thanksgiving Break	**28**	**29**	

SHELBY COUNTY SCHOOLS 2018-2019 MATHEMATICS INSTRUCTIONAL CALENDAR – GRADE 3

December 2019

Module	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:
Module 4	**2** Topic B Lesson 5	**3** Topic B Lesson 6	**4** Topic B Lesson 7	**5** Topic B Lesson 8	**6** Flex Day Options 3.MD.C.6 3.MD.C.7 Pacing Other	**Flex Day Options Include:** ***Standard***- Suggested standard(s) to review for the day (*-denotes a Power Standard) ***Pacing*** – Use this time to adjust instruction to stay on pace. ***Other***- This includes assessments, review, re-teaching, etc. Optional Quizzes- Module 4 Topic B Topic C Topic D (Quizzes should not take more than 15 minutes to administer) Module 4, Lessons 15 and 16 will be added during the last quarter of the school year.
Module 4	**9** Mid Module Assessment	**10** Topic C Lesson 9	**11** Topic C Lesson 10	**12** Topic C Lesson 11	**13** Flex Day Options 3.MD.C.7a 3.MD.C.7b 3.MD.C.7c Pacing Other	
Module 4 Omit Lessons 15 and 16	**16** Topic D Lesson 12	**17** Topic D Lesson 13	**18** Topic D Lesson 14	**19** End of Module Assessment	**20** *½ day students* *End of Quarter 2*	
	23	**24**	**25**	**26**	**27**	
	Winter Break					
	30	**31**	1	2	3	
	Winter Break					