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	TN Ready Testing Window	Material covered after April 9th is an extension of 4th 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		*Additional standards – see curriculum map
		4.NBT.B.6	4.G.A.3	4.MD.B.4				
		4.MD.A.3						

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 the following guide as you prepare to teach a module for additional guidance in planning, pacing, and suggestions for omissions.

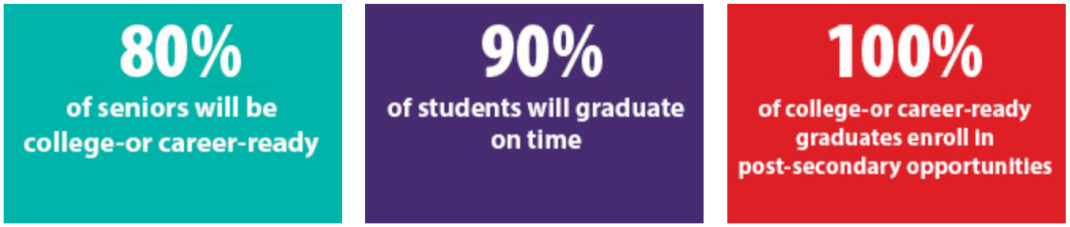
Pacing and Preparation Guide (Omissions)

■ Major Work ➢ Supporting Standards

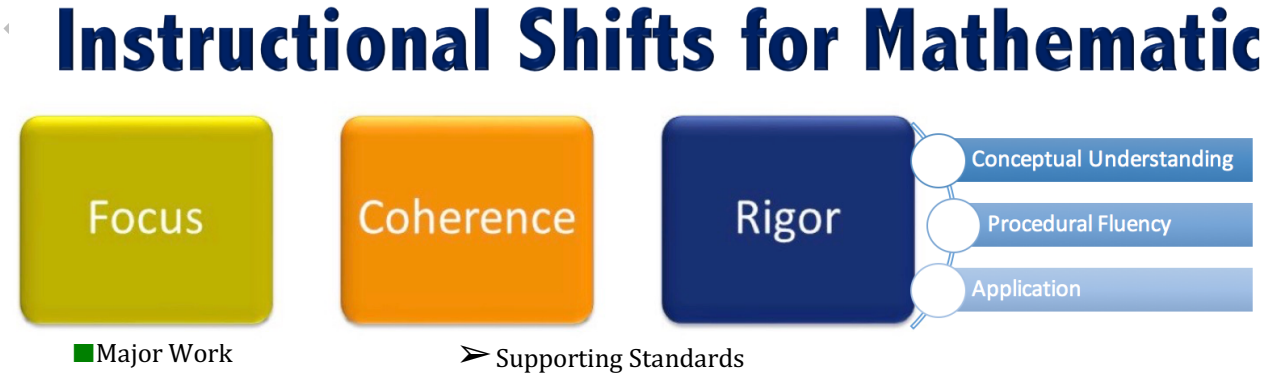
Introduction

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**.



Curriculum and Instruction – Mathematics

Quarter: 2 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.

- Tennessee Mathematics Content Standards
- Standards for Mathematical Practice
- Literacy Skills for Mathematical Proficency

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.

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Module 3: Multi-digit Multiplication and Division
Module 4: Angle Measures and Plane Figures

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	Type of Rigor	Foundational Standards
4.OA.A.3	Conceptual Understanding Application	3.OA.D.8, 4.NBT.A.3, 4.NBT.B.6
4.OA.B.4	Procedural Skill and Fluency	3.OA.C.7
4.NBT.B.5	Conceptual Understanding Procedural Skill and Fluency	3.NBT.A.2, 3.NBT.A.3, 3.OA.D.5, 3.OA.C.7, 4.NBT.A.1
4.NBT.B.6	Conceptual Understanding Procedural Skill and Fluency	3.OA.B.5, 3.OA.B.6, 3.OA.C.7, 3.NBT.A.2, 4.NBT.A.1, 4.NBT.B.5, 4.NBT.B.6,
4.MD.C.5	Conceptual Understanding	Introductory
4.MD.C.6	Procedural Skill and Fluency	4.MD.C.5
4.MD.C.7	Conceptual Understanding/Application, Procedural Skill and Fluency	4.MD.C.5,1.OA.D.7, 1.OA.D .8
4.G.A.1	Conceptual Understanding Procedural Skill and Fluency	3.G.A.1
4.G.A.2	Procedural Skill and Fluency	4.G.A.1
4.G.A.3	Conceptual Understanding	1.G.A.2

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Quarter: 2 Grade: 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
Module 3: Multi-Digit Multiplication and Division			
Domain: Numbers and Operations in Base Ten **Cluster:** Use place value understanding and properties of operations to perform multi-digit arithmetic • **4.NBT.B.6** Find whole-number quotients and remainders with up to four dividends and one- digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	. **Essential Questions** • How can you use place value and patterns to help you divide mentally? • What does it mean when you divide, and some are left over? • What do you do when there are not enough hundreds to divide? • How can you use multiplication to find all the factors of a number? • How can you sort numbers by their factors? • What hidden questions lie within a multiple-step problem? **Topic E: Division of Tens and Ones with Successive Remainders** **Learning Targets/Objectives:** **Lesson 14**: I can solve division word problems with remainders. **(4.NBT.B.6)** **Lesson 15**: I can understand and solve division problems with a remainder using the array and area models. **(4.NBT.B.6)** **Lesson 16:** I can understand and solve two-digit dividend division problems with a remainder in the ones place by using place value disks. **(4.NBT.B.6)**	Eureka Parent Newsletter Topic E Optional Quiz: Topic E **Pacing Considerations** Omit Lesson 19, and instead, embed discussions of interpreting remainders into other division lessons. Omit Lesson 21 because students solve division problems using the area model in Lesson 20. Using the area model to solve division problems with remainders are not specified in the Progressions documents. **Additional resources for enrichment/ Remediation:** Remediation Guide **I-Ready Lessons:** • Divide Whole Numbers Zearn Lessons- Mission 3 Lesson 14- That's what's left Lesson 15- All that Remains Lesson 16- Divisible Disks	**Vocabulary** Associative property, composite number, distributive property, divisible, divisor, formula, long division, partial product, prime number, remainder **Familiar Terms and Symbols** Algorithm, Area, Area model, Array, bundling, grouping, reaming, changing, compare, distribute, divide, division, equation, factors, mixed units, multiple, multiply, multiplication, perimeter, place value, product, quotient, rectangular array, rows, columns, times as many__as ____ **Fluency Practice:** **Lesson 14**: Group Count to Divide Number Sentences in an Array Divide with Remainders **Lesson 15**: Show values with Number Disks Divide with Remainders Number Sentences in an Array

		Lesson 17- Ten is not the end Lesson 18- Divide those Numbers Lesson 19- Shell it Out Lesson 20- Break and Build	

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Quarter: 2 Grade: 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
	Lesson 17: I can represent and solve division problems requiring decomposing a remainder in the tens. **(4.NBT.B.6)** **Lesson 18:** I can find whole number quotients and remainders. **(4.NBT.B.6)** **Lesson 19:** I can explain remainders by using place value understanding and models. **(4.NBT.B.6)** **Lesson 20:** I can solve division problems without remainders using the area model. **(4.NBT.B.6)** **Lesson 21:** I can solve division problems with remainders using the area model. **(4.NBT.B.6)**	**embarc.online- Module 3** **Videos:** • Solve division problems: using a picture model • Solve division problems: using arrays • Interpret the remainder of a division problem **I-Ready Lessons** • Relating Division and Multiplication • Divide Whole Numbers **Task Bank** Mental Division Strategy Carnival Tickets	**Lesson 16:** Group Count Divide with Remainders **Lesson 17:** Divide Using the Standard Algorithm **Lesson 18:** Group Count Divide Mentally Divide Using the Standard Algorithm **Lesson 19:** **Sprint:** Mental Division Divide Using the Standard Algorithm **Lesson 20** Divide Using the Standard Algorithm Find Unknown Factors Mental Multiplication **Lesson 21** Sprint: Division with Remainders Find Unknown Factors

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Quarter: 2 Grade: 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
Domain: Operations and Algebraic Thinking **Cluster:** Gain familiarity with factors and multiples ■ **4.OA.B.4** Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite.	**Topic F: Reasoning with Divisibility** **Objectives/Learning Targets** **Lesson 22**: I can find factor pairs for numbers to 100, and use understanding of factors to define prime and composite. **(4.OA.B.4)** **Lesson 23**: I can use division and the associative property to test for factors and observe patterns. **(4.OA.B.4)** **Lesson 24**: I can determine if a whole number is another multiple of another number. **(4.OA.B.4)** **Lesson 25**: I can explore properties of prime and composite numbers to 100 by using multiples. **(4.OA.B.4)**	Eureka Parent Newsletter: Topic F Optional Quiz: Topic F **Pacing Considerations:** No pacing adjustments recommended Additional instructional resources for enrichment/remediation See Eureka Remediation Guide Ready teacher- toolbox aligned lessons • Lesson 7- Multiples and Factors Zearn lessons- Mission 3 Lesson 22: Two of a Kind Lesson 23: Factor Finder Lesson 24: Mighty Multiples Lesson 25: So Prime embarc.online- Module 3 **Videos** • Determine if a number is prime or composite using area models • Find all the factor pairs of a number using area models • Understand multiples and factors **I-Ready Lessons** • Finding Multiples • Prime and Composite Numbers • Finding Factors • Identifying Multiples	**Fluency Practice:** **Lesson 22** Divide Using the Area Model Find the Unknown Factor Mental Multiplication **Lesson 23** Use arrays to find factors Multiply Two Factors Prime and Composite **Lesson 24** Group Counting Prime or Composite? Test for Factors **Lesson 25** Test for Factors Multiples are Infinite List Multiples and Factors

Curriculum and Instruction – Mathematics

Quarter: 2 Grade: 4

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
		Task Bank The Locker Game Identifying Multiples Multiples of 3,6 and 7	
Domain: Operations and Algebraic Thinking **Cluster:** Use the four operations with whole numbers to solve problems. ■ **4.OA.A.3** Solve multistep contextual word problems posed with whole numbers and having whole number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental com-computation and estimation strategies including rounding. ■ **4.NBT.B.6** Find whole- number quotients and remainders with up to four- digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	**Topic G: Division of Thousands, Hundreds Tens, and Ones** **Objectives/Learning Targets** **Lesson 26:** I can divide multiples of 10, 100, and 1,000 by single-digit numbers. **(4.OA.A.3, 4.NBT.B.6)** **Lesson 27:** I can represent and solve division problems with up to a three-digit dividend numerically and with place value disks requiring decomposing a remainder in the hundreds place. **(4.OA.A.3, 4.NBT.B.6)** **Lesson 28:** I can represent and solve three-digit dividend division with divisors of 2, 3, 4, and 5 numerically. **(4.OA.A,3, 4.NBT.B.6)** **Lesson 29:** I can represent numerically four-digit dividend division with divisors of 2, 3, 4, and 5, decomposing a remainder up to three times. **(4.OA.A.3, 4.NBT.B.6)** **Lesson 30:** I can solve division problems with a zero in the dividend or with a zero in the quotient. **(4.OA.3, 4.NBT.6)** **Lesson 31:** I can interpret division word problems as either number of groups unknown or group size unknown. **(4.OA.3, 4.NBT.6)**	Eureka Parent Newsletter Topic G Optional Quiz: Topic G **Pacing Considerations:** Using the area model to solve division problems with remainders is not specified in the Progressions documents. Omit Lesson 31, and instead, embed analysis of division situations throughout later lessons. Omit Lesson 33 and embed into Lesson 30 the discussion of the connection between division using the area model and division using the algorithm. Look ahead to the pacing suggestions for Module 4. **Additional instructional resources for enrichment/remediation** See Eureka Remediation Guide Ready teacher-toolbox aligned lessons • Lesson 12: Divide Whole Numbers Zearn Lessons- Mission 3 Lesson 26: All my single digits Lesson 27: Side by Side Lesson 28: Real World Division Lesson 29: The Great Divide Lesson 30: Zero to Hero Lesson 31: Decoding Division Lesson 32: Are you my remainder?	**Lesson 26:** Show values with Number Disks Group Counting List Multiples and Factors **Lesson 27:** **Sprint**: Circle the prime Number Divide with Number Disks **Lesson 28:** Multiply by Units Divide Different Units Group Count Divide Three-Digit Numbers by 2 **Lesson 29:** Multiply by Units Divide Different Units Divide to Find Half **Lesson 30** Multiply Using the Standard Algorithm Divide Using Different Units Find the Quotient and Remainder **Lesson 31:** **Sprint:** Divide Different Units Group Size or Number of Groups Unknown

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TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
	Lesson 32: I can interpret and find whole number quotients and remainders to solve one-step division word problems with larger divisors of 6, 7, 8, and 9. **(4.OA.A.3, 4.NBT.B.6)**	**embarc.online- Module 3** **Videos** • Solve division problems: using a picture model • Solve division problems: using arrays • Interpret the remainder of a division problem • Solve division problems with remainders using the standard algorithm **I-Ready Lessons** • Relating Division to Multiplication • Divide Whole Numbers • Dividing Whole numbers • Solve Multi-Step Problems **Task Bank** Carnival Tickets	**Lesson 32:** Quadrilaterals Multiply Units Group Count
Domain: Number and Operations in Base Ten **Cluster:** Use place value understanding and properties of operations to perform multi-digit arithmetic. ■**4.NBT.B.5** Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations. Rectangular arrays, and/or area models.	**Topic H:** Multiplication of Two-Digit by Two-Digit Numbers **Objectives/Learning Target** **Lesson 34:** I can multiply two-digit multiples of 10 by two-digit numbers using a place value chart. **(4.NBT.B.5)** **Lesson 35:** I can multiply two-digit multiples of 10 by two-digit numbers using the area model. **(4.NBT.B.5)**	**Eureka Parent Newsletter Topic H** **Optional Quiz: Topic H** **Pacing Considerations**: Lesson 37-38 may be combined. If students are struggling, teach the lessons separately. **Additional instructional resources for enrichment/remediation:** Remediation Guide	**Fluency Practice:** Lesson 34: Draw a Unit Fraction List Multiples and Factors List Prime Numbers Lesson 35: Draw and Label Unit Fractions Divide Three Different Ways Multiply by Multiples of 10

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TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
	Lesson 36: I can multiply two-digit by two-digit numbers using four partial products. **(4.NBT.B.5)** **Lesson 37-38:** I can transition from four partial products to the standard algorithm for two-digit by two-digit multiplication. **(4.NBT.B.5)** **End of Module Assessment**	Ready teacher-toolbox aligned lessons • Lesson 11:Multiply Whole Numbers Zearn- Mission 3 **Lesson 34:** Freedom of Association **Lesson 35:** Tens and Ones Split **Lesson 36:** Area Modeling **Lesson 37:** The Two Step Embarc.online.com- Module 3 **Videos:** • Use an area model to multiply a three-digit number by a one-digit number. **I-Ready Lessons:** • Multiplying two-digit numbers by one-digit numbers • Multiplying two-digit numbers by Two-Digit Numbers **Task Bank** • Threatened and Endangered • Thousands and Millions of Fourth Graders	**Lesson 36:** Draw and Label Unit Fractions Divide Three Different Ways **Lesson 37-38:** Decompose 90 and 180 Multiply by Multiples of 10 Written Vertically

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TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
Module 4: Angle Measure and Plane Figures			
Domain: Geometry **Cluster:** Draw and identify lines and angles and classify shapes by properties of their lines and angles. ➢ **4.G.A.1** Draw points, lines, line segments, rays, angles (right, acute, obtuse, straight, reflex), and perpendicular and parallel lines. Identify these in two-dimensional figures.	**Essential Questions** • What geometric terms describe types of angles? • How can you draw an angle? **Topic A: Lines and Angles** **Objectives/Learning Targets** **Lesson 1:** I can Identify and draw points, lines, line segments, rays, and angles. Recognize them in various contexts and familiar figures. **(4.G.A.1)** **Lesson 2:** I can use right angles to determine whether angles are equal to, greater than, or less than right angles. Draw right, obtuse, and acute angles. **(4.G.A.1)** **Lesson 3:** I can identify, define, and draw perpendicular lines. **(4.G.A.1)** **Lesson 4:** I can identify, define and draw parallel lines. **(4.G.A.1)**	Eureka Parent Newsletter Topic A Optional Quiz: Topic A **Pacing Considerations:** No pacing adjustments recommended **Additional instructional resources for enrichment/remediation** Remediation Guide **Ready teacher-toolbox aligned lessons:** • Lesson 31- Points, Lines, Rays, and Angles **Zearn Lessons- Mission 4** Lesson 1: Points, Lines, and Rays! Oh My! Lesson 2: All Right with Me Lesson 3: Two Lines Make a Right Lesson 4: Can't Touch This! **embarc.online- Module 4** **Videos:** • Draw points, lines, and line segments • Label and name points, lines, rays and angles using math notation • Classify and draw various types of angles	**Vocabulary** acute angle, acute triangle, adjacent angle, arc, angle, collinear, complimentary, degree, diagonal, equilateral, figure, interior of angle, intersecting lines, isosceles triangle, length of arc, line, line of symmetry, line segment, obtuse angle, obtuse triangle, parallel, perpendicular, point, protractor, ray, right angle, right triangle, scalene triangle, straight angle, supplementary angles, triangle, vertex, vertical angles, **Familiar Terms and Symbols** Decompose, Parallelogram, polygon, quadrilateral, rectangle, rhombus, square, sum, trapezoid **Fluency Practice:** **Lesson 1-** Multiply Mentally, Add and Subtract, Sides, Angles and Vertices **Lesson 2-** Multiply Using Partial Products, Identify Two-Dimensional Figures, Physiometry **Lesson 3-** Multiply Mentally, Identify Two-Dimensional Figures, Physiometry **Lesson 4- Divide Mentally,** Identify Two-Dimensional Figures,

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TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
Domain: Measurement and Data **Cluster**: Geometric measurement: understand concepts of angle and angle measures. ➢**4.MD.C.5** Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement: a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. b. An angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees ➢**4.MD.C.6** Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	**Topic B: Angle Measurement** **Objectives/Learning Targets** **Lesson 5:** I can use a circular protractor to understand a 1-degree angle as $\frac{1}{360}$ of a turn. Explore benchmark angles using the protractor. **(4. MD.C.5, 4. MD.C.6)** **Lesson 6:** I can use varied protractors to distinguish angle measure from length measurement. **(4. MD.C.5, 4. MD.C.6)** **Lesson 7:** I can measure and draw angles. Sketch given angle measures and verify with a protractor. **(4. MD.C.5, 4. MD.C.6)** **Lesson 8:** I can identify and measure angles as turns and recognize them in various contexts. **(4. MD.C.5, 4. MD.C.6)** **Mid- Module Assessment**	Eureka Parent Newsletter: Topic B Optional Quiz: Topic B **Pacing Considerations:** Topics B and C could be taught directly following Module 3, prior to Module 5, since they offer excellent scaffolding for the fraction work of Module 5. **Additional instructional resources for enrichment/remediation:** Remediation Guide **Ready teacher-toolbox aligned lessons** • Lesson 28- Understand Angles • Lesson 29-Measure and Draw Angles **Zearn Lessons- Mission 4** **Lesson 6:** To a Degree **Lesson 7:** Make and Measure **Lesson 8:** Turn, Turn, Turn **embarc.online-Module 4**	**Fluency Practice:** **Lesson 5-** Divide Using the Standard Algorithm, Identify Two-Dimensional Figures, Physiometry **Lesson 6-** Divide Using the area model, Divide Using the Standard Algorithm, Identify Two-Dimensional Figures, Physiometry **Lesson 7-** Break Apart, Physiometry, Identify Angle Measures **Lesson 8**- Count by 90°, Break Apart, Physiometry, Sketch Angles

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
		Videos • Introduction to protractors • Measure angles to the nearest degree with protractors **I-Ready Lessons:** • Add and Subtract Angle Measures • Using a Protractor	
Domain: Measurement and Data **Cluster**: Geometric measurement: understand concepts of angle and measure angles. ➢**4.MD.C.7** Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	**Objectives/Learning Targets** **Topic C:** Problem Solving with the Addition of Angle Measures **Lesson 9:** I can decompose angles using pattern blocks. **(4.MD.C.7)** **Lessons 10-11:** I can use the addition of adjacent angle measures to solve problems using a symbol for the unknown angle measure. **(4.MD.C.7)**	Eureka Parent Newsletter: Topic C Optional Quiz: Topic C **Pacing Considerations:** Topics B and C could be taught directly following Module 3, prior to Module 5, since they offer excellent scaffolding for the fraction work of Module 5 **Additional instructional resources for enrichment/remediation:** Remediation Guide **Ready teacher-toolbox aligned lessons** • Lesson 30-Add and Subtract with Angles **Zearn Lessons- Mission 4** Lesson 9: Sum Angles Lesson 10: The Great Angle Mystery **embarc.online- Module 4** **Videos** Compose and decompose angles **I-Ready Lessons:** • Add and Subtract Angle Measures	**Fluency Practice:** **Lesson 9-** Count by 90°, Break Apart 90, 180, and 360, Physiometry, Sketch Angles **Lessons 10-11-** Divide with Number Disks Units, Count by 90°, Break Apart 90, 180, and 360, Physiometry, Divide Different Units, Find the Unknown Angle

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY/FLUENCY
Domain: Geometry **Cluster**: Draw and identify lines and angles and classify shapes by properties of their lines and angles. ➢ **4.G.A.1** Draw points, lines, line segments, rays, angles (right, acute, obtuse, straight, reflex), and perpendicular and parallel lines. Identify these in two-dimensional figures. ➢ **4.G.A.2** Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category and identify right triangles. ➢ **4.G.A.3** Recognize and draw lines of symmetry for two-dimensional figures.	**Topic D: Two-dimensional Figures and Symmetry** **Objectives/Learning Targets** **Lesson 12:** I can recognize lines of symmetry for given two-dimensional figures. Identify line- symmetric figures and draw lines of symmetry. **(4.G.A.1, 4.G.A.2, 4.G.A.3)** **Lesson 13:** I can analyze and classify triangles based on side length, angle measure, or both. **(4.G.A.1, 4.G.A.2, 4.G.A.3)** **Lesson 14:** I can define and construct triangles from given criteria. Explore symmetry in triangles. **(4.G.A.1, 4.G.A.2, 4.G.A.3)** **Lesson 15:** I can classify quadrilaterals based on parallel and perpendicular lines and the presence or absence of angles of a specified size. **(4.G.A.1, 4.G.A.2, 4.G.A.3)** **Lesson 16:** I can reason about attributes to construct quadrilaterals on square or triangular grid paper. **(4.G.A.1, 4.G.A.2, 4.G.A.3)** **End of Module Assessment**	Eureka Parent Newsletter-Topic D Optional Quiz: Topic D **Pacing Considerations:** No pacing recommendations **Additional resources for enrichment/remediation:** Remediation Guide Ready-teacher toolbox aligned lessons • Lesson 32-Classify Two Dimensional Figures • Lesson 33- Symmetry Zearn lessons- Mission 4 Lesson 12: So Symmetrical Lesson 13: Name That Triangle Lesson 14: What's Your Angle Lesson 15: Four Sides- Four Angles embarc.online-Module 4 **Videos:** • Identify line symmetry in regular polygons **I-Ready Lessons** • Concepts of Symmetry • Line Symmetry	**Fluency Practice:** **Lesson 12-** Add and Subtract, Find the Quotient and Remainder, Find the Unknown Angle **Lesson 13-** Divide Three Different Ways, Physiometry, Lines of Symmetry **Lesson 14-** Divide Three Different Ways, Physiometry, Classify the Triangle **Lesson 15-** Classify the Triangle, Find the Unknown Angle, Add and Subtract **Lesson 16-** Classify the Quadrilateral, Find the Unknown Angle, Add and Subtract

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

TN State Standards/CCSS

TN Math Standards
Achieve the Core

Videos

Tech Coach Corner PowerPoint and Resources Teaching Channel
Scholastic Math Study
Jams Math TV
LearnZillion
Khan Academy

Interactive Manipulatives

http://www.eduplace.com/
Illuminations Resources for Teaching Math
Interactive Sites for Educators
Math Playground: Common Core Standards
PARCC Games
Virtual Manipulatives
IXL MATH
Thnikning Blocks: Computer and Ipad based programs

Additional Sites

http://www.k-5mathteachingresources.com/5th-grade-number-activities.html

http://embarc.online

Edutoolbox Resources

Illustrated Mathematics Dictionary for Kids

Parent Roadmap: Supporting Your Child in Grade 5 Mathematics

Other:

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 4

October 2018

Lessons for the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:
Module 3 Topic D: Lessons 12-13 1-day Review **Mid Module Assessment** Flex (Task) Day	1	2	3	4 **Module 3: Mid Module Assessment Complete**	5 *End of 1st Nine Weeks*	Optional Quizzes: Module 3 Topic D Topic E Topic F (Quizzes should not take more than 15 minutes to administer) Note: ***Flex days*** 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)
	8 *Columbus Day*	9 ***Fall Break***	10	11	12	
Module 3 Topic E: Lessons 14-18 (Omit Lesson 19)	15 *Begin 2nd Nine Weeks*	16	17	18	19	**Omit Lesson 19**
Module 3 Topic E: Lesson 20 (Omit Lesson 21) Topic F: Lesson 22-25	22	23	24	25	26	**Omit Lesson 21**
Module 3 Topic G: Lesson 26-30 (Omit Lesson 31)	29	30	31 *Halloween*	1	2	

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 4

November 2018

Lessons for the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:
Module 3 Topic G: Lesson 26-30 (Omit Lesson 31)				1	2	**Omit Lesson 31**
Module 3 Topic G: Lesson 32 (Omit Lesson 33) Topic H: Lessons 34-37	5	6	7	8	9	**Omit Lesson 33** Optional Quizzes: Module 3 Topic G Topic H (Quizzes should not take more than 15 minutes to administer) Optional Quizzes: Module 4 Topic A Topic B (Quizzes should not take more than 15 minutes to administer) **Combine Lesson 3 and 4**
Module 3 Topic H: Lesson 33 1-day Review End of Module Assessment Module 4 Topic A: Lesson 1	12 *Veteran's Day (Out)*	13	14	15 Module 3: End of Module Assessment Complete	16	
Module 4 Topic A: Lessons 2-4 (Combine Lesson 3/4)	19	20	21 Thanksgiving Break	22	23	
Module 4 Topic B: Lessons 5-8 1-day Review	26	27	28	29	30	

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 4

December 2018

Lessons for the Week	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:
Module 4 Mid Module Assessment Flex (NWEA) Day Topic C: Lessons 9-11	3 Module 4: Mid Module Assessment Complete	4	5	6	7	Note: ***Flex days*** 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)
Module 4 Topic D: Lessons 12-16 (Combine 15/16) 1-day Review	10	11	12	13	14	**Combine Lesson 15 and 16**
Module 4 End of Module Assessment 2-day Flex (Task Day)	17 Module 4: End of Module Assessment Complete	18	19 *2nd Nine Week ends*	20 Winter Break	21	Optional Quizzes: Module 4 Topic C Topic D (Quizzes should not take more than 15 minutes to administer)
	24 Winter Break	25	26	27	28	
	31 Winter Break	1	2	3	4	

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.