Mathematics
Grade 5- Year at a Glance
2019-2020

Q1		Q2	Q3		Q4		
Module 1 Aug 19- Sept 12	Module 2 Sept 16- Nov 14	Module 3 Nov 15- Dec 19	Module 4 Jan 6- Dec 13	Module 5 Feb 18- Mar 12	Module 6 Mar 23- Apr 17	TN READY APRIL 13- May 8	Module 6 April 27-May 22
Place Value and Decimal Fractions	Multi- Digit Whole Number and Decimals Fraction Operations	Additions and Subtraction of Fractions	Multiplication and Division of Fractions and Decimal Fractions	Addition and Multiplication with Volume and Area	Problem Solving with the Coordinate Plane		Material covered after Mid Module Assessments are extension of 5th grade standards or review of previously taught skills
5.NBT.A.1	5.OA.A.1	5.NF.A.1	5.OA.A.1	5.NF.B.4b	5.OA.A.2		5.OA.B.3
5.NBT.A.2	5.OA.A.2	5.NF.A.2	5.OA.A.2	5.NF.B.6	5.OA.B.3		5.G.A.1
5.NBT.A.3	5.NBT.A.1		5.NBT.B.7	5.MD.C.3	5.G.A.1		5.G.A.2
5.NBT.A.4	5.NBT.A.2		5.NF.B.3	5.MD.C.4	5.G.A.2		
5.MD.A.1	5.NBT.B.5		5.NF.B.4a	5.MD.C.5			
	5.NBT.B.6		5.NF.B.5	5.G.B.3			
	5.NBT.B.7		5.NF.B.6				
	5.MD.A.1		5.NF.B.7				
			5.MD.A.1				
			5.MD.B.2				

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.

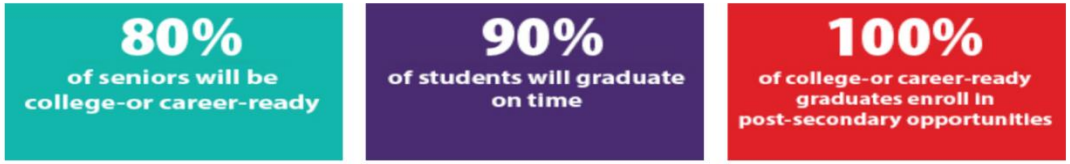
Use the instructional map and Digital Suite resources as you prepare to teach a module for additional guidance in planning, pacing, and suggestions for omissions

Pacing and Preparation Guide (Omission)

Introduction

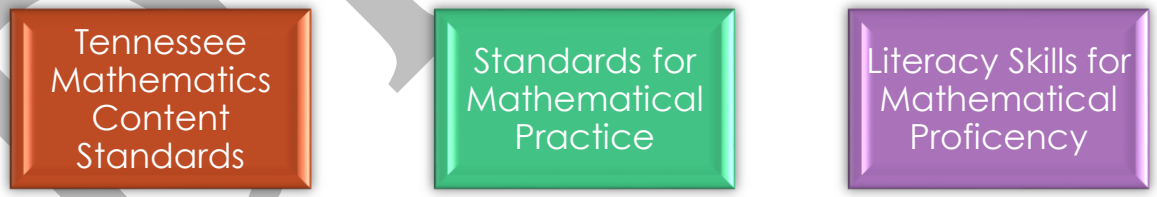
Destination 2025, Shelby County Schools' 10-year strategic plan, is designed not only to improve the quality of public education, but also to create a more knowledgeable, productive workforce and ultimately benefit our entire community.

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.



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 5 Quarter 4 Overview

Module 6: Problem Solving with the Coordinate Plane

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
5.OA.A.2	Conceptual Understanding	5.OA.A.1
5.OA.B.3	Conceptual Understanding	4.OA.C.5, 3. OA.D.9
5.G.A.1	Conceptual Understanding	3.NF.A.2, 2. MD.B.6
5.G.A.2	Conceptual Understanding, Procedural Skill and Fluency, Application	3.NF.A.1, 2. MD.B.6
Indicates Power Standards (2017-2018)		
Instructional Focus Documents- Grade 5		

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & FLUENCY	
Module 6: Problem Solving with Coordinate Planes			
Domain: Geometry **Cluster**: Graph points on the coordinate plane to solve real-world and mathematical problems. ➢**5.G.A.1** Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and xx-coordinate, y-axis and y-coordinate).	**Topic A: Coordinate Systems** **Essential Questions** 1. What are integers and what situations can integers represent? 2. How can you describe the location of a point on a coordinate plane? 3. How can you find the distance between integers on the number line? 4. How can you graph an equation on a coordinate grid? **Objectives/Learning Targets:** **Lesson 1:** *I can* construct a coordinate system on a line. **(5.G.A.1)** **Lesson 2:** *I can* construct a coordinate system on a plane. **(5.G.A.1)** **Lesson 3-4:** *I can* name points using coordinate pairs, and use the coordinate pairs to plot points. **(5.G.A.1)** **Lesson 5-6:** *I can* investigate patterns in vertical and horizontal lines, and interpret points on the plane as distances from the axes. **(5.G.A.1)**	Eureka Parent Newsletter-Topic A Optional Quiz: Topic A **Pacing Considerations:** Combine lessons 3 and 4. Combine lessons 5 and 6. **Suggestions for combining:** **Lessons 3 and 4** **Fluency:** Lesson 3- Name Parts of the Coordinate Grid Lessons 3/4- Name Coordinates on a Coordinate Grid Lesson 3- Find the Missing Numbers on a Number Line **Application Problem** Lesson 3 **Concept Development:** Lesson 3- Problems 1 and 2 Lesson 4- Review rules of playing Battleship and set up boards. Model playing a few rounds so that students understand the expectations for the game **Problem Set:** Lesson 4- Play Battleship **Exit Ticket:** Lesson 3	**Vocabulary:** Axis, Coordinate, Coordinate pair, Coordinate plane, Ordered pair, Origin, Quadrant *Familiar Terms and Symbols* Angle, Angle measure, Degree, Horizontal, Line, Parallel, Perpendicular, Point, Rule, Vertical **Additional instructional resources for enrichment/remediation:** Remediation Guide Ready teacher-toolbox aligned lessons: • Lesson28 - Understand the Coordinate Plane Zearn Lessons-Mission 6 **Lesson1: Cool Coordinates** **Lesson2: Coordinate Pairs** **Lesson 3: Star Coordinates** **Lesson 4: Lining Up** **Lesson 6: Coordinate Plane Puzzles** Embarc.online-Module 6 **Videos:** • Plot points on a coordinate grid

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & FLUENCY	
		Suggestions for combing lessons 5 and 6: **Lessons 5 and 6** **Fluency:** Lesson 5- Multiply Lesson 5- Count by decimals Lesson 5/6- Decimals on a Number Line **Concept Development:** Lesson 5- Problems 1 and 2 **Note**: Incorporate language from Lesson 6 in discussion of the x and y coordinates while completing Problems 1 and 5 from Lesson 5. "The x-coordinate is ___ units from the y-axis." "The y-coordinate is ___ units from the x- axis." "They y-values above/below this horizontal line are all greater than /less that ___." "The x-values to the left/right of this vertical line are all less than / greater than ____" Lesson 6- Problem 3 **Problem Set:** Lesson 6- Problems 1,2 3 **Exit Ticket** Lesson 6	• Plot points on a coordinate plane **Task Bank:** Battle Ship Using Grid Paper
Domain: Operations and Algebraic Thinking **Cluster: Write and interpret expressions** ➢ **5.OA.A.2** Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation "add 8	**Topic B: Patterns in the Coordinate Plane and Graphing Number Patterns from Rules** **Objectives/Learning Targets:** **Lesson 7:** *I can* plot points, use them to draw lines in the plane, and describe patterns within the	Eureka Parent Newsletter-Topic B Optional Quiz-Topic B **Pacing Considerations:** No pacing considerations at this time.	**Additional instructional resources for enrichment/remediation:** Remediation Guide Ready teacher-toolbox aligned lessons: • Lesson20 - Analyze Patterns and Relationships

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & FLUENCY	
and 7, then multiply by 2" as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product. **Domain: Operations and Algebraic Thinking** **Cluster: Analyze patterns and relationships** ➢ **5.OA.B.3** Generate two numerical patterns using two given rules. For example, given the rule "Add 3" and the starting number 0, generate terms in the resulting sequences. a. Identify relationships between corresponding terms in two numerical patterns. For example, observe that the terms in one sequence are twice the corresponding terms in the other sequence. b. Form ordered pairs consisting of corresponding terms from two numerical patterns and graph the ordered pairs on a coordinate plane.	coordinate pairs. **(5.OA.A.2, 5.G.A.1)** **Lesson 8:** *I can* generate a number pattern from a given rule, and plot the points. **(5.OA.A.2, 5.G.A.1)** **Lesson 9:** *I can* generate two number patterns from given rules, plot the points, and analyze the patterns. **(5.OA.B.3, 5.G.A.1)** **Lesson 10:** *I can* compare the lines and patterns generated by addition rules and multiplication rules. **(5.OA.A.2, 5.OA.B.3, 5.G.A.1)** **Lesson 11:** *I can* analyze number patterns created from mixed operations. **(5.OA.A.2, 5.OA.B.3)** **Lesson 12:** *I can* create a rule to generate a number pattern, and plot the points. (Topic B: Lesson 12) **(5.OA.A.2, 5.OA.B.3, 5.G.A.1)**		Zearn Lessons-Mission 6 Lesson 7: That's the Point Lesson 8: Plot the Rule Lesson 9: Lasers on a Plane Lesson 10: Lines with Sparkle Embarc.online-Module 6 **Videos:** Represent a real world situation as a numerical expression **I-Ready Lessons:** • Numerical Expressions and Order of Operations **Task Bank:** Sidewalk Patterns
Domain: Geometry **Cluster**: Graph points on the coordinate plane to solve real-world and mathematical problems. ➢ **5.G.A.1** Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the	**Topic C: Drawing Figures in the Coordinate Plane** **Objectives/Learning Targets** **Lesson 13:** *I can* construct parallel line segments on a rectangular grid. **(5.G.A.1)** **Lesson 14:** *I can* construct parallel line segments, and analyze relationships of the coordinate pairs. **(5.G.A.1, 5.G.A.2)** **Lesson 15:** *I* can construct perpendicular line segments on a rectangular grid. **(5.G.A.1)**	Eureka Parent Newsletter-Topic C **Pacing Considerations:** No pacing considerations at this time.	**Additional instructional resources for enrichment/remediation:** Remediation Guide Ready teacher-toolbox aligned lessons: • Lesson29 - Graph Points in the Coordinate Plane Zearn Lessons-Mission 6 Lesson 14: Paris and Parallels

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & FLUENCY	
direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate). ➢ **5.G.A.2** Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plan and interpret coordinate values of points in the context of the situation.	**Lesson 16:** *I can* construct perpendicular line segments, and analyze relationships of the coordinate pairs. **(5.G.A.1, 5.G.A.2)** **Lesson 17:** *I can* draw symmetric figures using distance and angle measure from the line of symmetry. **(5.G.A.1)**		Lesson 15: Perpendicular Pals Embarc.online-Module 6 **Videos:** Plot points on a coordinate grid Plot points on a coordinate plane
Domain: Operations and Algebraic Thinking **Cluster: Analyze patterns and relationships** ➢ **5.OA.B.3** Generate two numerical patterns using two given rules. For example, given the rule "Add 3" and the starting number 0, generate terms in the resulting sequences. a. Identify relationships between corresponding terms in two numerical patterns. For example, observe that the terms in one sequence are twice the corresponding terms in the other sequence. b. Form ordered pairs consisting of corresponding terms from two numerical patterns and graph the ordered pairs on a coordinate plane	**Topic D: Problem Solving in the Coordinate Plane** **Objectives/Learning Targets** **Lesson 18:** I can draw symmetric figures on the coordinate plane. (Topic D: Lesson 18) **(5.G.A.2)** **Lesson 19:** I can plot data on line graphs and analyze trends. **(5.OA.B.3, 5.G.A.2)** **Lesson 20:** I can use coordinate systems to solve real world problems. **(5.OA.B.3, 5.G.A.2)**	Eureka Parent Newsletter- Topic D **Pacing Considerations:** No pacing considerations at this time.	**Additional instructional resources for enrichment/remediation:** Remediation Guide Ready teacher-toolbox aligned lessons: • Lesson29 - Graph Points in the Coordinate Plane Zearn Lessons-Mission 6 Lesson 18: Stella Symmetry Embarc.online-Module 6 **I-Ready:** Analyze Patterns and Relationships **Task Bank:** Sidewalk Patterns

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & FLUENCY	
	Topic E: Multi-Step Word Problems **Objectives/Learning Targets** **Lesson 21-25:** *I can* make sense of complex, multi-step problems and persevere in solving them. Share and critique peer solutions. (5. NF.A. 2, 5. NF.B.3, 5. NF.B.6, 5. NF.B.7, 5. MD.A.1, 5.MD.C.5, 5.G.A.2)	**Pacing Considerations:** No pacing considerations at this time	**Additional instructional resources for enrichment/remediation:** Remediation Guide Zearn Lessons-Mission 6 Lesson 21: Perplexing Problems Part 1 Lesson 22: Perplexing Problems Part 2 Lesson 23: Perplexing Problems Part 3 Lesson 24: Perplexing Problems Part 4 Embarc.online-Module 6
	Topic F: The Years in Review: A Reflection on A Story of Units **Objectives/Learning Targets:** **Lesson 26-27:** I can solidify writing and interpreting numerical expressions. **(5.OA.A.2)** **Lesson 28:** I can solidify fluency with Grade 5 skills. **Lesson 29-30:** I can solidify the vocabulary of geometry. **Lesson 31:** I can explore the Fibonacci sequence. **Lesson 32:** *I* can explore patterns in saving money. **Lesson 33-34:** *I can* design and construct boxes to house materials for summer use. **End of Module Assessment**	**Pacing Considerations:** No pacing considerations at this time	**Additional instructional resources for enrichment/remediation:** Remediation Guide Zearn Lessons-Mission 6 Lesson 26: Far Out Expressions Lesson 27: Word Problem Wheel Lesson 28: Fluency Round Up Lesson 29: Geometry Carnival Lesson 30: Geometry Carnival Returns Lesson 32: Zearnland Savings Embarc.online-Module 6

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** **Achieve the Core** TN Math Standards	**Videos** **Eureka Resources/Homework Resources** **NCTM Common Core Videos** **TN Core Online Math Resources** **LearnZillion**
Children's Literature **Math and Literature:** **A Match Made in the Classroom** **Math for Kids-Best Children's Books** **Scholastic: Books and Programs to Improve Elementary Math**	**Interactive Manipulatives** **Multiplying by Repeated Addition** **Related Repeated Addition to Multiplication** **Multiplication Games Multiplication Fluency**	**Additional Sites** **http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html** illustrative mathematics- Grade 5 **http://www.edutoolbox.org/tntools/list/grade/819/955/3#96 0**
Other **Parent Roadmap: Supporting Your Child in Grade Five Mathematics** **Illustrated Mathematics Dictionary for Kids** **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)		

March 2020

Module	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:
	2	3	4	5	6	**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 6 Topic A Topic B (Topic quizzes should take no longer than 15 minutes)
	9	10	11	12	13 *End of Quarter 3*	
	16	17	18	19	20	
	Spring Break					
Module 6	23 **Topic A** **Lesson 1** *Quarter 4 begins*	24 **Topic A** **Lesson 2**	25 Topic A Combine lessons 3 and 4	26 Topic A Combine lessons 5 and 6	27 **Flex Options** ***5.G.A.1** **Pacing** **Other**	
Module 6	30 **Topic B** **Lesson 7**	31 **Topic B** Lesson 8	1	2	3	

April 2020

Curriculum and Instruction – Mathematics

Quarter 4 Grade 5

Module	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:
			1 **Topic B** **Lesson 9**	**2** **Topic B** **Lesson 10**	**3** **Flex Options** **5.OA.A.2** **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 (Topic quizzes should take no longer than 15 minutes)
Module 6	**6** **Topic B** **Lesson 11**	**7** **Topic B** **Lesson 12**	**8** **Mid Module Assessment**	**9** **Topic C** **Lesson 13**	**10** ***Spring Holiday/Good Friday (Out)***	
Module 6	**13** **Topic C** **Lesson 14**	**14** **Topic C** **Lesson 15**	**15** **Topic C** **Lesson 16**	**16** **Topic D** **Lesson 17**	**17** **Flex Options** **Choice**	
	20	**21**	**22**	**23**	**24**	
Module 6	**27** **Topic D** **Lesson 18**	**28** **Topic D** **Lesson 19**	**29** **Topic D** **Lesson 20**	**30** **Topic E** **Lesson 21**	1	

Flex – TN Ready Testing (Dates not Confirmed)

Flex – TN Ready Testing (Dates not Confirmed)

Curriculum and Instruction – Mathematics

Quarter 4 **Grade 5**

May 2020						
Module	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Notes:**
					1 **Flex Options** ***5.G.A.1** **5.G.A.2** **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 (Topic quizzes should take no longer than 15 minutes)
	4 **Topic E** **Lesson 22**	**5** **Topic E** **Lesson 23**	**6** **Topic E** **Lesson 24**	**7** **Topic E** **Lesson 25**	**8** **Topic F** **Lesson 26**	
	11 **Topic F** **Lesson 27**	**12** **Topic F** **Lesson 28**	**13** **Topic F** **Lesson 29**	**14** **Topic F** **Lesson 30**	**15** **Topic F** **Lesson 31**	
	18 **Topic F** **Lesson 32**	**19** **Topic F** **Lesson 33**	**20** **Topic F** **Lesson 34**	**21** **End of Module Assessment**	**22** *1/2 day students* *End of Quarter 4*	
	25 *Memorial Day*	**26** **PD FLEX DAY**	**27**	**28**	**29**	