



£		Gra	de 7: Year at a (Glance		
01		Q2	2018-2019	Q3		Q4
Module 1 Aug. 6-Sept. 7	Module 2 Sept. 12- Oct. 25	Module 3 Oct. 25-Nov 29	Module 4 Nov. 30- Jan. 18	Module 5 Topics A-C Grade 6 Module 6 Topic B Jan. 23- March 8	Grade 6 Module 6 Topic C Module 5 Topic D Jan. 23- March 8	Grade 7 Module 6 Mar. 18 – April 12 Review after <u>TNReady</u> April 29-May 24
Ratios and Proportional Relationships	Rational Numbers	Expressions and Equations	Percent and Proportional Relationships	Statistics & Probability	Statistics & Probability	Geometry
7.RP.1	7.NS.1	7.EE.1	7.RP.1	7.SP.1	7.SP.3	7.G.2
7.RP.2	7.NS.2	7.EE.2	7.RP.2	7.SP.2	7.SP.4	7.G.4
7.RP.3	7.NS.3	7.EE.3a	7.RP.3	7.SP.5	7.SP.8	7.G.5
7.EE.4a	7.EE.2	7.EE.3b	7.EE.3	7.SP.6		After <u>TNReady</u> Review Standards
7.G.1	7.EE.4a	7.EE.4	7.G.1	7.SP.7		7.RP 2
		7.G.3		7.SP.8		7.EE.3
		7.G.4				7.EE.4
		7.G.5				

Key:

Major Content

Supporting Content

Note: Please use the suggested pacing as a guide. It is understood that teachers may be up to one week ahead or one week behind depending on the needs of their students.

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Eureka Grade 7 Pacing and Preparation Guide SCS 2018/2019 Revised 6/26/18 CSH

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Introduction

Major Content

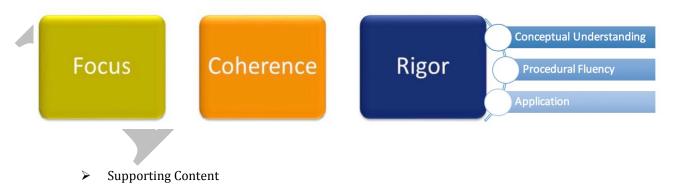
Destination 2025, Shelby County Schools' 10-year strategic plan, is designed not only to improve the quality of public education, but also to create a more knowledgeable, productive workforce and ultimately benefit our entire community.

What will success look like?



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

Instructional Shifts for Mathematics



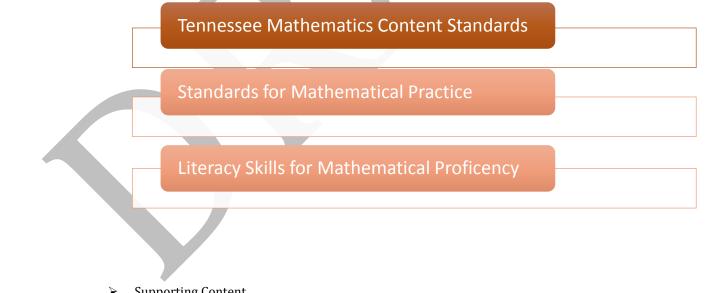


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The Standards for Mathematical Practice describe varieties of expertise, habits of minds and productive dispositions that mathematics educators at all levels should seek to develop in their students. These practices rest on important National Council 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 guantitatively.
- 3. Construct viable arguments and critique the reasoning of them.
- 4. Model with mathematics.
- 5. Use appropriate tools strategically.
- 6. Attend to precision.
- 7. Look for and make use of structure.
- 8. Look for and express regularity in repeated reasoning.

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





Structure of the Standards

Structure of the TN State Standards include:

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- 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

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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 7 Quarter 4 Overview

Module 6: Geometry

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
7.G.B.4	Conceptual Understanding	4.MD.C.7
7.G.B.2	Conceptual Understanding and Procedural Fluency	
7.G.B.5	Application	6.G.1, 6.G.2, 6.G.4
7.G.A.1	Conceptual Understanding	6.SP.1, 6.SP.2



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TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY
TN STATE STANDARDS			VOCABULARY
	Grade 7 Modu	le 6 Geometry	
	Grade 7 Pacing and	Preparation Guide	
		nstruction, review and assessment)	
 Domain: Geometry Cluster: Solve real-life and mathematical problems involving angle measure, area, surface area and volume. 7.G.B.4 (formerly 7.G.B.5) Know and use facts about supplementary, complementary, vertical, and adjacent angles in a multi-step problem to write and solve simple equations for an unknown angle in a figure. 	 Essential Question(s): What is the total number of degrees in supplementary and complementary angles? Topic A Objectives: Lesson 1 Students solve for unknown angles in word problems and in diagrams involving complementary and supplementary angles. Lesson 2 Students solve for unknown angles in word problems and in diagrams involving complementary, supplementary, vertical, and adjacent angles. Lesson 3 Students solve for unknown angles in word problems and in diagrams involving all learned angle facts. Lesson 4 Students solve for unknown angles in word problems and in diagrams involving all learned angle facts. 	Topic A: Unknown Angles Lesson 1 Lessons 2 & 3, Combine • Lessons 2 and 3 of this module can be consolidated or omitted depending on the level of proficiency students demonstrated in Module 3 Lessons 10 and 11. These lessons use the same angle relationships introduced in Module 3 but also include supplementary and complementary angles, which were introduced in Module 6 Lesson 1. To combine lessons 2 & 3, choose problems throughout these two lessons that students need to practice more based on students' strengths and weaknesses from previous lessons. Example 4 and Exercise 4, of lesson 3, involve solving an equation with a variable on both sides of the equal sign, which is an 8 th grade skill. Lesson 4 For Topic A, you may use the resources from the following Teacher Toolbox lesson for review, remediation, and/or assessment to meet the needs of your students. • Lesson 18: Problem Solving with Angles	Vocabulary for Module 6 Right Rectangular Pyramid Surface of a Pyramid Three Sides Condition Triangle Correspondence Triangles with Identical Measures Two Angles and the Included Side Condition Two Angles and the Side Opposite a Given Angle Condition Two Sides and the Included Angle Condition Familiar Terms and Symbols for Module 6 Adjacent Angles Angles at a Point Angles on a Line Complementary Angles Right Rectangular Prism Supplementary Angles Vertical Angles



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Curriculum and Instruction – Mathematics

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and the included angle are equal under	(Complete by 4/1/19)	
some correspondence; two sides and an	Module 6 Topic B Assessment	
included angle of a triangle determine a		
unique triangle.	Additional Resources: These optional	
Lesson 10	resources may be used for extension,	
• Students understand that two triangles	enrichment and/or additional practice, as	
are identical if two pairs of corresponding	needed.	
angles and one pair of corresponding	Illustrative Math: 7.G.B.2 Task	
sides are equal under some	Formative Assessment Items to Support	
correspondence; two angle	7.G.B.2	
measurements and a given side length of	Building Bridges Task: p.12	
a triangle determine a unique triangle.		
 Students understand that the two angles 		
and any side condition can be separated		
into two conditions: (1) the two angles		
and included side condition and (2) the		
two angles and the side opposite a given		
angle condition.		
Lesson 11	· ·	
Students understand that three given		
lengths determine a triangle, provided		
the largest length is less than the sum of		
the other two lengths; otherwise, no		
triangle can be formed.		
 Students understand that if two side 		
lengths of a triangle are given, then the		
third side length must be between the		
difference and the sum of the first two		
side lengths.		
 Students understand that two angle 		
measurements determine many		
triangles, provided the angle sum is less		
than 180°; otherwise, no triangle can be		
formed.		
Lesson 12		
 Students understand that two sides of a 		
triangle and an acute angle not included		
between the two sides may not		
		SCS 2018/2019



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	 determine a unique triangle. Students understand that two sides of a triangle and a 90° angle (or obtuse angle) not included between the two sides determine a unique triangle. 	Omit Topic C (Slicing Solids) because it	
		addresses a standard that is no longer a TN Standard for Gr. 7	
 Domain: Geometry Cluster: Solve real-life and mathematical problems involving angle measure, area, surface area and volume. ▶ 7.G.B.5 (formerly 7.G.B.6) Solve real-world and mathematical problems involving area, volume and surface area of two- and three-dimensional objects composed of triangles, quadrilaterals, polygons, cubes, and right prisms. 	 Essential Question(s): What units are appropriate for area, surface, area, and volume? Topic D Objectives: Lesson 20 Students determine the area of composite figures in real-life contextual situations using composition and decomposition of polygons and circular regions. Lesson 22 Students determine the area of composite figures and of missing regions using composition and decomposition and decomposite figures and of missing regions using composition and decomposition of polygons. Lesson 23 Students determine the surface area of three-dimensional figures, including both composite figures and those missing sections. 	Topic D: Problems Involving Area and Surface Area Lesson 20 Lesson 21 Omit Lesson 22 Lesson 23 Lesson 24 Omit For Topic D, you may use the resources from the following Teacher Toolbox lessons for review, remediation, and/or assessment to meet the needs of your students. • Lesson 20: Area of Composed Figures • Lesson 21: Area and Circumference of a Circle • Lesson 24: Surface Area of Solids Module Topic D Assessment Additional Resources: These optional resources may be used for extension, enrichment and/or additional practice, as needed. Illustrative Math: Sand Under the Swing Set	



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Domain: Geometry	Topic E: Problems Involving Volume	Topic E: Problems Involving Volume	
Cluster: Solve real-life and mathematical	Lesson 25	, , , , , , , , , , , , , , , , , , ,	
problems involving angle measure, area,	• Students use the formula V = bh to	Lesson 25	
surface area and volume.	determine the volume of a right prism.	Lesson 26	
	Students identify the base and compute	Lesson 27	
7.G.B.5 (formerly 7.G.B.6) Solve real-world	the area of the base by decomposing it		
and mathematical problems involving area,	into pieces.	For Topic E, you may use the resources	
volume and surface area of two- and three-	Lesson 26	from the following Teacher Toolbox lesson	
dimensional objects composed of triangles,	Students compute volumes of three-	for review, remediation, and/or assessment	
quadrilaterals, polygons, cubes, and right prisms.	dimensional objects composed of right	to meet the needs of your students.	
pristris.	prisms by using the fact that volume is	Lesson 23: Volume of Solids	
	additive.	Module 6 Topic E Assessment	
	Students use the volume formula for a		
	right prism ($V = Bh$) to solve volume	Additional Resources: These optional	
	problems involving rate of flow.	resources may be used for extension,	
		enrichment and/or additional practice, as	
		needed.	
	Grade 7 Module 3 Topic C:	Formative Assessment Items to Support Surface Area and Volume	
	Lesson 20	Sunace Area and Volume	
	Students find the area of regions in the	The standard 7.G.B.5 was previously	
	coordinate plane with polygonal	covered in Module 3 Lessons 20-26.	
	boundaries by decomposing the plane into triangles and quadrilaterals,	Please refer to these lessons if students	
	including regions with polygonal holes.	need additional practice. See the lesson	
	 Students find composite areas of regions 	outcomes to the left to determine which	
	in the coordinate plane by decomposing	lesson(s) to reference.	
	the plane into familiar figures (triangles,		
	quadrilaterals, circles, semicircles, and	End of Module 6 Assessment & Review of	
	quarter circles).	Assessment (Omit #8 because it addresses a	
	Lessons 21-22	standard that is no longer a TN Standard for	



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•	Students find the surface area of three- dimensional objects whose surface area is composed of triangles and quadrilaterals. They use polyhedron nets to understand that surface area is simply the sum of the area of the lateral faces and the area of the base(s). sons 23-24 Students use the known formula for the volume of a right rectangular prism (length × width × height). Students understand the volume of a right prism to be the area of the base times the height. Students compute volumes of right prisms involving fractional values for length. sons 25-26 Students solve real-world and mathematical problems involving volume and surface areas of three-dimensional objects composed of cubes and right prisms.
	After TNReady Assessment
	e recommended to be reviewed after The State assessment. The Teacher Toolbox is a great
	ards and you may also use the web resources that are provided below and in each of the
instructional maps.	

Module 1: Ratios and Proportional Relationships



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Topic A: Proportional Relationships Lessons 3-4 Identifying Proportional and Non-Proportional Relationships in Tables Lessons 5-6 Identifying Proportional and Non-Proportional Relationships in Graphs Topic B: Unit Rate and the Constant of Proportionality Lesson 7 Unit Rate as the Constant of Proportionality Lessons 8-9 Representing Proportional Relationships with Equations Lesson 10 Interpreting Graphs of Proportional Relationships Performance Task: First Rate Level B
7.RP.2
Tennessee PBS Video Lesson
sions and Equations
Topic B: Solve Problems Using Expressions, Equations and Inequalities Lessons 8-9 Using If-Then Moves in Solving Equations Lessons 10-11 Angle Problems and Solving Equations Lesson 13 Inequalities Lesson 13 Inequalities Lesson 15 Graphing Solutions to Inequalities Performance Task: Toy Trains 7.EE.3 &



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quantities in a real-world or mathematical	<u>7.EE.4a</u>
problem, and construct simple equations	Performance Task: Speedy Texting 7.EE.3
and inequalities to solve problems by	<u>& 7.EE.4a</u>
reasoning about the quantities.	Tennessee Task Arc: Investigating
7.EE.B.4a: Solve contextual problems	Inequalities (Tasks 4 & 8)
leading to equations of the form $px + q = r$	
and $p(x + q) = r$, where p, q, and r are	
specific rational numbers. Solve equations	
of these forms fluently. Compare an	
algebraic solution to an arithmetic solution,	
identifying the sequence of the operations	
used in each approach.	
7.EE.B.4b: Solve word problems leading to	
inequalities of the form $px + q > r$ or $px + q > r$	
q < r, where p, q, and r are specific rational	
numbers. Graph the solution set of the	
inequality and interpret it in the context of	
the problem. For example: As a	
salesperson, you are paid \$50 per week	
plus \$3 per sale. This week you want your	
pay to be at least \$100. Write an inequality	
for the number of sales you need to make,	
and describe the solutions. (Note that	
inequalities using >, <, \leq , \geq are included in	
this standard).	



	RESOURCE TOOLBOX	
	nprehension and mastery of grade-level skills and concepts. N can assist educators with maximizing their instructional pract	
NWEA MAP Resources: <u>https://teach.mapnwea.org/assist/help_r</u> resources will help as you plan for intervention, and differentiating <u>https://support.nwea.org/khanrit</u> - These Khan Academy lessons a	are aligned to RIT scores.	
Textbook Resources	Standards Support	Videos
www.greatminds.org	TN Math Standards	Learn Zillion
Eureka Math Grade 7 Remediation Guide	Grade 7 Instructional Focus Document	Khan Academy
	Achieve the Core Edutoolbox	
Calculator Activities	Interactive Manipulatives	Additional Sites
TI-73 Activities	Glencoe Virtual Manipulatives	Embarc Online
CASIO Activities	National Library of Interactive Manipulatives	PBS: Grades 6-8 Lesson Plans
TI-Inspire for Middle Grades		Grade 7 Flip Book
		(This book contains valuable resources that help develop the intent, the understanding and the implementation of the state standards.)



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Shelby County Schools – Grade 7 – March 2019						
Mon	Tue	Wed	Thu	Fri		
				1		
4	5	6	7	8		
11	12	13	14	15		
Spring Break	Spring Break	Spring Break	Spring Break	Spring Break		
18 Q4 Begins Begin Module 6	19	20	21	22		
25	26	27	28	29 Mid-Module 6 Assessment & Review of Assessment		



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Shelby County Schools – Grade 7 – April 2019					
Mon	Tue	Wed	Thu	Fri	
1 Mid-Module 6 Assessment & Review of Assessment	2	3	4	5	
8	9	10	11 End-of Module 6 Assessment & Review of Assessment	12 End-of Module 6 Assessment & Review of Assessment	
15 State Assessment Week	16	17	18	19 <u>Good Friday</u> (no school)	
22 State Assessment Week	23	24	25	26	
29 Begin Review Lessons for 7.RP.2	30				



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Shelby County Schools – Grade 7 – May 2019					
Mon	Tue	Wed	Thu	Fri	
		1	2	3	
6 Begin Review Lessons for 7.EE.3 & 7.EE.4	7	8	9	10	
13	14	15	16	17	
20	21 Semester Exams	22 Semester Exams	23 Semester Exams	24 Last Day of School	
27 Memorial Day	28	29	30	31	