Quarter 4 2019-2020 Grade 7 Grade 7: Year at a Glance 02 Q3 Q4 Q1 Module 5 Topics A-C Module 1 Module 2 Module 3 Module 4 Grade 6 Module 6 Grade 7 Module 6 Topic C Aug. 14-Sept. 6 Sept. 9- Oct. 11 Grade 6 Module 6 Oct. 21-Nov 22 Dec. 2- Jan. 17 Mar. 23 - April 24 Topic B Module 5 Topic D Jan. 21- March 13 Jan. 21- March 13 TNReady April 13-May 8 **Review after** TNReady May 9-May 24 Ratios and Rational Numbers Expressions and Percent and Statistics & Probability Statistics & Probability Geometry **Proportional** Equations Proportional Relationships Relationships 7.EE.A.1 7.RP.A.1 7.SP.A.1 7.SP.B.3 7.G.A.2 7.NS.A.1 7.RP.A.1 7.NS.A.2 7.EE.A.2 7.RP.A.2 7.SP.A.2 7.G.B.4 7.SP.B.4 7.RP.A.2 7.RP.A.3 7.NS.A.3 7.EE.B.3a 7.G.B.5 7.RP.A.3 7.SP.C.5 7.SP.D.8 7.EE.4a 7.EE.A.2 7.EE.B.3b After TNReady 7.EE.B.3 7.SP.C.6 **Review Standards** 7.EE.B.4a 7.EE.B.4 7.SP.C.7 7.G.A.1 7.G.A.1 7.RPA. 2 7.G.B.3 7.SP.D.8 7.EE.B.3 7.G.B.4 7.EE.B.4 7.G.B.5 Major Content > Supporting Content

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Introduction

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



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

Instructional Shifts for Mathematics



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.



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How to Use the Curriculum Map

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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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
	Instructional Focus Document Grade 7	



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TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY						
Grade 7 Module 6 Geometry									
	Grade 7 Pacing and Preparation Guide								
	(Allow approximately 4 weeks for i	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 4 Students solve for unknown angles in word problems and in diagrams involving all learned angle facts. 	Topic A: Unknown Angles Teacher Toolbox Alignment: Lesson 18: Problem Solving with Angles Integrating Teacher Toolbox Lessons Lesson 1 Lesson 2 Omit Lesson 3 Omit Lesson 4 Optional Module 6 Topic A Assessment Additional Resources: These optional resources may be used for extension, enrichment and/or additional practice, as needed. Better Lesson: So Many Angle Relationships Cpalms: What's Your Angle?	Vocabulary for Module 6 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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Domain: Geometry Cluster: Draw, construct and describe geometrical figures and describe the relationships between them. Essential Question(s): • How are sketching, drawing, and constructing a figure different? Topic B: Constructing Triangles Vocabulary for Module 6 Topic B > 7.G.B.2 Draw geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle. Topic B Objectives Topic B Objectives Three Sides Condition Triangle correspondence to recognize when two triangles match identically. Students use notation to denote a triangle correspondence to talk about corresponding angles and sides of triangles with multiple equal angles and sides of triangles with multiple arcs or tick marks. Lesson 8 Topic B Constructing Triangles Vocabulary for Module 6 Topic B Lesson 5 • How are sketching, drawing, and constructing a figure different? Topic B Objectives Topic B Objectives Lesson 5 • Students use a triangle correspondence to recognize when two triangles and sides of triangles with multiple Lesson 6 Omit Lesson 7 Omit Lesson 1 1 Lesson 11 Lesson 12 Lesson 1 1 Lesson 12 Devers all of the Eureka Math lessons. Watch the videos and do	TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY
 Students draw triangles under different criteria to explore which criteria result in many, a few, or one triangle. Lesson 9 Students understand that two triangles are identical if all corresponding sides are equal under some corresponding sides and the included angle are equal under some correspondence; two sides and an included angle of a triangle determine a unique triangle. 	 Domain: Geometry Cluster: Draw, construct and describe geometrical figures and describe the relationships between them. 7.G.B.2 Draw geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle. 	 Essential Question(s): How are sketching, drawing, and constructing a figure different? Topic B Objectives Lesson 5 Students use a triangle correspondence to recognize when two triangles match identically. Students use notation to denote a triangle correspondence and use the triangle correspondence to talk about corresponding angles and sides. Students are able to label equal angles and sides of triangles with multiple arcs or tick marks. Lesson 8 Students understand that two triangles are identical if all correspondence; three side lengths of a triangle determine a unique triangle. Students understand that two triangles are identical if two correspondence; three side lengths of a triangle are equal under some correspondence; two sides and the included angle are equal under some correspondence; two sides and an included angle of a triangle determine a unique triangle. 	Topic B: Constructing Triangles Teacher Toolbox Alignment: Lesson 19: Understanding Conditions for Drawing Triangles Integrating Teacher Toolbox Lessons Lesson 5 Lesson 6 Omit Lesson 7 Omit Lesson 9 Lesson 10 Lesson 11 Lesson 12 Eureka Math lessons. Watch the videos and do problems from this Teacher Toolbox lesson and from Lesson 11 of Eureka Math. Click here for more information.	Vocabulary for Module 6 Topic B 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



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TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY
Domain: Geometry Cluster: Draw, construct and describe geometrical figures and describe the relationships between them. 7.G.B.2 Draw geometric shapes with given conditions. Focus on constructing triangles from three measures of angles or sides, noticing when the conditions determine a unique triangle, more than one triangle, or no triangle.	 Lesson 10 Students understand that two triangles are identical if two pairs of corresponding angles and one pair of corresponding sides are equal under some correspondence; two angle measurements and a given side length of 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 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 determine a unique triangle. Students understand that two sides of a triangle and an acute angle not included between the two sides may not determine a unique triangle. 	Topic B, cont'd Lesson 8 Lesson 9 Lesson 10 Lesson 11 Lesson 12 Watch the videos and do problems from this Teacher Toolbox lesson and from Lesson 11 of Eureka Math. Click here for more information.	Vocabulary for Module 6 Topic B 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



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TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY			
Omit Topic C (Slic	ing Solids) because it addresses a st	andard that is no longer a TN Star	ndard 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 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 Teacher Toolbox Alignment Lesson 20: Area of Composed Figures Lesson 21: Area and Circumference of a Circle Lesson 24: Surface Area of Solids Integrating Teacher Toolbox Lessons Lesson 20 Lesson 21 Omit Lesson 22 Lesson 23 Lesson 24 Omit Optional 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	Topic D Vocabulary Right Rectangular Pyramid Surface of a Pyramid			

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TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT	VOCABULARY
Domain: Geometry	Topic E: Problems Involving Volume	Topic E: Problems Involving Volume	Topic E Vocabulary
Cluster: Solve real-life and mathematical	Lesson 25	Teacher Tealbax Alignment	Right Rootongular Dyramid
surface area and volume	 Students use the formula V = bit to determine the volume of a right prism. Students identify 	Lesson 23: Volume of Solids	Surface of a Pyramid
	the base and compute the area of the base by	Integrating Teacher Toolbox Lessons	
7.G.B.5 (formerly 7.G.B.6) Solve real-world	decomposing it into pieces.		
and mathematical problems involving area,	Lesson 26	Lesson 25	
volume and surface area of two- and three-	Students compute volumes of three- dimensional abjects compared of right prime	Lessons 26 & 27, combine	
quadrilaterals, polygons, cubes, and right	by using the fact that volume is additive	Do all of lesson 27 and use	
prisms.	Lesson 27	exercises or problem set items	
	• Students use the volume formula for a right	from lesson 27 for practice	
	prism ($V = Bh$) to solve volume problems	problems/homework.	
	involving rate of flow.	Ontional Quiz for Module 6 Tonic E	
		Additional Resources: These optional	
		resources may be used for extension,	
		enrichment and/or additional practice, as	
		Formative Assessment Items to Support	
		Surface Area and Volume	
		The standard 7.G.B.5 was previously	
		covered in Module 3 Lessons 20-26.	
		Please refer to these lessons if students	
		End of Module 6 Assessment & Review of	
		Assessment (Omit #8 because it addresses a	
		standard that is no longer a TN Standard for Gr.	
		(Complete by 4/14/20)	
		Optional Module 6 EOM Assessment	



Grade 7

After TNReady Assessment

This section lists standards that are recommended to be reviewed after The State assessment. The Teacher Toolbox is a great resource to use to cover the standards 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						
7.RP.A.2a: Decide whether two quantities are in a proportional relationship, e.g., by	Topic A: Proportional Relationships						
testing for equivalent ratios in a table or graphing on a coordinate plane and	Lessons 3-4 Identifying Proportional and Non-Proportional Relationships in Tables						
observing whether the graph is a straight line through the origin.	Lessons 5-6 Identifying Proportional and Non-Proportional Relationships in Graphs						
7.RP.A.2b : Identify the constant of proportionality (unit rate) in tables, graphs and equations, diagrams and verbal	Topic B: Unit Rate and the Constant of Proportionality						
 descriptions of proportional relationship. 7.RP.A.2c: Represent proportional 	Lesson 7 Unit Rate as the Constant of Proportionality						
relationships by equations. For example, if total cost t is proportional to the number n	Lessons 8-9 Representing Proportional Relationships with Equations						
the relationship between the total cost and	Lesson 10 Interpreting Graphs of Proportional Relationships						
t = pn.	Performance Task: First Rate Level B 7.RP.2 Tennessee PBS Video Lesson						
the graph of a proportional relationship means in terms of the situation, with							
special attention to the points $(0, 0)$ and $(1, r)$ where r is the unit rate.							



Quarter 4 2019-2020 Grade 7 **Module 3: Expressions and Equations** Topic B: Solve Problems Using Expressions, Equations and Inequalities **7.EE.B.3:** Solve multi-step real-world and mathematical problems posed with positive Lessons 8-9 Using If-Then Moves in Solving Equations and negative rational numbers presented in Lessons 10-11 Angle Problems and Solving Equations any form (whole numbers, fractions, and Lesson 13 Inequalities decimals). a. Apply properties of operations Lesson 14 Solving Inequalities to calculate with numbers in any form; Lesson 15 Graphing Solutions to Inequalities convert between forms as appropriate. b. Assess the reasonableness of answers Performance Task: Toy Trains 7.EE.3 & 7.EE.4a using mental computation and estimation Performance Task: Speedy Texting 7.EE.3 & 7.EE.4a strategies. Tennessee Task Arc: Investigating Inequalities (Tasks 4 & 8) **7.EE.B.4:** Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. **7.EE.B.4a:** Solve contextual problems leading to equations of the form px + q = rand 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). SCS 2019/2020

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RESOURCE TOOLKIT							
The Resource Toolkit provides additional support for comprehension and mastery of grade-level skills and concepts. While some of these resources are imbedded in the map, the use of these categorized materials can assist educators with maximizing their instructional practices to meet the needs of all students.							
Textbook Resources www.greatminds.org Grade 7 Remediation Guides Remediation Tools	Standards Support <u>TN Math Standards</u> <u>Grade 7 Instructional Focus Document</u> <u>Achieve the Core</u> <u>Edutoolbox</u>	Videos Learn Zillion Khan Academy					
Calculator Activities <u>TI-73 Activities</u> <u>CASIO Activities</u> <u>TI-Inspire for Middle Grades</u>	Interactive Manipulatives Glencoe Virtual Manipulatives National Library of Interactive Manipulatives SEL Resources SEL Connections with Math Practices SEL Core Competencies The Collaborative for Academic, Social, and Emotional Learning (CASEL)	Additional Sites <u>Embarc Online</u> <u>PBS: Grades 6-8 Lesson Plans</u> <u>Grade 7 Flip Book</u> (This book contains valuable resources that help develop the intent, the understanding and the implementation of the state standards.) <u>https://academy.act.org/</u> <u>https://opened.com</u>					

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Streetlence since 1861	Quarter 4		2019-2020				Grade 7
			March 202	20			
Module/Topic	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
	9	10	11	12	End of Quarte	13 er 3	Pacing – Use this time to adjust instruction to stay on pace.
	16	17	18	19		20	<i>Other-</i> This includes
	Spring Break						assessments, review, re- teaching, etc.
Module 6 Topic A Topic B	23 <i>Quarter 4 begins</i> Module 6 Lesson 1	24 Module 6 Lesson 4	25 Module 6 Lesson 5	26 Module 6 Lesson 6	Flex Day Optic 7.G.B.4 Pacing Other	27 ons	
Module 6 Topic B	30 Teacher Toolbox Lesson 19	31 Teacher Toolbox Lesson 19		2		3	

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.

Streetlence since 1361	Quarter 4		2019-2020			Grade 7	
April 2020							
Module/Topic	Monday	Tuesday	Wednesday	Thursday	Friday	Notes:	
			1	2	3	Flex Day Options Include:	
Module 6 Topic	В		Mid-Module 6 Assessment or Topics A & B Assessment	Module 6 Lesson 20	Flex Day Options 7.G.B.2 7.G.B.5 Pacing Other	Standard- Suggested standard(s) to review for the day (*-denotes a Power Standard) Pacing – Use this time to	
	6	7	8	9	10	adjust instruction to stay on nace	
Module 6 Topic	D Module 6 Lesson 22	Module 6 Lesson 23	Module 6 Lesson 25	Module 6 <u>Lessons 26</u> <u>& 27, combined</u>	Good Friday Spring Break II	<i>Other</i> - This includes assessments, review, re- teaching, etc.	
	13	14	15	16	17		
	TN Ready Testing Window						
	20	21	22	23	24		
TN Ready Testing Window							
	27	28	29	30	1		
Module 1 Review							
Note Discours this surro							

It is understood that teachers may ek benina depending on their individual class heeds.

Major Content



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	May 2020							
Module/Tonic	Monday	Tuocdov	Wodnosday	Thursday	Friday	Notoc		
	Monuay	Tuesuay	weunesuay	Thursday	гниау	Notes:		
					1	Flex Day Options		
						include:		
						Standard- Suggested		
						standard(s) to review for		
	1.	۲ ۲	6	7	<u> </u>	the day		
	Т	3			0	(*-denotes a Power		
		Modu	ıle 1 Review			Standard)		
						Pacina – Use this time to		
						adjust instruction to stav		
						on pace.		
	11	12	13	14	15			
						Other- This includes		
		Mod	ule 3 Review			assessments, review, re-		
	1					teaching, etc.		
	10					_		
	18	19	20	21	22			
					1/2 day students			
		End of Quarter 4						
	25	26	27	28	29			
		_0						
	Memorial Day PD FLEX DAY							

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.

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Major Content