Quarter 1	Quarter 2	Quarter 3	Quarter 4
Properties of Exponents, Expressions, Equations, and Inequalities, Linear Systems, Various Functions & Their Graphs, Rational and Irrational Expressions	Polynomials, Quadratic Functions and Equations	Basic Geometry, Similar Triangles, Measurement	Right Triangles, Probability and Statistics, Distance and Midpoint Formulas, Operations on Functions, Exponential Functions
August 6, 2018 – October 5, 2018	October 15, 2018 – December 19, 2018	January 7, 2019 – March 8, 2019	March 18, 2019 – May 24, 2019
B.A.CED.A.1	B.A.APR.A.1	B.A.REI.A.1	B.A.REI.D.4
B.A.CED.A.2	B.A.APR.B.2	B.A.SSE.A.2	B.F.IF.C.6
B.A.CED.A.3	B.A.REI.B.2	B. G.C.A.1	B.G.SRT.B.2
B.A.SSE.A.1	B.F.IF.A.2	B.G.GMD.A.1	B.G.SRT.B.3
B.A.REI.C.3	B.F.IF.C.4	B.G.GMD.A.2	B.G.SRT.B.4
B.A.REI.D.5	B.N.CN.A.1	B.G.GMD.A.3	B.S.CP.A.1
B.F.IF.A.1	B.N.CN.A.2	B.G.MG.A.1	B.S.CP.A.2
B.F.IF.B.3	B.N.Q.A.1	B.G.MG.A.2	B.S.CP.A.3
B.F.IF.C.4	B.N.Q.A.3	B.G.SRT.A.1	B.S.CP.A.4
B.F.IF.C.5		B.N.Q.A.2	B.S.ID.A.1
B.N.RN.A.1			B.S.ID.B.2
B.N.Q.A.1			B.S.ID.B.3
B.N.Q.A.3			
B.S.ID.C.4			

Tennessee Academic Standards for Mathematics

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?

80% of seniors will be college-or career-ready

90% of students will graduate on time

100% of college-or career-ready graduates enroll in post-secondary opportunities

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

Focus

Coherence

Rigor

Conceptual Understanding

Procedural Fluency

Application

Tennessee Academic Standards for Mathematics

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 Proficiency

[Tennessee Academic Standards for Mathematics](#)

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.

Tennessee Academic Standards for Mathematics

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 (for Algebra I, Algebra II & Geometry only). 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 & Resources

District and web-based resources have been provided in the Instructional Support & Resources columns. 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. 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.

Tennessee Academic Standards for Mathematics

Topics Addressed in Quarter

- **Polynomials**
- **Quadratic Functions and Equations**

Overview

The content at the beginning of this quarter introduces students to polynomial expressions and how to add, subtract, and multiply polynomials. Students will understand factoring as the reverse process of multiplication and this understanding is extended and connected to factoring polynomial expressions and solving basic polynomial equations. The ability to manipulate expressions is critical to students' understanding, particularly in solving quadratic equations. Students work extensively with factoring quadratics using various factoring techniques. Students will find and estimate roots, solve quadratics using the Quadratic Formula, completing the square, taking square roots, and by factoring using the Zero Product Property. Students will understand what it means to solve a quadratic equation. Building on previous units and prior courses that explored linear equations and expressions, students will begin to explore radicals and rational functions.

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
	Unit 4 - Chapter 11: Polynomials (McGraw-Hill Bridge Math) **Chapter 8: Polynomials & Factoring (Prentice Hall Algebra 1)** **(Allow approximately 3 weeks for instruction, review, and assessment)**		
Domain: Arithmetic with Polynomials and Rational Expressions (A.APR) **Cluster:** Perform arithmetic operations on polynomials. **B.A.APR.A.1** Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.	**Essential Question(s):** Why is it important to know the operations of integers to understand the properties of polynomials? **Objective(s):** • Students will write polynomials in standard form. • Students will add & subtract polynomials. • Students will multiply polynomials by monomials. • Students will factor polynomials into a monomial factor and a polynomials factor.	**McGraw-Hill Bridge Math** 11-1 Add and Subtract Polynomials 11-2 Multiply by a Monomial 11-3 Divide and Find Factors **Prentice Hall Algebra 1** 8-1 Adding and Subtracting Polynomials 8-2 Multiplying and Factoring **Concept Byte:** Using Models to Multiply **Task(s):** Illustrative: Powers of 11 Polynomial Farm Task	**Vocabulary:** Polynomial, monomial, coefficient, constant, binomial, trinomial, like terms, simplify, standard form, extracting factors, greatest common factor (GCF) **Writing in Math:** Tell whether you prefer to group terms or use columns to add or subtract polynomials. Explain why you prefer that method. Explain how subtraction of polynomials is related to addition of polynomials.

Tennessee Academic Standards for Mathematics

Curriculum and Instruction – Mathematics

Quarter 2   **BRIDGE MATH**

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
		Additional Resources: Khan Academy Videos: Intro to Polynomials Khan Academy Videos: Adding & Subtracting Polynomials Khan Academy Videos: Intro to factorization Khan Academy Videos: Factoring monomials Khan Academy Videos: Common monomial factors	How is algebraic multiplication of a monomial and a polynomial similar to arithmetic multiplication of a single-digit number and a multi-digit number?
Domain: Arithmetic with Polynomials and Rational Expressions (A.APR) **Cluster:** Perform arithmetic operations on polynomials. **B.A.APR.A.1** Understand that polynomials form a system analogous to the integers, namely, they are closed under the operations of addition, subtraction, and multiplication; add, subtract, and multiply polynomials.	**Essential Question(s):** How are the properties of real numbers related to polynomials? **Objective(s):** • Students will multiply a binomial by a binomial. • Students will write polynomials in standard form. • Students will expand a product of two binomials.	**McGraw-Hill Bridge Math** 11-4 Multiply Two Binomials **Prentice Hall Algebra 1** 8-3 Multiplying Binomials **Task(s):** Multiplying Binomials Task Multiplying Polynomials Formative Assessment Task **Additional Resources:** EngageNY Lesson: Multiplying Polynomials (Eureka Math Algebra I Module 1, Topic B, Lesson 9) Khan Academy: Multiplying Binomials by Binomials Virtual Nerd Video	**Vocabulary:** binomial, distributive property, product, terms, expanding, sum and difference of two squares, **Writing in Math:** Have students create multiple representations of binomial multiplication. Have students write a response to the following: *Can the product of two binomials ever have more than three terms? Explain your thinking.*

Tennessee Academic Standards for Mathematics

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
Chapter 12: Quadratic Equations (McGraw-Hill Bridge Math) **Chapter 9: Quadratic Functions & Equations (Prentice Hall Algebra 1)** **Chapter 4: Quadratic Functions and Equations (Prentice Hall Algebra 2)** **(Allow approximately 6 weeks for instruction, review, and assessment)**			
Domain: Interpreting Functions (F.IF) **Cluster:** Analyze functions using different representations. **B.F.IF.C.4** Graph linear, quadratic, absolute value, and piecewise functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated ones. **Domain:** Quantities (N.Q) **Cluster:** Reason quantitatively and use units to solve problems. **B.N.Q.A.1** Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	**Essential Question(s):** ● How can we determine which way the parabola will be facing before you graph it? ● How do we find the vertex when an equation is given? A graph? ● How does a quadratic equation transform on a coordinate plane? ● How can we recognize solutions on a parabola? **Objective(s):** ● Students will graph quadratic functions. ● Students will identify key features of a quadratic equation.	**McGraw-Hill Bridge Math** 12-1 Graph Parabolas **Prentice Hall Algebra 1** 9-1 Quadratic Graphs and Their Properties **Prentice Hall Algebra 2** 4-1 Quadratic Functions and Transformations **Task(s):** GSE Tasks: Modeling and Analyzing Quadratic Functions (a collection of tasks) **Additional Resources:** Khan Academy: Graphing Quadratic Functions 3-lesson unit on Quadratics Shifting and Scaling Parabolas Better Lesson: The Parabola (Day 1) Better Lesson: The Parabola (Day 2)	**Vocabulary:** quadratic, quadratic equation, function, parabola, vertex, axis of symmetry **Writing in Math:** What are some of the real-life applications of quadratic equations? What do you notice about the location of the vertex and axis of symmetry of the parabola you obtain when you graph an equation in the form $y = ax^2 + c$?
Domain: Reasoning with Equations and Inequalities (A.REI) **Cluster:** Solve equations and inequalities in one variable. **B.A.REI.B.2** Solve quadratic equations in one variable. Solve quadratic equations by inspection (e.g., for $x2 = 49$), taking square roots, completing the square, knowing and applying the quadratic formula, and factoring,	**Essential Question(s):** ● What are the advantages of a quadratic function in vertex form? In standard form? ● How is any quadratic function related to the parent quadratic function? ● How are the real solutions of a quadratic equation related to the graph of the related quadratic function?	**McGraw-Hill Bridge Math** 12-2 The General Quadratic Function **Prentice Hall Algebra 1** 9-2 Quadratic Functions **Prentice Hall Algebra 2** 4-2 Standard Form of a Quadratic Function	**Vocabulary:** quadratic equation, standard form of a quadratic equation **Writing in Math:** Summarize the relationship between │a│ and the width of the graph of $y = ax^2 + bx + c$.

Tennessee Academic Standards for Mathematics

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as a ± bi for real numbers a and b. **Domain:** Interpreting Functions (F.IF) **Cluster:** Analyze functions using different representations. **B.F.IF.C.4** Graph linear, quadratic, absolute value, and piecewise functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated ones. **Domain:** Quantities (N.Q) **Cluster:** Reason quantitatively and use units to solve problems. **B.N.Q.A.1** Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.	**Objective(s):** • Students will graph functions defined by the general quadratic equation (standard form). • Students will solve quadratic equations by graphing	**Task(s):** Illustrative: Identifying Quadratic Functions (Vertex Form) Illustrative: Identifying Quadratic Functions (Standard Form) **Additional Resources:** Khan Academy: Graphing Quadratic Functions 3-lesson unit on Quadratics EngageNY Lesson: Algebra I Module 4, Topic A, Lesson 8 (Eureka Math Algebra I Module 4, Topic A, Lesson 8) EngageNY Lesson: Algebra I Module 4, Topic A, Lesson 10 (Eureka Math Algebra I Module 4, Topic A, Lesson 8)	Compare standard form with vertex form using an actual function. Compare the steps needed to find the vertex. Explain how you can use the *y*-intercept, vertex, and axis of symmetry to graph a quadratic function. Assume the vertex is not on the *y* axis.
Domain: Reasoning with Equations and Inequalities (A.REI) **Cluster:** Solve equations and inequalities in one variable. **B.A.REI.B.2** Solve quadratic equations in one variable. Solve quadratic equations by inspection (e.g., for x2 = 49), taking square roots, completing the square, knowing and applying the quadratic formula, and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic	**Essential Question(s):** How can features of quadratic functions such as the equation, solutions, axis of symmetry, vertex, etc. be represented in tables, equations, and in "real world" contexts? **Objective(s):** • Students will solve quadratic equations by graphing and using square roots. • Students will use factoring to solve quadratic equations.	**McGraw-Hill Bridge Math** 12-3 Factor and Graph **Prentice Hall Algebra 1** 9-3 Solving Quadratic Equations 9-4 Factoring to Solve Quadratic Equations **Task(s):** Illustrative: Building a General Quadratic Function	**Vocabulary:** Zero-Product Property, roots of the equation, zeros of the function **Writing in Math:** When is it easier to solve a quadratic equation of the form $ax + bx + c = 0$ using square roots than to solve it using a graph? How is factoring the expression $x^2 - 6x + 8$

Tennessee Academic Standards for Mathematics

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
formula gives complex solutions and write them as a ± bi for real numbers a and b. **Domain:** Interpreting Functions (F.IF) **Cluster:** Analyze functions using different representations. **B.F.IF.C.4** Graph linear, quadratic, absolute value, and piecewise functions expressed symbolically and show key features of the graph, by hand in simple cases and using technology for more complicated ones. **Domain:** Quantities (N.Q) **Cluster:** Reason quantitatively and use units to solve problems. **B.N.Q.A.1** Use units as a way to understand problems and to guide the solution of multi-step problems; choose and interpret units consistently in formulas; choose and interpret the scale and the origin in graphs and data displays.		Illustrative: Throwing Baseballs Tile Patterns **Additional Resources:** Khan Academy: Solving quadratic equations by taking square root Khan Academy: Solving quadratic equations by factoring and using structure Solving Quadratics	similar to solving the equation $x^2 - 6x + 8 = 0$? How is it different?
Domain: The Complex Number System (N.CN) **Cluster:** Perform arithmetic operations with complex numbers. **B.N.CN.A.1** Know there is a complex number i such that $i^2 = -1$, and every complex number has the form a + bi with a	**Essential Question(s):** • Why do imaginary numbers exist? • How do you simplify and solve equations involving complex numbers? **Objective(s):** • Students will perform operations with pure imaginary numbers.	**McGraw-Hill Bridge Math** 12-4 Complex Numbers **Prentice Hall Algebra 2** 4-8 Complex Numbers **Task(s):** Illustrative: Complex Square Roots	**Vocabulary:** imaginary unit (*i*), complex number, pure imaginary numbers, Square Root Property **Writing in Math:** Explain how complex numbers are related to quadratic equations.

Tennessee Academic Standards for Mathematics

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
and b real. **B.N.CN.A.2** Know and use the relation i2 = -1 and the commutative, associative, and distributive properties to add, subtract, and multiply complex numbers.	• Students will perform operations with complex numbers.	**Additional Resources:** [Khan Academy: Imaginary and Complex Numbers](#)	Determine whether the following statement is *always*, *sometimes*, or *never* true. Explain your reasoning. *Every complex number has both a real part and an imaginary part.*
Domain: Reasoning with Equations and Inequalities (A.REI) **Cluster:** Solve equations and inequalities in one variable. **B.A.REI.B.2** Solve quadratic equations in one variable. Solve quadratic equations by inspection (e.g., for $x2 = 49$), taking square roots, completing the square, knowing and applying the quadratic formula, and factoring, as appropriate to the initial form of the equation. Recognize when the quadratic formula gives complex solutions and write them as $a \pm bi$ for real numbers a and b.	**Essential Question(s):** What does "completing the square" mean in the context of solving quadratic equations? **Objective(s):** • Students will solve equations by using the Square Root Property. • Students will solve quadratic equations by completing the square.	**McGraw-Hill Bridge Math** 12-5 Completing the Square **Prentice Hall Algebra 1** 9-5 Completing the Square **Task(s):** [Illustrative: Completing the Square](#) [Illustrative: Quadratic Sequence 1](#) [Illustrative: Quadratic Sequence 2](#) **Additional Resources:** [Khan Academy: Solving Quadratic equations by Completing the Square](#)	**Vocabulary:** completing the square, Square Root Property **Writing in Math:** Can you solve any quadratic equation by completing the square? Explain your answer.
Domain: Reasoning with Equations and Inequalities (A.REI) **Cluster:** Solve equations and inequalities in one variable. **B.A.REI.B.2** Solve quadratic equations in one variable. Solve quadratic equations by inspection (e.g., for $x2 = 49$), taking square roots, completing the square, knowing and applying the quadratic formula, and factoring, as appropriate to the initial form of the equation.	**Essential Question(s):** How do you solve a quadratic equation using the Quadratic Formula? **Objective(s):** • Students will solve quadratic equations by using the Quadratic Formula. • Students will use the discriminant to determine the number and type of	**McGraw-Hill Bridge Math** 12-6 The Quadratic Formula and the Discriminant **Prentice Hall Algebra 1** 9-6 The Quadratic Formula and the Discriminant **Task(s):** [Illustrative: Two Squares are Equal](#)	**Vocabulary:** Quadratic Formula, discriminant, **Writing in Math:** Describe three different ways to solve $x^2 – 2x – 15 = 0$. Which method do you prefer, and why? Describe how finding the discriminant can assist you in solving quadratic equations.

[Tennessee Academic Standards for Mathematics](#)

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
Recognize when the quadratic formula gives complex solutions and write them as a ± bi for real numbers a and b.	roots of a quadratic equation.	Illustrative: Springboard Dive **Additional Resources:** Khan Academy: Solving quadratics using the Quadratic Formula	
Domain: Arithmetic with Polynomials and Rational Expressions (A.APR) **Cluster:** Understand the relationship between zeros and factors of polynomials. **B.A.APR.B.2** Identify zeros of polynomials when suitable factorizations are available, and use the zeros to construct a rough graph of the function defined by the polynomial. **Domain:** Interpreting Functions (F.IF) **Cluster:** Understand the concept of a function and use function notation. **B.F.IF.A.2** Use function notation, evaluate functions for inputs in their domains, and interpret statements that use function notation in terms of a context.	**Essential Question(s):** • How do we determine the number and type of roots of a polynomial and find its zeros? • What is the relationship between zeros and factors? • What characteristics of polynomial functions can be seen on their graphs? **Objective(s):** • Students will determine the number and type of roots for a polynomial equation. • Students will find the zeros of a polynomial function.	**McGraw-Hill Bridge Math** 12-7 Roots and Zeros **Prentice Hall Algebra 2** 5-1 Polynomial Functions 5-2 Polynomials, Linear Factors, and Zeros **Task(s):** Illustrative: Baseball task **Additional Resources:** Khan Academy: The Fundamental Theorem of Algebra Khan Academy: Finding Zeros of Polynomials Khan Academy: Zeros of Polynomials and Their Graphs	**Vocabulary:** Fundamental Theorem of Algebra **Writing in Math:** Compare and contrast these three words: *roots*, *zeros*, and *solutions*. Write a polynomial function of least degree with integral coefficients having zeros that include -1 and 1 + 2i.
Domain: Quantities (N.Q) **Cluster:** Reason quantitatively and use units to solve problems. **B.N.Q.A.3** Solve problems involving squares, square roots of numbers, cubes, and cube roots of numbers.	**Essential Question(s):** What are the key features of the graphs of radical and rational functions? **Objective(s):** • Students will graph radical functions.	**McGraw-Hill Bridge Math** 12-9 Radical Equations **Prentice Hall Algebra 2** 6-8 Graphing Radical Functions 6-5 Solving Square Root and Other Radical Equations	**Vocabulary:** radical function, square root function **Writing in Math:** What makes a function radical? Write some general rules about how to solve

Tennessee Academic Standards for Mathematics

TN STATE STANDARDS	CONTENT	INSTRUCTIONAL SUPPORT & RESOURCES	
	• Students will solve radical equations. • Students will solve radical equations with extraneous roots.	**Additional Resources:** Khan Academy: Domain of radical functions Khan Academy: Graphs of radical Functions Khan Academy: Solving square-root equations Khan Academy: Radical Equations and Functions Khan Academy: Extraneous solutions of radical equations Radical Equations	radical equations. Demonstrate your rules with a partner by solving a radical equation.

Tennessee Academic Standards for Mathematics

RESOURCE TOOLBOX
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	Standards	Videos
http://www.connected.mcgraw-hill.com/ http://www.pearsonsuccessnet.com/	Common Core Standards - Mathematics Common Core Standards - Mathematics Appendix A Edutoolbox (formerly TNCore) http://www.ccsstoolbox.org/ Common Core Lessons Tennessee State Math Standards HS Flip Book with Examples of each Standard	Brightstorm Teacher Tube The Futures Channel Khan Academy Math TV Lamar University Tutorial Shmoop - We Speak Students
Additional Sites Illuminations (NCTM) Stem Resources www.learnzillion.com	**Interactive Manipulatives & Tasks** National Math Resources MARS Course 2 NASA Space Math Math Vision Project UT Dana Center Illustrative Mathematics Inside Math Tasks Math Vision Project Tasks Better Lesson National Math Resources SMARTboard Lessons	**Calculator** MathNspired Texas Instrument Activities Casio Activities
Literacy Graphic Organizers (9-12)	**ACT** TN ACT Resources ACT College & Career Readiness Mathematics Standards	

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