## Model Curricula Alignment for Connecticut Mathematics

## Alignment Grade 6 **Resource Unit(s) Number Model Unit Name Model Unit Standards Resources Lessons** Pacing This is the title of the unit in This is the expected number of *These are the standards This is the unit(s) that aligns* These are the lessons from the with the model unit from the identified units that align the model curricula addressed in the unit days for instruction to the standards within the resource model unit **Operating with Positive** 6.NS.A.1 Mr. Mung's Ice ≈ 20-25 days 6.NS.A.1, 6.NS.B.2, 6.NS.B.3, 6.NS.A **Rational Numbers** 6.NS.B 6.NS.B.4, 6.G.A.2 Cream 6.G.A (partial) 6.NS.B.2 Which Way...? 6.NS.B.3 Enter the Dragon 6.NS.B.4 The Castle Guard 6.G.A.2 River Rescue **Understanding Positive and** 6.NS.C 6.NS.C.5, 6.NS.C.6, 6.NS.C.7, 6.NS.C.5 Weather Bear ≈ 32-40 days 6.NS.C.6a The Sandwich Artist **Negative Numbers** 6.NS.C.8 6.NS.C.6b Treasure Trail 6.NS.C.6c Special Intelligence 6.NS.C.7ab Snow School 6.NS.C.c Day by Day 6.NS.C.7d Coffee Accounting 6.NS.C.8 The Mark of Zero Using Expressions and 6.EE.A 6.EE.B 6.EE.A.1 | Dream of Djinni ≈ 36-45 days 6.EE.A.1, 6.EE.A.2, 6.EE.A.3, 6.EE.A.4, 6.EE.B.5, 6.EE.B.6, 6.EE.A.2a Mr. & Mrs. Stone Equations 6.EE.A.2b A Fairy Good Job 6.EE.B.7, 6.EE.B.8 6.EE.A.2c Real Stories of the AIF 6.EE.A.3 Provision Problem 6.EE.A.4 ... And a Tin of Rice 6.EE.B.6 Say Cheese! 6.EE.B.7 The Sign of Zero 6.EE.B.8 Farm Fortune Applications of Geometry 6.G.A.1, 6.G.A.3, 6.G.A.4 6.G.A (partial) 6.G.A.1 The Lilliput Regatta ≈ 12-15 days 6.G.A.3 Fuel Factor

## Resource Name: MidSchoolMath

			6.G.A.4 Build a Better Box	
Ratios and Rates	6.RP.A.1, 6.RP.A.2, 6.RP.A.3	6.RP.A	6.RP.A.1 For Every Day	≈ 24-30 days

			6.RP.A.2 Road Trip Ratios	
			6.RP.A.3a Clone Wars	
			6.RP.A.3b Vacation Day	
			6.RP.A.3c Stealing Home	
			6.RP.A.3d Saffron Shuffle	
Algebraic Reasoning	6.EE.B.6, 6.EE.B.7, 6.EE.C.9	6.EE.B (partial)	6.EE.B.6 Say Cheese!	≈ 12-15 days
		6.EE.C	6.EE.B.7 The Sign of Zero	
			6.EE.C.9 Sister Act	
Statistics and Distributions	6.SP.A.1, 6.SP.A.2, 6.SP.A.3,	6.SP.A 6.SP.B	6.SP.A.1 Statistical Friends	≈ 16-20 days
	6.SP.B.4, 6.SP.B.5		6.SP.A.2 Build a Better Forest	
			6.SP.A.3 Periodontal Pockets	
			6.SP.B.4&5 Shoot for the	
			Moon!	

## **Scope and Sequence**

If a district uses this resource to implement the state model curriculum for grade 6, the following scope and sequence should be followed to ensure alignment and attention to the progressions of mathematics.

\*\*A district is welcome to use their own scope & sequence as well. The main consideration being would be the unit tests in this curriculum (Milestone Assessments) are aligned to the units below.

Core Curriculum by MidSchoolMath is structured by grade, domain, cluster and standard levels. MidSchoolMath provides general guidelines for scope, sequence and pacing in the Teacher's Guide for each grade level (summarized below) to ensure that all standards for the grade level are included. Essential concepts (Major Clusters) are allotted additional time throughout the year. The sequence provided in the materials is specifically designed to provide a framework to allow teachers sufficient time for teaching each standard throughout the year. Additionally, the materials are intentionally designed for students to work with more 'concrete' forms of mathematics prior to abstract concepts. Finally, the structure of the curriculum is sequenced to allow for completion of topics before associated summative assessments, and sequencing within lessons progresses from conceptual work to practice with exercises. Core Curriculum by MidSchoolMath is based on estimated 36 weeks or 180 days per school year. Lessons typically take four days; if necessary for content coverage, they may be compressed to three days.

Districts using Core Curriculum may opt to use the Model Unit sequence instead and can order lessons as outlined in the crosswalk above.

Order	Unit Number/Title and	Lesson Objectives	# of days (assume 1 hour of	Number of weeks
	Lessons		instruction)	
Ratios & Proportional	6.RP.A	Understand the	≈24-30 days	≈ 5-6 weeks
Reasoning	6.RP.A.1 For Every Day 6.RP.A.2 Road Trip Ratios 6.RP.A.3a Clone Wars 6.RP.A.3b Vacation Day	<ul> <li>concept of ratios and use ratio</li> <li>language to interpret ratios.</li> <li>Interpret ratios as unit rates.</li> </ul>		
	6.RP.A.3c Stealing Home			

6.RP.A.3d Saffron Shuffle	Represent and compare	
	ratios in tables and graphs. •	
	Use unit rates to solve	
	problems.	

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The Number System	6.NS.A	Understand percent as	≈ 4-5 days	≈ 1 week
-	6.NS.A.1 Mr. Mung's Ice	a rate per 100 and use that to	-	
	Cream	solve problems.		
		<ul> <li>Use ratio reasoning to</li> </ul>		
	6 NS B	convert measurements.	≈ 12-15 days	≈ 2-3 weeks
	6 NS B 2 Which Way 2	<ul> <li>Interpret and compute</li> </ul>	~ 12-13 uays	~ 2-3 WEEKS
	6.NS.B.2 Which Wayr	quotients of fractions.		
	6.NS.B.3 Enter the Dragon			
	6.NS.B.4 The Castle Guard			
		• Divide multi-digit		
		numbers using the standard		
		algorithm. • Add. subtract.		
	6.NS.C	multiply, divide decimals	≈ 32-40 days	≈ 7-8 weeks
	6.NS.C.5 Weather Bear	Use GCF and LCM to		
	6.NS.C.6a The Sandwich Artist	solve problems.		
	6.NS.C.6b Treasure Trail			
	6.NS.C.6c Special Intelligence	Understand positive		
	6.NS.C.7ab Snow School	and negative numbers as they		
	6 NS C c Day by Day	represent real-world contexts		
	6 NS C 7d Coffee Accounting	Becognize numbers		
	CNS.C. 7 Conee Accounting	have opposites, located on		
	0.NS.C.8 THE WAR OF ZERO	opposite sides of zero on a		
		number line.		
		Understand signed		
		numbers as they relate to		
		guadrants on a coordinate		
		plane, including plotting points		
		with signed coordinates.		
		Interpret the		
		relationship between numbers		
		based on their location on the		
		number line.		
		Understand and		
		interpret absolute value.		

Expressions & Equations	<b>6.EE.A</b> 6.EE.A.1 I Dream of Djinni 6.EE.A.2a Mr. & Mrs. Stone 6.EE.A.2b A Fairy Good Job	• Write & evaluate numerical expressions with exponents. • Write expressions with numbers	≈24-30 days	≈5-6 weeks
	6.EE.A.2c Real Stories of the AIF 6.EE.A.3 Provision Problem 6.EE.A.4 And a Tin of Rice	<ul> <li>and letters. • Identify parts of an expression.</li> <li>Evaluate expressions at specific valuables of their variables.</li> <li>Apply properties of operations to generate equivalent expressions. • Identify when two expressions are equivalent</li> </ul>		
	<b>6.EE.B</b> 6.EE.B.6 Say Cheese! 6.EE.B.7 The Sign of Zero 6.EE.B.8 Farm Fortune	<ul> <li>Understand a solution of an equation or inequality as a value that make the equation or inequality true.</li> <li>Use variables to represent numbers and write expressions when solving problems.</li> <li>Solve problems by writing simple equations(with nonnegative numbers).</li> </ul>	≈ 12-15 days	≈ 2-3 weeks
	<b>6.EE.C</b> 6.EE.C.9 Sister Act	<ul> <li>Write and solve simple inequalities.</li> <li>Use variables to represent the relationship between independent and dependent variables.</li> <li>Analyze the relationship between independent and dependent variables using tables, graphs &amp; equations.</li> </ul>	≈ 4-5 days	≈ 1 week

Geometry	6.G.A	• Find the area of	≈16-20 days	≈4-5 weeks
	6.G.A.1 The Lilliput Regatta	triangles and other polygons		
	6.G.A.2 River Rescue	by composing rectangles or		
	6.G.A.3 Fuel Factor	decomposing into familiar		
	6.G.A.4 Build a Better Box	shapes.		
		• Find the volume of		
		right rectangular prisms with		
		fractional side lengths by		
		packing it with unit cubes. •		
		Apply formulas to find		
		volumes of right rectangular		
		prisms.		
		<ul> <li>Use coordinates to</li> </ul>		
		find the length of a side of a		
		figure using ordered pairs		
		that share a coordinate and		
		use this to skill to solve		
		problems. • Represent 3-D		
		figures using nets made of		
		rectangles and triangles.		
		Use nets to calculate		
		surface area and solve		
		realworld problems.		

Statistics & Probability	6.SP.A	Recognize statistical	≈12-15 days	≈2-3 weeks
	6.SP.A.1 Statistical Friends	questions as questions that		
	6.SP.A.2 Build a Better Forest	anticipate variability.		
	6.SP.A.3 Periodontal Pockets	<ul> <li>Understand that data</li> </ul>		
		sets have a distribution that		
		can be described by center,		
		spread and shape.		
		<ul> <li>Recognize that a</li> </ul>		
		measure of center		
		summarizes all values of a		
		data set with a single number		
		& that a measure of variation		
		describes how the values in		
		the data set vary with a single		
		number.		
			≈ 4-5 days	≈ 1 week

6.SP.B 6.SP.B.4&5 Shoot for the Moon!	<ul> <li>Display numerical data in dot plots, histograms and dot plots.</li> <li>Summarize numerical data sets in context using measures of center, measures of variation, shape of distribution.</li> </ul>			
Supports of Diversity, Equity and Inclusion				
Please provide any information relative to supporting culturally	responsive instruction, multi-langua	age learners, and students with	n disabilities	

From a high-level perspective, *Core Curriculum* has been designed to allow **all students** to engage in learning grade-level math standards. *The Math Simulator* is intentionally designed, and placed prior to teacher instruction, so that students have the freedom to enter into the problem where they are. Students are specifically encouraged to conceive of multiple solutions and solution paths. Collaboration is encouraged, with a focus and emphasis on using processes and strategies over rushing to arrive at an answer.

Each *Detailed Lesson Plan* provides lesson-specific recommendations for differentiation, in two places. The "Strategies for Supporting Diverse Learners" Chart found in each *Detailed Lesson Plan* provides accommodations, modifications and extensions for that lesson to use with EL and special populations, including supporting students with skill gaps and special education needs, and those identified as gifted. The "Practice Printable Differentiation Plan" provides recommendations for remediation, practice and enrichment to meet the needs of all students. Resources to support these students are further embedded and integrated within *Core Curriculum*, such as *Test Trainer Pro* and *Mathematical Language Routines*.

All *Detailed Lesson Plans* also contain at least one strategy around **Mathematical Language Routines (MLRs)** for each lesson standard; these MLRs apply to all students but are particularly beneficial for English Language Learners. An overview on using MLRs, and a professional development module on MLRs, can be accessed within the system from the Teacher Dashboard.

*Test Trainer Pro* allows for students to practice math items in every domain at their own ability level, be that at grade level, below grade level, or above grade level. Teachers have access to lessons from all grade levels 5-8, which can be used to assign specific lessons outside of the current course with individual students or groups of students, as needed.

Videos are closed captioned in English and also have the option of Spanish subtitles to support EL and students who are deaf or hard of hearing. Highcontrast text is used throughout and can be resized by users; images can also be doubled in size. Users have the ability to adjust and adapt background colors and sizes through browser settings, for improved accessibility, and content works with common Chrome extensions to further accessibility.

To support schools and districts with large populations of Spanish-speakers, MidSchoolMath publishes Spanish-language versions of all student materials and has built in Spanish-language subtitles for all videos. The Spanish-language print materials can be accessed online (alongside Englishlanguage materials) or districts may opt to purchase *Student Workbooks (Spanish Edition)*. All Spanish-language materials were created through a professional translation process, undertaken by humans and overseen by Spanish-speaking educators, to ensure authenticity and understanding.