Connecticut Mathematics Model Curricula Alignment

Resource Name: **REVEAL MATH GRADE 3**

Alignment Grade 3				
Model Unit Name	**Model Unit Standards**	**Resource Unit(s) Number**	**Resources Lessons**	**Pacing**
This is the title of the unit in the model curricula	*These are the standards addressed in the unit*	*This is the unit(s) that aligns with the model unit from the resource*	*These are the lessons from the identified units that align to the standards within the model unit*	*This is the expected number of days for instruction*
Understanding Multiplication and Division	3.OA.A.1, 3.OA.A.2, 3.MD.B.3	Unit 3: Multiplication and Division Unit 12: Measurement and Data	Lesson 3-1: Understand Equal Groups Lesson 3-2: Use Arrays to Multiply Lesson 3-4: Understand Equal Sharing Lesson 3-5: Understand Equal Grouping Lesson 3-6: Relate Multiplication and Division Lesson 12-7: Understand Scaled Picture Graphs Lesson 12-8: Understand Scaled Bar Graphs Lesson 12-9: Solve Problems Involving Scaled Graphs	8 days

Connecting and Using Multiplication and Division	3.OA.A.3, 3.OA.A.4, 3.OA.B.5, 3.OA.B.6, 3.OA.C.7	Unit 3: Multiplication and Division	Lesson 3-3: Understand the Commutative Property	26 days
			Lesson 3-7: Find the Unknown	
		Unit 4: Use Patterns to Multiply by 0, 1, 2, 5, and 10		
			Lesson 4-1: Use Patterns to Multiply by 2	
		Unit 5: Use Properties to Multiply by 3, 4, 6, 7, 8, and 9	Lesson 4-2: Use Patterns to Multiply by 5	
			Lesson 4-3: Use Patterns to Multiply by 10	
		Unit 9: Use Multiplication to Divide	Lesson 4-4: Use Patterns to Multiply by 1 and 0	
		Unit 10: Use Properties and Strategies to Multiply and Divide	Lesson 4-5: Multiply Fluently by 0, 1, 2, 5, and 10	
		Unit 11: Perimeter	Lesson 4-6: Solve Problems Involving Equal Groups	
			Lesson 5-1: Understand the Distributive Property	
			Lesson 5-2: Use Properties to Multiply by 3	
			Lesson 5-3: Use Properties to Multiply by 4	
			Lesson 5-4: Use Properties to Multiply by 6	
			Lesson 5-5: Use Properties to Multiply by 8	

			Lesson 5-6: Use Properties to Multiply by 7 and 9	
			Lesson 5-7: Solve Problems Involving Arrays	
			Lesson 9-1: Use Multiplication to Solve Division Equations	
			Lesson 9-2: Divide by 2	
			Lesson 9-3: Divide by 5 and 10	
			Lesson 9-4: Understand Division with 1 and 0	
			Lesson 9-5: Divide by 3 and 6	
			Lesson 9-6: Divide by 4 and 8	
			Lesson 9-7: Divide by 9	
			Lesson 9-8: Divide by 7	
			Lesson 9-9: Multiply and Divide Fluently within 100	
			Lesson 10-4: Two-Step Problems Involving Multiplication and Division	
			Lesson 11-5: Solve Problems Involving Measurement	
Computing with Whole Numbers	3.NBT.A.1, 3.NBT.A.2, 3.NBT.A.3, 3.OA.C.7,	Unit 2: Use Place Value to Fluently Add and Subtract within 1,000	Lesson 2-1: Represent 4-Digit Numbers	33 days

	3.OA.D.8, 3.OA.D.9	Unit 4: Use Patterns to Multiply by 0, 1, 2, 5, and 10	Lesson 2-2: Round Multi-Digit Numbers	
			Lesson 2-3: Estimate Sums and Differences	
		Unit 5: Use Properties to Multiply by 3, 4, 6, 7, 8, and 9	Lesson 2-4: Use Addition Properties to Add	
			Lesson 2-5: Addition Patterns	
		Unit 9: Use Multiplication to Divide	Lesson 2-6: Use Partial Sums to Add	
			Lesson 2-7: Decompose to Subtract	
		Unit 10: Use Properties and Strategies to Multiply and Divide	Lesson 2-8: Adjust Numbers to Add or Subtract	
			Lesson 2-9: Use Addition to Subtract	
			Lesson 2-10: Fluently Add within 1,000	
			Lesson 2-11: Fluently Subtract within 1,000	
			Lesson 2-12: Solve Two-Step Problems Involving Addition and Subtraction	
			Lesson 4-1: Use Patterns to Multiply by 2	
			Lesson 4-2: Use Patterns to Multiply by 5	
			Lesson 4-3: Use Patterns to Multiply by 10	

			Lesson 4-4: Use Patterns to Multiply by 1 and 0	
			Lesson 4-5: Multiply Fluently by 0, 1, 2, 5, and 10	
			Lesson 5-3: Use Properties to Multiply by 4	
			Lesson 5-4: Use Properties to Multiply by 6	
			Lesson 5-5: Use Properties to Multiply by 8	
			Lesson 5-6: Use Properties to Multiply by 7 and 9	
			Lesson 9-2: Divide by 2	
			Lesson 9-3: Divide by 5 and 10	
			Lesson 9-4: Understand Division with 1 and 0	
			Lesson 9-5: Divide by 3 and 6	
			Lesson 9-6: Divide by 4 and 8	
			Lesson 9-7: Divide by 9	
			Lesson 9-8: Divide by 7	
			Lesson 9-9: Multiply and Divide Fluently within 100	
			Lesson 10-1: Patterns with Multiples of 10	

			Lesson 10-4: Two-Step Problems Involving Multiplication and Division	
			Lesson 10-5: Solve Two-Step Problems	
			Lesson 10-6: Explain the Reasonableness of a Solution	
Exploring Measurement and Data	3.MD.A.1, 3.MD.A.2, 3.MD.B.3, 3.MD.B.4	Unit 12: Measurement and Data	Lesson 12-1: Measure Liquid Volume	11 days
			Lesson 12-2: Estimate and Solve Problems with Liquid Volume	
			Lesson 12-3: Measure Mass	
			Lesson 12-4: Estimate and Solve Problems with Mass	
			Lesson 12-5: Tell Time to the Nearest Minute	
			Lesson 12-6: Solve Problems Involving Time	
			Lesson 12-7: Understand Scaled Picture Graphs	
			Lesson 12-8: Understand Scaled Bar Graphs	
			Lesson 12-9: Solve Problems Involving Scaled Graphs	
			Lesson 12-10: Measure to Halves or Fourths of an Inch	

			Lesson 12-11: Show Measurement Data on a Line Plot	
Understand Area and Perimeter	3.MD.C.5, 3.MD.C.6, 3.MD.C.7, 3.MD.C.8	Unit 6: Connect Area and Multiplication Unit 11: Perimeter	Lesson 6-1: Understand Area Lesson 6-2: Count Unit Squares to Determine Area Lesson 6-3: Use Multiplication to Determine Area Lesson 6-4: Determine the Area of a Composite Figure Lesson 6-5: Use the Distributive Property to Determine Area Lesson 6-6: Solve Area Problems Lesson 11-1: Understand Perimeter Lesson 11-2: Determine Perimeter of Figures Lesson 11-3: Determine an Unknown Side Length Lesson 11-4: Solve Problems Involving Area and Perimeter	10 days
Reasoning About Two-dimensional Shapes	3.MD.D.8, 3.G.A.1, 3.G.A.2	Unit 7: Fractions Unit 11: Perimeter	Lesson 7-1: Partition Shapes into Equal Parts Lesson 7-2: Understand Fractions	8 days

		Unit 13: Describe and Analyze 2-Dimensional Shapes	Lesson 11-1: Understand Perimeter	
			Lesson 11-2: Determine Perimeter of Figures	
			Lesson 11-3: Determine an Unknown Side Length	
			Lesson 11-4: Solve Problems Involving Area and Perimeter	
			Lesson 13-1: Describe and Classify Polygons	
			Lesson 13-2: Describe Quadrilaterals	
			Lesson 13-3: Classify Quadrilaterals	
			Lesson 13-4: Draw Quadrilaterals with Specific Attributes	
Understanding Fractions	3.NF.A.1, 3.NF.A.2	Unit 7: Fractions	Lesson 7-2: Understand Fractions	3 days
			Lesson 7-3: Represent Fractions on a Number Line	
			Lesson 7-6: Represent a Fraction Greater Than One on a Number Line	
Reasoning about Fraction Comparisons and Equivalence	3.NF.A.3, 3.G.A.2	Unit 7: Fractions	Lesson 7-1: Partition Shapes into Equal Parts	11 days

		Unit 8: Fraction Equivalence and Comparison	Lesson 7-2: Understand Fractions	
			Lesson 7-4: Represent One Whole as a Fraction	
			Lesson 7-5: Represent Whole Numbers as Fractions	
			Lesson 8-1: Understand Equivalent Fractions	
			Lesson 8-2: Represent Equivalent Fractions	
			Lesson 8-3: Represent Equivalent Fractions on a Number Line	
			Lesson 8-4: Understand Fractions of Different Wholes	
			Lesson 8-5: Compare Fractions with the Same Denominator	
			Lesson 8-6: Compare Fractions with the Same Numerator	
			Lesson 8-7: Compare Fractions	

Reveal Math® was designed based on a learning progression of mathematical content and connecting concepts across all grades and within each grade. A program scope and sequence is available in the Teacher Digital Center: Program Resources. In support of effective implementation and best practices, guiding principles of the instructional design & pedagogy, professional learning videos, and other program features can be found in the Teacher Digital Center: Program Resources.

Scope and Sequence

If a district uses this resource to implement the state model curriculum for grade 3, the following scope and sequence should be followed to ensure alignment and attention to the progressions of mathematics.

Unit Number/Title and Lessons	Lesson Objectives	# of days (assume 1 hour of instruction)	Number of weeks
Unit 1: Math Is...			
Lesson 1-1: Math Is Mine	Students discuss how math is used in their daily lives and in the lives of others. They describe their math story.	1	1 Week 1 Day
Lesson 1-2: Math Is Exploring and Thinking	Students discuss approaches for understanding a problem and strategies for solving it. Students make sense of quantities in the problem and look for connections among quantities.	1	
Lesson 1-3: Math Is In My World	Students explore ways to show real-world situations and problems with mathematical models.	1	
Lesson 1-4: Math Is Explaining and Sharing	Students construct arguments to support their thinking. Students respond to the ideas and arguments of others.	1	
Lesson 1-5: Math Is Finding Patterns	Students explore strategies for uncovering patterns and for using patterns to solve problems.	1	
Lesson 1-6: Math Is Ours	Students discuss and decide on classroom norms of interaction for a productive math learning environment.	1	
Unit 2: Use Place Value to Fluently Add and Subtract Within 1,000			
Lesson 2-1: Represent 4-Digit Numbers	Students represent 4-digit numbers in expanded form, word form, and standard form using an understanding of place value.	1	2 Weeks 2 Days

Lesson 2-2: Round Multi-Digit Numbers	Students round numbers to the nearest 10 or nearest 100.	1	
Lesson 2-3: Estimate Sums and Differences	Students use compatible numbers to estimate a sum or difference.	1	
Lesson 2-4: Use Addition Properties to Add	Students apply the properties of addition when adding two or more addends.	1	
Lesson 2-5: Addition Patterns	Students identify addition patterns and use the patterns to help determine sums of 3-digit numbers and check their accuracy.	1	
Lesson 2-6: Use Partial Sums to Add	Students use partial sums to add 3-digit numbers.	1	
Lesson 2-7: Decompose to Subtract	Students decompose one number in different ways to subtract.	1	
Lesson 2-8: Adjust Numbers to Add or Subtract	Students adjust numbers to help them add or subtract.	1	
Lesson 2-9: Use Addition to Subtract	Students use related addition equations to find the difference.	1	
Lesson 2-10: Fluently Add within 1,000	Students explain different strategies to add 3-digit numbers.	1	
Lesson 2-11: Fluently Subtract within 1,000	Students explain different strategies to subtract 3-digit numbers.	1	
Lesson 2-12: Solve Two-Step Problems Involving Addition and Subtraction	Students write and solve equations to represent a two-step problem. Students use letters for the unknowns.	1	
Unit 3: Multiplication and Division			
Lesson 3-1: Understand Equal Groups	Students explain one meaning of multiplication: equal groups.	1	1 Week 2 Days

Lesson 3-2: Use Arrays to Multiply	Students use arrays to represent multiplication.	1	
Lesson 3-3: Understand the Commutative Property	Students demonstrate understanding of the Commutative Property of Multiplication.	1	
Lesson 3-4: Understand Equal Sharing	Students represent division with equal sharing.	1	
Lesson 3-5: Understand Equal Grouping	Students represent division with equal grouping.	1	
Lesson 3-6: Relate Multiplication and Division	Students use equal groups and arrays to represent the relationship between multiplication and division.	1	
Lesson 3-7: Find the Unknown	Students use representations to determine the unknown in a multiplication or division equation.	1	
Unit 4: Use Patterns to Multiply by 0, 1, 2, 5, and 10			
Lesson 4-1: Use Patterns to Multiply by 2	Students describe and use patterns to multiply by 2.	1	1 Week 1 Day
Lesson 4-2: Use Patterns to Multiply by 5	Students describe and use patterns to multiply by 5.	1	
Lesson 4-3: Use Patterns to Multiply by 10	Students describe and use patterns to multiply by 10.	1	
Lesson 4-4: Use Patterns to Multiply by 1 and 0	Students describe and use patterns to multiply by 0 and 1.	1	
Lesson 4-5: Multiply Fluently by 0, 1, 2, 5, and 10	Students use known patterns to solve unknown facts.	1	
Lesson 4-6: Solve Problems Involving Equal Groups	Students represent the problem with equal groups and an equation. Students use equal groups to solve the equation.	1	

Unit 5: Use Properties to Multiply by 3, 4, 6, 7, 8, and 9			
Lesson 5-1: Understand the Distributive Property	Students demonstrate understanding of the Distributive Property.	1	1 Week 2 Days
Lesson 5-2: Use Properties to Multiply by 3	Students apply properties of multiplication to recall 3s facts.	1	
Lesson 5-3: Use Properties to Multiply by 4	Students apply the properties of multiplication to recall 4s facts.	1	
Lesson 5-4: Use Properties to Multiply by 6	Students apply the properties of multiplication to recall 6s facts.	1	
Lesson 5-5: Use Properties to Multiply by 8	Students apply the properties of multiplication to recall 8s facts.	1	
Lesson 5-6: Use Properties to Multiply by 7 and 9	Students apply the properties of multiplication to recall 7s and 9s facts.	1	
Lesson 5-7: Solve Problems Involving Arrays	Students represent the problem with arrays and an equation. Students use arrays and properties of multiplication to solve the equation.	1	
Unit 6: Connect Area and Multiplication			
Lesson 6-1: Understand Area	Students demonstrate understanding of concepts of area measurement.	1	1 Week 1 Day
Lesson 6-2: Count Unit Squares to Determine Area	Students determine area by counting unit squares.	1	
Lesson 6-3: Use Multiplication to Determine Area	Students multiply the length of a rectangle by its width to determine the area of a rectangle.	1	

Lesson 6-4: Determine the Area of a Composite Figure	Students determine the area of composite figures.	1	
Lesson 6-5: Use the Distributive Property to Determine Area	Students determine the area of a rectangle by decomposing a side length using the Distributive Property.	1	
Lesson 6-6: Solve Area Problems	Students solve real-world problems involving the area of rectilinear figures.	1	
Unit 7: Fractions			
Lesson 7-1: Partition Shapes into Equal Parts	Students partition different shapes into equal parts. Students use the numbers of parts to describe the equal parts of the shape.	1	1 Week 1 Day
Lesson 7-2: Understand Fractions	Students identify and represent fractions. Students explain how to represent a fraction using the meanings of the numerator and the denominator.	1	
Lesson 7-3: Represent Fractions on a Number Line	Students partition number lines into intervals and represent each interval with a unit fraction. Students identify and represent fractions on a number line.	1	
Lesson 7-4: Represent One Whole as a Fraction	Students represent one whole as a fraction. Students represent fractions equal to one whole.	1	
Lesson 7-5: Represent Whole Numbers as a Fraction	Students represent whole numbers as fractions. Students represent fractions equal to whole numbers.	1	

Lesson 7-6: Represent a Fraction Greater Than One on a Number Line	Students represent fractions greater than one on a number line.	1	
Unit 8: Fraction Equivalence and Comparison			
Lesson 8-1: Understand Equivalent Fractions	Students determine whether two fractions are equivalent.	1	1 Week 2 Days
Lesson 8-2: Represent Equivalent Fractions	Students generate equivalent fractions. Students explain why fractions are equivalent.	1	
Lesson 8-3: Represent Equivalent Fractions on a Number Line	Students use number lines to determine and generate equivalent fractions. Students use number lines to explain why fractions are equivalent.	1	
Lesson 8-4: Understand Fractions of Different Wholes	Students explain why fraction comparisons are valid only when the wholes are the same size.	1	
Lesson 8-5: Compare Fractions with the Same Denominator	Students compare fractions with the same denominator and different numerators.	1	
Lesson 8-6: Compare Fractions with the Same Numerator	Students compare fractions with the same numerator and different denominators.	1	
Lesson 8-7: Compare Fractions	Students compare two fractions and justify their comparison using fraction models or number lines.	1	
Unit 9: Use Multiplication to Divide			
Lesson 9-1: Use Multiplication to Solve Division Equations	Students use an unknown-factor problem to solve a division equation.	1	1 Week 4 Days
Lesson 9-2: Divide by 2	Students use related multiplication facts to divide by 2.	1	

Lesson	Objective		
Lesson 9-3: Divide by 5 and 10	Students use related multiplication facts to divide by 5 and 10.	1	
Lesson 9-4: Understand Division with 1 and 0	Students use patterns and rules to recall division facts with 1 and 0.	1	
Lesson 9-5: Divide by 3 and 6	Students use related multiplication facts to divide by 3 and 6.	1	
Lesson 9-6: Divide by 4 and 8	Students use related multiplication facts to divide by 4 and 8.	1	
Lesson 9-7: Divide by 9	Students use related multiplication facts to divide by 9.	1	
Lesson 9-8: Divide by 7	Students use related multiplication facts to divide by 7.	1	
Lesson 9-9: Multiply and Divide Fluently within 100	Students use different multiplication and division strategies to multiply and divide.	1	
Unit 10: Use Properties and Strategies to Multiply and Divide			
Lesson 10-1: Patterns with Multiples of 10	Students use basic facts, place-value understanding, and patterns to determine the product of a 1-digit factor and a multiple of 10.	1	1 Week 1 Day
Lesson 10-2: More Multiplication Patterns	Students identify and explain patterns in the multiplication fact table.	1	
Lesson 10-3: Understand the Associative Property	Students explain that three factors can be grouped in different ways without changing the product.	1	
Lesson 10-4: Two-Step Problems Involving Multiplication and Division	Students make sense of a two-step word problem and use multiplication and division to solve.	1	

Lesson 10-5: Solve Two-Step Problems	Students make sense of a two-step word problem and determine which operations are needed to solve the problem.	1	
Lesson 10-6: Explain the Reasonableness of a Solution	Students use mental computation and estimation strategies to assess the reasonableness of answers to a two-step problem.	1	
Unit 11: Perimeter			
Lesson 11-1: Understand Perimeter	Students determine when a measurement describes perimeter. Students count or add to determine the perimeter of a figure.	1	1 Week
Lesson 11-2: Determine Perimeter of Figures	Students use different strategies to find the perimeter of a figure, including counting, adding, and multiplying.	1	
Lesson 11-3: Determine an Unknown Side Length	Students determine an unknown side length of a figure when given the perimeter and other side lengths.	1	
Lesson 11-4: Solve Problems Involving Area and Perimeter	Students solve problems involving area and perimeter. Students solve problems involving figures with the same perimeter and different areas or with the same area and different perimeters.	1	
Lesson 11-5: Solve Problems Involving Measurement	Students represent and solve problems with length measurements.	1	
Unit 12: Measurement and Data			
Lesson 12-1: Measure Liquid Volume	Students measure liquid volume in milliliters and liters.	1	2 Weeks 1 Day

Lesson 12-2: Estimate and Solve Problems with Liquid Volume	Students estimate liquid volumes in milliliters and liters. Students solve word problems involving liquid volume.	1	
Lesson 12-3: Measure Mass	Students measure mass in grams and kilograms.	1	
Lesson 12-4: Estimate and Solve Problems with Mass	Students estimate mass in grams and kilograms. Students solve word problems involving mass.	1	
Lesson 12-5: Tell Time to the Nearest Minute	Students tell and write time to the nearest minute.	1	
Lesson 12-6: Solve Problems Involving Time	Students solve word problems involving time intervals.	1	
Lesson 12-7: Understand Scaled Picture Graphs	Students create scaled picture graphs.	1	
Lesson 12-8: Understand Scaled Bar Graphs	Students create scaled bar graphs.	1	
Lesson 12-9: Solve Problems Involving Scaled Bar Graphs	Students solve problems using scaled graphs.	1	
Lesson 12-10: Measure to Halves or Fourths of an Inch	Students measure objects to the nearest half and quarter inch.	1	
Lesson 12-11: Show Measurement Data on a Line Plot	Students generate measurement data and create line plots to display the data.	1	
Unit 13: Describe and Analyze 2-Dimensional Shapes			
Lesson 13-1: Describe and Classify Polygons	Students describe polygons and classify them based on their shared attributes.	1	4 Days
Lesson 13-2: Describe Quadrilaterals	Students describe quadrilaterals based on their attributes.	1	

Lesson 13-3: Classify Quadrilaterals	Students identify and classify quadrilaterals based on their attributes.	1	
Lesson 13-4: Draw Quadrilaterals with Specific Attributes	Students use give attributes and an understanding of categories of quadrilaterals to draw quadrilaterals.	1	

Supports of Diversity, Equity and Inclusion

Please provide any information relative to supporting culturally responsive instruction, multi-language learners, and students with disabilities

Culturally Responsive Instruction | Reveal Math

Drawing from research, McGraw Hill understands there are a number of factors that support classroom equity and echo the tenets of culturally responsive practices: high academic expectations for all students; a socially and emotionally positive classroom; a safe school climate; authentic and rigorous tasks; inclusive, relevant, and meaningful content; open and accepting communication; drawing from students' strengths, knowledge, culture, and competence; critically and socially aware inquiry practices; and strong teaching and teacher professional support for equity and inclusion.

McGraw Hill is committed to publishing pedagogically sound, high-quality, instructional materials that are fair, unbiased, and that recognize the unique contributions of people of all races and cultures. *Reveal Math* prides itself on exceeding the requirements for equal opportunity and representation in its program. We believe that all children should be able to see themselves as doers of mathematics and that means showing students from a range of genders, ethnicities, cultural backgrounds, and with different disabilities. McGraw Hill is also committed to producing materials that are free from cultural, ethnic or gender bias. Utmost care was taken to ensure an antiracist, anti-biased, nonsexist, and nonstereotyping presentation in the production of this resource.

The program displays males and females from various ethnic backgrounds in all types of environments, avoiding stereotypes. It provides every student with access and opportunities to learn. Throughout *Reveal Math*, all types of students are portrayed in all types of environments, so students of all backgrounds will be able to relate to the text.

For grades K-5, the **STEM Career Kids** support students in seeing their potential in mathematics. The Kids introduce each unit and are then seen in various exercises throughout the unit. Both the career and application are presented.

Hi, I'm Jin. I want to be a paleontologist.

Hi, I'm Marisol. I want to be a paramedic.

Hi, I'm Erik. I want to make video games.

Hi, I'm Noah. I want to be a nurse.

Hi, I'm Grace. I want to be a computer programmer.

Hi, I'm Haley. I want to be an astronomer.
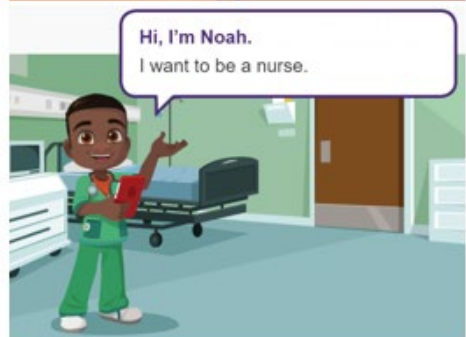
To help build student mathematical identity and student agency and to set high expectations for all students while incorporating principles of culturally responsive teaching, the authorship team developed the **Math is...** unit, the first unit in each grade. The first lesson in this unit has students think and write about their mathematical identity to build student agency. Other lessons in the unit focus on important thinking habits that are integral to doing mathematics. The last lesson has students think about and determine classroom norms for a productive learning experience for all. This can encourage an exploration to recognize and value differences between the home cultures of students and the classroom.

On My Own

Complete the exercise on this page.

Show your work or explain your thinking.

What is my math story?

Math is...

Each unit begins with an **Ignite! Activity** by Dr. Raj Shah and each lesson has a **Be Curious Moment** written by Annie Fetter to allow all students to engage in conversation around the topic and to bring in their various cultural backgrounds and experiences to enrich the discussion and to provide various on-ramps into learning.
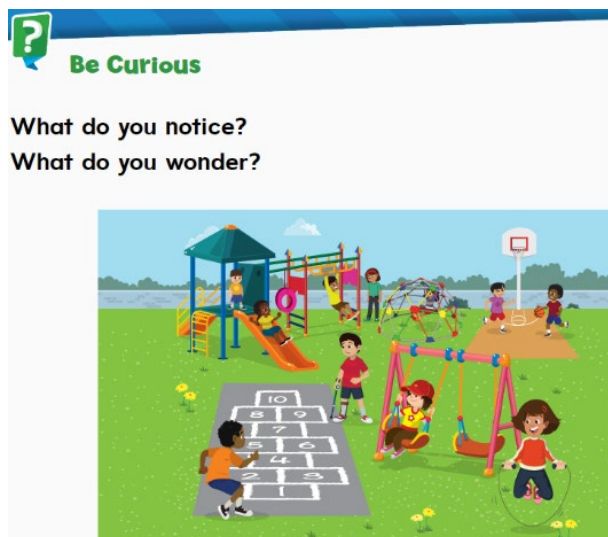
The focus on Social Emotional Learning also provides multiple opportunities for students and teachers to recognize and value differences between home cultures of students and the classroom. Each lesson has an SEL focus in the Math in Mindset that is seen as part of the Be Curious Moment and reflection at the end of the lesson. These were designed using the CASEL Core Competencies in SEL.

Multi-language learners and students with disabilities

A core instructional belief of McGraw Hill's *Reveal Math* K-12 is that the learning of mathematics requires a focus on language and the language of mathematics. To support students' development of the language of mathematics, the program includes rich support for language development, for both native and non-native speakers of English.

Each lesson features a language objective in addition to a content and SEL (social and emotional learning) objective to highlight the importance of language development in the program. In addition, these features provide support and scaffolds for building students' mathematical language proficiency:

- **Language of Math (LOM)** strategies and features focus on mathematical and academic terms that students need to understand to be successful.
- **Math Language Development** support at the unit level offer support and strategies that teachers can use to help students build proficiency with language skills.

- **Math Language Routines (MLR)** found in each lesson are specifically designed to help English language learners build fluency with math language. These routines were developed by a team of educators and researchers at Stanford Graduate School of Education.
- **English Language Learner Supports** also found in each lesson provide scaffolded support at three levels of proficiency: Entering/Emerging, Developing/Expanding, and Bridging/Reaching. These three levels align to the WIDA levels: Entering, Beginning, Developing, Expanding, Bridging, and Reaching.

The Teacher Edition also has specific pedagogical suggestions for teachers based on the WIDA levels. These are included both at the Unit/Module and Lesson Levels.

Reveal Math addresses the needs for all students and a variety of tiered instructional resources are provided for remediation or enrichment. Each lesson includes a list of suggested **Differentiated** resources that is based on assessment data from the **Checks** after each **Example**. Remediation resources (**Review** resources) target prerequisite skill knowledge. Leveled **Questions for Mathematical Discourse** are also included for every Example in the Teacher Edition. The supplemental materials differ in K-5 and 6-12 based on the different nature of these classrooms and age appropriateness for students.

Reveal Math K-5

In R*eveal Math* K-5, scaffolding for various learners begins with assessment. The course level diagnostic gives teachers a view into where their students are with their math ability. In addition, at the unit level, teachers can have students take the diagnostic assessment that targets the pre-requisite content and skills, and can assign different program assets for students who may have weaknesses in pre-requisite skills. This guided intervention directs teachers to the specific assets for each pre-cursor standard. This can be small group or independent work. With the coming Remediation Report, teachers will be able to assign these resources with a click to the indicated students who need the support.

In the *Reveal Math* Lesson Design, Part 5 of each lesson, **"Assess and Differentiate,"** the teacher can assign differentiated instructional activities to students based on their results on the Lesson Check. These differentiated instructional activities were designed to address the individual learning needs of students, depending on their levels of understanding of the math concept presented in the lesson.

The following is an example from Grade 2, Unit 2, Lesson 3:

Every lesson in *Reveal Math* contains multiple, specific suggestions for working with special populations of students. Point-of-use tips, activities, and strategies are provided in the Teacher Edition and every lesson has the **Differentiate** feature in the Teacher Edition which identifies support for Reinforcement, Building Understanding, and Extending the learning. This includes a small group or workstation option, a Digital Option, and an independent option for each category. Depending on the topics special education students are mastering or need more support on, there are a variety of ways to meet their needs.

Support for **English Language Learners** and other special populations is thoughtful and helps those students meet the same content expectations as all other students. The language in which problems are posed is carefully considered.

There are robust Spanish resources for *Reveal Math* K-5. There is a Spanish translation of the Student Edition and other resources. The Student Edition includes support for all students in vocabulary development, notetaking, and writing skills using word cards, vocabulary squares, three-column charts, definition maps, concept webs, and other graphic organizers, along with English/Spanish cognates in Dinah Zike's Visual Kinesthetic Vocabulary®.

A course-level digital and print **Glossary** is provided with words translated into English and Spanish. Also, online are K-5 Math Replay Videos that provide additional support and review opportunities for concepts presented in the text.

Language and vocabulary support is provided both within the Teacher Edition and in the support materials. Additionally, the Student Digital Center includes an audio read function; student-facing material can be read aloud to students. Embedded **Take Another Look** lessons are digital mini-lessons

that provide quick, actionable data to help inform instruction while supporting each student with a three-part, gradual release activity…modeling, interactive practice, and check.

For additional information, please refer to Page 10 of our [Reveal Math Research Foundations Brochure.](#)