

Model Curricula Alignment for Connecticut Mathematics

Resource Name: i-Ready Classroom Mathematics

Alignment Grade 8

Model Unit Name	Model Unit Standards	Resource Unit(s) Number	Resources Lessons	Pacing
<i>This is the title of the unit in the model curricula</i>	<i>These are the standards addressed in the unit</i>	<i>This is the unit(s) that aligns with the model unit from the resource</i>	<i>These are the lessons from the identified units that align to the standards within the model unit</i>	<i>This is the expected number of days for instruction</i>
Real Numbers	8.NS.A.1, 8.NS.A.2, 8.EE.A.1, 8.EE.A.2, 8.EE.A.3, 8.EE.A.4	Unit 5: Integer Exponents: Properties and Scientific Notation Unit 6: Real Numbers: Rational Numbers, Irrational Numbers, and the Pythagorean Theorem	Lessons 19, 20: 8.EE.A.1 Lesson 21: 8.EE.A.3 Lesson 22: 8.EE.A.4 Lesson 23: 8.EE.A.2 Lesson 24: 8.NS.A.1 Lesson 25: 8.NS.A.1, 8.NS.A.2, 8.EE.A.2 Unit 5 Math in Action: Scientific Notation and Properties of Exponents: 8.EE.A.1, 8.EE.A.3, 8.EE.A.4	27 days
Pythagorean Theorem	8.EE.A.2, 8.G.B.6, 8.G.B.7, 8.G.B.8	Unit 6: Real Numbers: Rational Numbers, Irrational Numbers, and the Pythagorean Theorem	Lesson 26: 8.G.B.6 Lesson 27: 8.G.B.7, 8.G.B.8	8 days

Congruence and Similarity	8.G.A.1, 8.G.A.2, 8.G.A.3, 8.G.A.4, 8.G.A.5	Unit 1: Geometric Figures: Rigid Transformations and Congruence Unit 2: Geometric Figures: Transformations, Similarity, and Angle Relationships	Lesson 1: 8.G.A.1 Lesson 2: 8.G.A.3 Lesson 3: 8.G.A.2, 8.G.A.3 Lesson 4: 8.G.A.4 Lesson 5: 8.G.A.3, 8.G.A.4 Lessons 6, 7: 8.G.A.5 Unit 1 Math in Action: Rigid Transformations in the Coordinate Plane: 8.G.A.1, 8.G.A.3 Unit 2 Math in Action: Dilations, Similarity, and Angle Relationships: 8.G.A.3, 8.G.A.4, 8.G.A.5	31 days
---------------------------	---	--	--	---------

Linear Relationships	8.EE.B.7, 8.EE.B.6, 8.EE.C.7, 8.F.A.1, 8.F.A.2, 8.F.A.3, 8.F.B.4, 8.F.B.5	Unit 4: Functions: Linear and Non-Linear Relationships	Lesson 8: 8.EE.B.5, 8.EE.B.6 Lesson 9: 8.EE.B.6 Lessons 10, 11: 8.EE.C.7 Lesson 15: 8.F.A.1, 8.F.A.3 Lesson 16: 8.F.B.4 Lesson 17: 8.EE.B.5, 8.F.A.2 Lesson 18: 8.F.B.5 Unit 4 Math in Action: Functional Relationships: 8.F.A.1, 8.F.A.2, 8.F.A.3, 8.F.B.4, 8.F.B.5, 8.EE.B.5	31 days
Systems of Linear Relationships	8.EE.C.7, 8.EE.C.8, 8.F.A.2, 8.F.B.4	Unit 3: Linear Relationships: Slope, Linear Equations, Systems	Lessons 12, 13, 14: 8.EE.C.8 Unit 3 Math in Action: Linear Relationships and Systems of Equations: 8.EE.B.5, 8.EE.C.7, 8.EE.C.8	14 days

Volume	8.G.C.9	Unit 6: Real Numbers: Rational Numbers, Irrational Numbers, and the Pythagorean Theorem	Lesson 28: 8.G.C.9 Unit 6 Math in Action: Irrational Numbers, the Pythagorean Theorem, and Volume: 8.NS.A.2, 8.EE.A.2 , 8.G.B.7, 8.G.C.9	6 days
Patterns in Data	8.SP.A.1, 8.SP.A.2, 8.SP.A.3, 8.SP.A.4,	Unit 7: Statistics: Two-Variable Data and Fitting a Linear Model	Lesson 29: 8.SP.A.1, 8.SP.A.2 Lesson 30: 8.SP.A.3 Lessons 31, 32: 8.SP.A.4 Unit 7 Math in Action: Representing Data: 8.SP.A.1, 8.SP.A.2, 8.SP.A.3, 8.SP.A.4	18 days

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.

Order	Unit Number/Title and Lessons	Lesson Objectives	# of days (assume 1 hour of instruction)	Number of weeks
-------	----------------------------------	-------------------	---	-----------------

1	Unit 5: Integer Exponents: Properties and Scientific Notation	Lessons 19, 20: 8.EE.A.1 Lesson 21: 8.EE.A.3 Lesson 22: 8.EE.A.4 Unit 5 Math in Action: Scientific Notation and Properties of Exponents: 8.EE.A.1, 8.EE.A.3, 8.EE.A.4	19 days	4 weeks
---	--	---	---------	---------

2	Unit 6: Real Numbers: Rational Numbers, Irrational Numbers, and the Pythagorean Theorem	Lesson 23: 8.EE.A.2 Lesson 24: 8.NS.A.1 Lesson 25: 8.NS.A.1, 8.NS.A.2, 8.EE.A.2 Lesson 26: 8.G.B.6 Lesson 27: 8.G.B.7, 8.G.B.8 Lesson 28: 8.G.C.9 Unit 6 Math in Action: Irrational Numbers, the Pythagorean Theorem, and Volume: 8.NS.A.2, 8.EE.A.2 , 8.G.B.7, 8.G.C.9	25 days	5 weeks
3	Unit 1: Geometric Figures: Rigid Transformations and Congruence	Lesson 1: 8.G.A.1 Lesson 2: 8.G.A.3 Lesson 3: 8.G.A.2, 8.G.A.3 Unit 1 Math in Action: Rigid Transformations in the Coordinate Plane: 8.G.A.1, 8.G.A.3	14 days	3 weeks
4	Unit 2: Geometric Figures: Transformations, Similarity, and Angle Relationships	Lesson 4: 8.G.A.4 Lesson 5: 8.G.A.3, 8.G.A.4 Lessons 6, 7: 8.G.A.5 Unit 2 Math in Action: Dilations, Similarity, and Angle Relationships: 8.G.A.3, 8.G.A.4, 8.G.A.5	17 days	4 weeks
5	Unit 3: Linear Relationships: Slope, Linear Equations, Systems	Lesson 8: 8.EE.B.5, 8.EE.B.6 Lesson 9: 8.EE.B.6 Lessons 10, 11: 8.EE.C.7 Lessons 12, 13, 14: 8.EE.C.8 Unit 3 Math in Action: Linear Relationships and Systems of	31 days	6-7 weeks

		Equations: 8.EE.B.5, 8.EE.C.7,		
--	--	---------------------------------------	--	--

		8.EE.C.8		
6	Unit 4: Functions: Linear and Non-Linear Relationships	Lesson 15: 8.F.A.1, 8.F.A.3 Lesson 16: 8.F.B.4 Lesson 17: 8.EE.B.5, 8.F.A.2 Lesson 18: 8.F.B.5 Unit 4 Math in Action: Functional Relationships: 8.F.A.1, 8.F.A.2, 8.F.A.3, 8.F.B.4, 8.F.B.5, 8.EE.B.5	18 days	4 weeks
7	Unit 7: Statistics: Two-Variable Data and Fitting a Linear Model	Lesson 29: 8.SP.A.1, 8.SP.A.2 Lesson 30: 8.SP.A.3 Lessons 31, 32: 8.SP.A.4 Unit 7 Math in Action: Representing Data: 8.SP.A.1, 8.SP.A.2, 8.SP.A.3, 8.SP.A.4	18 days	4 weeks
Supports of Diversity, Equity and Inclusion				
<i>Please provide any information relative to supporting culturally responsive instruction, multi-language learners, and students with disabilities</i>				

Culturally Responsive Features of Program and their Benefits :

- ***Select and Sequence:*** This support in the TG helps to validate all students' understanding through examination and discussion. It shows that every student's work is worthy and shares authority with students.
- ***STEM Stories:*** These graphic novel style stories spotlight the lives and STEM contributions of people with diverse backgrounds and provide a real-life instance of the Mathematical Practices in action.
- ***Connect to Culture:*** Support in the TG and in the presentation slides provides background information and ideas on how to connect with and leverage the diverse background and experiences of all students during instruction to increase student engagement.
- ***Protocols for Engagement:*** These protocols draw on students' cultural and linguistic backgrounds and behaviors to engage students while affirming and validating their identities.
- ***Culturally-diverse problem situations:*** Problems that involve a wide range of cultural contexts that reflect students' own experiences and the world around them make mathematics relevant and helps students make better connections to the content.
- ***Family Letters:*** To help educators form relationships with students' families, the Family Letter can be used as a regular communication letting parents know what students are learning. Available in 11 languages: English, Spanish, Amharic (K-5), Arabic, Korean, Mandarin, Portuguese, Russian, Somali (K-5), Tagalog, and Vietnamese.
- ***Unit Flow and Progression Videos:*** To support families and alleviate anxiety that some parents feel about supporting their children in mathematics, the Unit Flow and Progression videos provide them with a refresher on the content. Closed captioned in English and Spanish.

English Learner Supports in Program and their Benefits :

- ***Try-Discuss-Connect:*** English Learners bring a variety of linguistic and cultural assets to the classroom. The Try-Discuss-Connect instructional framework starts with students' background knowledge, experiences, and insights and builds on it to develop understanding and engage ELs in learning.

- **Differentiation | English Learners:** Every session includes differentiated support for a continuum of English proficiency levels. Differentiation suggestions focus on a specific problem so that teachers can scaffold language, as needed, to ensure that ELs access and engage with the mathematics.
- **EL Language Expectations Chart:** These charts provide examples of what ELs can do based on their English language proficiency levels in connection with a learning target. These examples help teachers differentiate instruction to meet the needs of English learners.
- **Cognate Support:** Use this routine as part of the Build Your Vocabulary activity to help students who speak Spanish or other Latin-based languages use their home language as an asset for learning.
- **Academic Vocabulary Routine and Build Your Vocabulary activities:** Focus on bridging from informal to academic vocabulary.
- **Language Routines:** The Try-Discuss-Connect framework incorporates research-based language routines to support students as they learn content, develop mathematical practices, and master language. While these routines support English learners, they are designed to be used by all children as they access mathematical concepts and their growing mathematical understanding.
- **Multilingual Student Resources:** All student-facing resources are available in Spanish and some are also available in other languages.
- **Spanish Teacher Guide:** The TG includes all the Spanish content that students see, along with specific teacher support, trans-adapted in Spanish.
 - **Purple Boxes in TG:** Embedded supports provide prompts in Spanish to help teachers facilitate meaningful discussions.
 - **Math Background:** To support the diverse group of teachers that work with biliteracy/dual language programs, the math background pages are also available in Spanish.

Equity Features and their Benefits:

- **Prerequisites Report:** Accelerate learning by using the powerful insights from the Diagnostic Assessment. The practical strategies and teacher tools from the Prerequisites report helps teachers engage students, scaffold instruction, and address unfinished learning to help ensure student success with grade-level standards.
- **Multiple-day Lesson Structure:** Gives students time to dig deeper and refine their understanding and supports differentiation.
- **Try-Discuss-Connect:** By centering instruction on student-generated solutions and meaningful discussions, students make better connections to the mathematics.
 - **Try It:** Students use their prior knowledge, identity, and community experiences to make sense of the problem.
 - **Discuss It:** Partner and whole class discussions place value on students' ideas and contributions.
 - **Connect It:** Students make connections to strategies and underlying mathematics.
- **Balanced Representation of Cultures:** i-Ready Classroom Mathematics strives to help students see themselves in their math textbook, as well as the use of mathematics in familiar, relevant contexts. Through a balanced representation of cultures and groups in multiple settings, occupations, careers, and lifestyles, the program supports equal opportunity without regard for age, color, gender, disability, national origin, race, or religion. The portrayal of individuals and situations are free of biases/stereotypes and in many cases promote an understanding/appreciation of the contributions made by diverse cultures and heritages.

Accessibility Supports

- Accessibility opportunities and expectations are continually evolving. To meet the needs of the students and districts we serve, we engage in ongoing work to evaluate and improve our educational tools and resources. We have developed a systematic approach to accessibility that includes:
 - Web Content Accessibility Guidelines (WCAG) and the Universal Design for Learning (UDL) framework guiding our accessibility efforts
 - An internal team of access and equity, curriculum, assessment, policy, and research experts who are dedicated to finding new ways for our educational tools and resources to be used by a diverse range of learners
 - A rigorous review process that involves outside accessibility experts to ensure our thinking and approach reflect established and evolving best practices

- *Guidance and feedback from the school districts and educators we serve.*

- *i-Ready Classroom Mathematics offers Accessibility Supports (Universal Supports and Designated Supports) and Accommodations for program components such as i-Ready Diagnostic Assessment, Student Bookshelf, Comprehension Checks, and Interactive Practice.*