Connecticut Mathematics Model Curricula Alignment
Resource Name: Fishtank Plus Math

Alignment Grade 8				
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*
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 1 Unit 7	8.NS.A.1: U7 L2, L4-5 8.NS.A.2: U7 L2-3, L13 8.EE.A.1: U1 L1-9, L15 8.EE.A.2: U7 L1, L13 8.EE.A.3: U1 L10-12, L15 8.EE.A.4: U1 L10, L12-15	21 days + 2-3 flex days + assessment
Pythagorean Theorem	8.EE.A.2, 8.G.B.6, 8.G.B.7, 8.G.B.8	Unit 7	8.EE.A.2: U7 L1, L13 8.G.B.6: U7 L6-8 8.G.B.7: U7 L9-11 8.G.B.8: U7 L12	8 days + 1-2 flex days + assessment

Congruence and Similarity	8.G.A.1, 8.G.A.2, 8.G.A.3, 8.G.A.4, 8.G.A.5	Unit 3	8.G.A.1: U3 L1-8, L10 8.G.A.2: U3 L1-10, L14, L17-18 8.G.A.3: U3 L3, L5, L9-10, L13 8.G.A.4: U3 L11-16 8.G.A.5: U3 L17-22	22 days + 2-3 flex days + assessment
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 2 Unit 4 Unit 5	8.EE.B.5: U5 L1-4 8.EE.B.6: U5 L6-13 8.EE.C.7: U2 L1-10 8.F.A.1: U4 L1-6, L8 8.F.A.2: U4 L3, L9-10 8.F.A.3: U4, L7-8; U5 L8 8.F.B.4: U4 L3-4, L6 U5 L5, L7, L10-12, L14-15 8.F.B.5: U4 L11-12	37 days + 3-4 flex days + assessment

Systems of Linear Relationships	8.EE.C.7, 8.EE.C.8, 8.F.A.2, 8.F.B.4	Unit 6	8.EE.C.8: U6 L1-11	11 days + 1-2 flex days + assessment
Volume	8.G.C.9	Unit 7	8.G.C.9: U7 L14-16	3 days + 1 flex days + assessment
Patterns in Data	8.SP.A.1, 8.SP.A.2, 8.SP.A.3, 8.SP.A.4,	Unit 8	8.SP.A.1: U8 L1-3 8.SP.A.2: U8 L4 8.SP.A.3: U8 L5-6 8.SP.A.4: U8 L7-9	9 days + 1-2 flex days + assessment

Scope and Sequence

If a district uses this resource to implement the state model curriculum for grade 8, 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 1 Exponents and Scientific Notation	Topic A: Review of Exponents Topic B: Properties of Exponents Topic C: Scientific Notation	15 Lessons + 4 flex days = 19 total days	4 weeks
2	Unit 2: Solving One-Variable Equations	Topic A: Simplifying Expressions and Verifying Solutions Topic B: Analyzing and Solving Equations in One Variable Topic C: Analyzing and Solving Inequalities in One Variable	12 Lessons + 4 flex days = 16 total days	3-4 weeks
3	Unit 3: Transformations and Angle Relationships	Topic A: Congruence and Rigid Transformations Topic B: Similarity and Dilations Topic C: Angle Relationships	22 Lessons + 4 flex days = 26 total days	5 weeks

4	Unit 4: Functions	Topic A: Defining Functions Topic B: Representing and Interpreting Functions Topic C: Comparing Functions Topic D: Describing and Drawing Graphs of Functions	12 Lessons + 4 flex days = 16 total days	3-4 weeks
5	Unit 5: Linear Relationships	Topic A: Comparing Proportional Relationships Topic B: Slope and Graphing Linear Equations Topic C: Writing Linear Equations	15 Lessons + 4 flex days = 19 total days	4 weeks
6	Unit 6: Systems of Linear Equations	Topic A: Analyze & Solve Systems of Equations Graphically Topic B: Analyze & Solve Systems of Equations Algebraically	11 Lessons + 4 flex days = 15 total days	3 weeks
7	Unit 7: Pythagorean Theorem and Volume	Topic A: Irrational Numbers and Square Roots Topic B: Understanding and Applying the Pythagorean Theorem Topic C: Volume and Cube Roots	16 Lessons + 4 flex days = 20 total days	4 weeks
8	Unit 8: Bivariate Data	Topic A: Associations in Bivariate Numerical Data Topic B: Associations in Bivariate Categorical Data	9 Lessons + 3 flex days = 12 total days	2-3 weeks

Supports of Diversity, Equity and Inclusion

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

We believe that all students deserve access to high-quality curriculum and that students should not need to prove they can do rigorous, grade-level math in order to gain access to it. We see these beliefs as key components of supporting anti-racist school practice, and we share our curriculum as a trusted resource for educators in this work. As a curriculum team, we are continually listening, learning, and iterating on our curriculum and resources to get this work right. We strive to help all students see themselves as confident and competent mathematicians who are able to apply their math knowledge both in and out of the classroom as global citizens.

Our problems are written to reflect a wide range of identities and real-life contexts. The contexts and quantities used within problems do not suggest certain levels of wealth or access to opportunities. At times, common contexts that are accessible to most, such as school, nature, daily activities, temperature, or sports, are used. Other problems offer opportunities to connect to specific cultures and provide windows and mirrors for students. We aim to use engaging contexts that are interesting to students and connect to the real world. Gender is also balanced to avoid negative stereotypes around gender assignments, such as boys playing sports and girls baking. Situations that imply a binary gender are also avoided, such as a problem asking for a total number of people when given the number of girls and the number of boys. Gender neutral names and pronouns are present in the curriculum as well.

To support teachers in implementing the curriculum, we have many tools available in our Math Teacher Tools section. Here, teachers find in-depth resources available for topics such as Preparing to Teach Fishtank Math, Academic Discourse, Assessments, and Procedural Skill and Fluency. Two specific resources, Supporting English Learners and Special Populations, include protocols and strategies for teachers to use in their classrooms with students who are either learning English or who have a learning disability.