## Connecticut Mathematics Model Curricula Alignment

## Resource Name: HMH Into Math Grade 3

| Alignment Grade 3 |  |  |  |  |
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| 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 | $\begin{aligned} & \text { 3.OA.A. } 1 \\ & \text { 3.OA.A. } 2 \\ & \text { 3.MD.B. } \end{aligned}$ | Modules 1 \& 5 <br> Module 6 <br> Module 18 | $1.1,1.2,5.3$ $6.2,6.3,6.6$ $18.1,18.2,18.3,18.5,18.7$ | 3 Days <br> 3 Days <br> 5 Days |
| Connecting and Using Multiplication and Division | $\begin{aligned} & \text { 3.OA.A. } 3 \\ & \\ & \text { 3.OA.A. } 4 \\ & \text { 3.OA.B. } 5 \\ & \text { 3.OA.B.6 } \\ & \text { 3.OA.C. } 7 \end{aligned}$ | Modules 1, 3, 5, 6, 7, \& 8 <br> Modules 7 \& 8 <br> Modules 1, 4, 5, 6, \& 7 <br> Modules 7 \& 8 <br> Module 4 \& 7 | $\begin{gathered} 1.3,1.5,1.6,3.1,3.2,3.3,5.4,6.1,6.4,6.5,7.3 \\ 7.4,7.5,8.3,8.4,8.5 \\ 7.6,8.2,8.3 \\ 1.4,4.1,4.2,4.3,4.4,4.5,4.6,4.7,5.2,6.7,7.6 \\ 7.1,8.2 \\ 4.3,4.4,4.5,4.6,7.2,7.3,7.4,7.5,7.7 \end{gathered}$ | 4 Weeks 4 Days <br> 1 Week <br> 2 Weeks 3 Days <br> 3 Days <br> 2 Weeks 2 Days |
| Computing with Whole Numbers | $\begin{aligned} & \text { 3.NBT.A. } 1 \\ & \text { 3.NBT.A. } 2 \\ & \text { 3.NBT.A. } 3 \\ & \text { 3.OA.C. } 7 \\ & \text { 3.OA.D. } 8 \\ & \text { 3.OA.D. } 9 \end{aligned}$ | Module 9 <br> Module 9 \& 10 <br> Module 5 <br> Module 4 \& 7 <br> Module 8, 9,10 \& 18 <br> Module 4, 8, \& 9 | $\begin{gathered} \hline 9.5,9.6 \\ 9.2,9.3,10.1,10.2,10.3,10.4,10.5 \\ 5.1,5.2,5.3,5.4 \\ 4.3,4.4,4.5,4.6,7.2,7.3,7.4,7.5,7.7 \\ 8.4,8.5,9.4,10.6,18.1 \\ 4.7,8.1,9.1 \end{gathered}$ | 2 Days <br> 1 Week 4 Days <br> 1 Week 4 Days <br> 2 Weeks 2 Days <br> 1 Week 2 Days <br> 4 Days |
| Exploring Measurement and Data | $\begin{aligned} & \text { 3.MD.A. } 1 \\ & \text { 3.MD.A. } 2 \\ & \text { 3.MD.B. } 3 \\ & \text { 3.MD.B. } 4 \end{aligned}$ | Module 12 <br> Module 17 <br> Module 18 <br> Module 13 \& 18 | $\begin{gathered} 12.1,12.2,12.3,12.4,12.5 \\ 17.1,17.2,17.3 \\ 18.1,18.2,18.3,18.5,18.7 \\ 13.7,18.5,18.6 \end{gathered}$ | 1 Week <br> 4 Days <br> 1 Week <br> 3 Days |
| Understand Area and Perimeter | $\begin{aligned} & \hline \text { 3.MD.C. } 5 \\ & \text { 3.MD.C. } 6 \\ & \text { 3.MD.C. } 7 \\ & \text { 3.MD.D. } 8 \end{aligned}$ | Module 2 <br> Module 2 <br> Module 2 \& 5 <br> Module 11 | $2.1,2.2$ 2.2 $2.3,2.4,2.5,5.1$ $11.1,11.2,11.3,11.4,11.5$ | 2 Day 1 Day 1 Week 1 Day 1 Week |
| Reasoning About Twodimensional Shapes | $\begin{aligned} & \hline \text { 3.MD.D. } 8 \\ & \text { 3.G.A. } 1 \\ & \text { 3.G.A. } 2 \\ & \hline \end{aligned}$ | Module 11 <br> Modules 19 \& 20 <br> Modules 13 \&14 | $\begin{gathered} 11.1,11.2,11.3,11.4,11.5 \\ 19.1,19.2,19.3,19.4,20.1,20.2,20.3 \\ 13.1,13.2,14.1,14.2,14.3 \\ \hline \end{gathered}$ | 1 Week 1 Week 1 Week |


| Understanding Fractions | $\begin{aligned} & \text { 3.NF.A. } 1 \\ & \text { 3.NF.A. } 2 \end{aligned}$ | Module 13 <br> Module 13 | $\begin{gathered} \hline 13.1,13.2,13.3,13.6 \\ 13.4,13.6 \end{gathered}$ | 4 Days <br> 2 Days |
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| Reasoning about Fraction Comparisons and Equivalence | $\begin{aligned} & \hline \text { 3.NF.A. } 3 \\ & \text { 3.G.A. } 2 \end{aligned}$ | Module 13, 15, \& 16 Modules 13 \& 14 | $\begin{gathered} 13.5,15.1,15.2,15.3,15.4,16.1,16.2,16.3 \\ 13.1,13.2,14.1,14.2,14.3 \end{gathered}$ | 2 Weeks 3 Days <br> 1 Week |
| 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. |  |  |  |  |
| Order | Unit Number/Title and Lessons | Lesson Objectives | \# of days (assume 1 hour of instruction) | Number of weeks |
| 1 | Lesson 1.1 Count Equal Groups | Use concrete and visual models to represent and solve problems when you know the number of equal groups and the number of objects in each group. | 1 |  |
| 2 | Lesson 1.2 Relate <br> Addition and Multiplication | Use concrete and visual models or drawings to write related addition and multiplication equations. | 1 |  |
| 3 | Lesson 1.3 <br> Represent <br> Multiplication with Arrays | Use an array model to represent a multiplication problem. Write a multiplication equation for an array. | 1 |  |
| 4 | Lesson 1.4 <br> Understand the <br> Commutative <br> Property of <br> Multiplication | Use the Commutative Property of Multiplication to find products and to write related multiplication equations. | 1 |  |
| 5 | Lesson 1.5 <br> Represent <br> Multiplication with Number Lines | Count equal groups on a number line to find how many. | 1 |  |
| 6 | Lesson 1.6 Represent Multiplication with Bar Models | Use a bar model to represent an unknown in a multiplication problem. | 2 | 1 Week 2 Days |
| 7 | Lesson 2.1 <br> Understand Area | Explore area as an attribute of a two-dimensional shape, and | 1 |  |


|  | by Counting Unit Squares | explore how to find area by counting unit squares. |  |  |
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| 8 | Lesson 2.2 Measure Area by Counting Unit Squares | Use concrete representations of unit squares to cover a plane figure, and find the area by counting the number of unit squares. | 1 |  |
| 9 | Lesson 2.3 Relate Area to Addition and Multiplication | Relate finding area to using an array to find a product. | 1 |  |
| 10 | Lesson 2.4 Solve <br> Problems with Area | Solve real-world problems by finding areas of rectangles. | 1 |  |
| 11 | Lesson 2.5 Find the Area of Combined Rectangles | Break apart a composite figure into smaller rectangles to find the area of combined figures. | 1 | 1 Week |
| 12 | Lesson 3.1 Multiply with 2 and 4 | Achieve fluency with 2 s and 4 s multiplication facts. | 2 |  |
| 13 | Lesson 3.2 Multiply with 5 and 10 | Achieve fluency with 5 s and 10 s multiplication facts. | 2 |  |
| 14 | Lesson 3.3 Multiply with 3 and 6 | Achieve fluency with 3 s and 6 s multiplication facts. | 2 | 1 Week 1 Day |
| 15 | Lesson 4.1 <br> Understand the Identity and Zero Properties of Multiplication | Use the Identity and Zero Properties of Multiplication and patterns to write multiplication equations with the factors 1 and 0. | 1 |  |
| 16 | Lesson 4.2 Understand the Distributive Property | Use the Distributive Property as a strategy to find products by breaking apart a factor. | 1 |  |
| 17 | Lesson 4.3 Understand the Associative Property of Multiplication | Use the Associative Property of Multiplication as a strategy to multiply with three factors. | 1 |  |
| 18 | Lesson 4.4 Multiply with 7 | Apply the Distributive Property or the Commutative Property of Multiplication, or use known | 1 |  |


|  |  | facts to multiply with the factor $7 .$ |  |  |
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| 19 | Lesson 4.5 Multiply with 8 | Apply properties and use strategies to multiply with the factor 8. | 1 |  |
| 20 | Lesson 4.6 Multiply with 9 | Use patterns with 9 s facts and the Distributive Property with addition or subtraction to find products with the factor 9 . | 1 |  |
| 21 | Lesson 4.7 Identify <br> Number Patterns on the Multiplication Table | Identify and explain patterns on the multiplication table by using properties of operations. | 2 | 1 Week 3 Days |
| 22 | Lesson 5.1 Use the Distributive Property | Use the Distributive Property to break apart factors and find products in which one factor is a multiple of 10. | 2 |  |
| 23 | Lesson 5.2 Use the Associative Property of Multiplication | Use the Associative Property of Multiplication to break apart factors and find products in which one factor is a multiple of 10. | 1 |  |
| 24 | Lesson 5.3 Use <br> Place-Value <br> Strategies to <br> Multiply with <br> Multiples of 10 | Use place value to break apart factors and find products in which one factor is a multiple of 10. | 1 |  |
| 25 | Lesson 5.4 Multiply Multiples of 10 by 1-Digit Numbers | Use place value, regrouping, and visual and concrete models to find products of multiples of 10 . | 1 | 1 Week |
| 26 | Lesson 6.1 <br> Represent Division | Represent and solve division problems. | 1 |  |
| 27 | Lesson 6.2 Separate Objects into Equal Groups | Use concrete or visual models to separate objects into equal groups. | 1 |  |
| 28 | Lesson 6.3 Find the Number of Equal Groups | Use concrete or visual models to find the number of equal groups. | 1 |  |


| 29 | Lesson 6.4 Relate Subtraction and Division | Use repeated subtraction and number lines to relate subtraction and division. | 1 |  |
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| 30 | Lesson 6.5 Represent Division with Arrays | Use arrays to represent division. | 1 |  |
| 31 | Lesson 6.6 Represent Division with Bar Models | Use bar models to represent division. | 1 |  |
| 32 | Lesson 6.7 Apply Division Rules for 1 and 0 | Identify and apply rules for dividing with 1 and 0 . | 1 | 1 Week 2 Days |
| 33 | Lesson 7.1 Relate Multiplication and Division | Relate multiplication and division as inverse operations using concrete and visual models. | 1 |  |
| 34 | Lesson 7.2 Write Related Facts | Write related multiplication and division facts. | 1 |  |
| 35 | Lesson 7.3 Multiply and Divide with 2, 4, and 8 | Multiply and divide with 2,4 , and 8 as factors and divisors. | 2 |  |
| 36 | Lesson 7.4 Multiply and Divide with 5 and 10 | Multiply and divide with 5 and 10 as factors and divisors. | 2 |  |
| 37 | Lesson 7.5 Multiply and Divide with 3 and 6 | Multiply and divide with 3 and 6 as factors and divisors. | 2 |  |
| 38 | Lesson 7.6 Multiply and Divide with 7 and 9 | Multiply and divide with 7 and 9 as factors and divisors. | 2 |  |
| 39 | Lesson 7.7 Build <br> Fluency with Multiplication and Division | Multiply and divide within 100 fluently. | 1 | 2 Weeks 1 Day |
| 40 | Lesson 8.1 Identify and Extend Patterns | Identify and extend arithmetic patterns to solve problems. | 1 |  |


| 41 | Lesson 8.2 Find Unknown Factors and Numbers | Determine the unknown number in a multiplication or division equation. | 2 |  |
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| 42 | Lesson 8.3 Use <br> Multiplication and Division to Solve Problem Situations | Model and solve equations that represent multiplication and division situations. | 1 |  |
| 43 | $\begin{aligned} & \text { Lesson } 8.4 \text { Solve } \\ & \text { Two-Step Problems } \end{aligned}$ | Develop strategies and use reasoning to represent and solve two-step word problems. | 2 |  |
| 44 | Lesson 8.5 Practice with One- and Two-Step Problems | Solve one- and two-step problems that involve all four operations and a letter to represent the unknown. | 1 | 1 Week 2 Days |
| 45 | Lesson 9.1 Identify Number Patterns on the Addition Table | Identify and explain number patterns on the addition table by applying the Commutative and Identity Properties of Addition and by describing sums as even or odd. | 1 |  |
| 46 | Lesson 9.2 Use <br> Mental Math <br> Strategies for <br> Addition and <br> Subtraction | Use mental math strategies to find sums and differences. | 1 |  |
| 47 | Lesson 9.3 Use Properties to Add | Use the Commutative and Associative Properties of Addition to add more than two addends. | 1 |  |
| 48 | Lesson 9.4 Use Mental Math to Assess Reasonableness | Use mental math strategies to assess reasonableness of sums and differences. | 1 |  |
| 49 | Lesson 9.5 Round to the Nearest Ten or Hundred | Round whole numbers to the nearest ten or hundred. | 1 |  |
| 50 | Lesson 9.6 Use <br> Estimation with | Round whole numbers to the nearest ten or hundred. | 1 | 1 Week 1 Day |


|  | Sums and Differences |  |  |  |
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| 51 | Lesson 10.1 Use Expanded Form to Add | Use expanded form and partial sums to add 2 - and 3 - digit numbers. | 1 |  |
| 52 | Lesson 10.2 Use Place Value to Add | Use place value strategies to add 2 - and 3 - digit numbers. | 2 |  |
| 53 | Lesson 10.3 Combine Place Values to Subtract | Use flexible grouping to combine place values to subtract 2-and 3-digit numbers. | 1 |  |
| 54 | Lesson 10.4 Use Place Value to Subtract | Use place value strategies to subtract 2- and 3-digit numbers. | 2 |  |
| 55 | Lesson 10.5 Choose a Strategy to Add or Subtract | Choose a strategy to add or subtract to solve a problem. | 1 |  |
| 56 | Lesson 10.6 Model and Solve TwoStep Problems | Model and solve two-step problems. | 2 | 1 Week 4 Days |
| 57 | Lesson 11.1 Describe Perimeter | Explore and find perimeter of polygons using grid paper or dot paper. | 1 |  |
| 58 | Lesson 11.2 Find Perimeter | Estimate and measure perimeter of polygons using inch and centimeter rulers. | 1 |  |
| 59 | Lesson 11.3 Find Unknown Side Lengths | Find the unknown side length of a polygon when the perimeter and one side length is known. | 1 |  |
| 60 | Lesson 11.4 Represent Rectangles with the Same Area and Different Perimeters | Understand that rectangles with the same area can have different perimeters. | 1 |  |
| 61 | Lesson 11.5 Represent Rectangles with the Same | Understand that rectangles with the same perimeter can have different areas. | 1 | 1 Week |


|  | Perimeter and Different Areas |  |  |  |
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| 62 | Lesson 12.1 Tell and Write Time to the Minute | Read, write, and tell time on analog and digital clocks to the nearest minute. | 1 |  |
| 63 | Lesson 12.2 Use a.m. and p.m. to Describe Time | Decide when to use a.m. and p.m. when telling time to the nearest minute. | 1 |  |
| 64 | Lesson 12.3 Measure Time Intervals | Use an analog clock or a number line to measure time intervals in minutes. | 1 |  |
| 65 | Lesson 12.4 Find Start and End Times | Use a number line or an analog clock to add or subtract time intervals to find start times or end times. | 1 |  |
| 66 | Lesson 12.5 Solve Time Interval Problems | Apply strategies to solve word problems involving addition and subtraction of time intervals. | 1 | 1 Week |
| 67 | Lesson 13.1 Describe Equal Parts of a Whole | Use visual models of whole shapes partitioned into equalsized parts to identify and represent halves, thirds, fourths, sixths, and eighths. | 1 |  |
| 68 | Lesson 13.2 Represent and Name Unit Fractions | Represent and identify one equal part of a whole as a unit fraction, and use fraction notation to name unit fractions that correspond to a part of a whole or a single item in a group of items. | 1 |  |
| 69 | Lesson 13.3 <br> Represent and Name Fractions of a Whole | Use visual models to represent and identify fractional parts of a whole or group that are composed of one or more unit fractions. | 1 |  |
| 70 | Lesson 13.4 Represent and Name Fractions on a Number Line | Identify, describe, and represent fractions on a number line, and relate fractions on a number line to | 1 |  |


|  |  | parts of a whole and group fraction models. |  |  |
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| 71 | Lesson 13.5 Express Whole Numbers as Fractions | Relate fractions and whole numbers by expressing whole numbers as fractions and recognizing fractions that are equivalent to whole numbers. | 1 |  |
| 72 | Lesson 13.6 Represent and Name Fractions Greater Than 1 | Identify, name, and represent fractions greater than 1, and write a fraction greater than 1 as a mixed number. | 1 |  |
| 73 | Lesson 13.7 Use <br> Fractions to <br> Measure Lengths | Measure lengths using a ruler that is marked off in fractional units to the nearest half or fourth of an inch. | 1 | 1 Week 2 Days |
| 74 | Lesson 14.1 Relate <br> Fractions and Area | Explore and identify equal areas of whole shapes. | 1 |  |
| 75 | Lesson 14.2 Partition Shapes into Equal Areas | Partition shapes into parts with equal areas. | 1 |  |
| 76 | Lesson 14.3 Use Unit Fractions to Describe Area | Identify the unit fraction that names the area of each part of a shape partitioned into equal areas. | 1 | 3 Days |
| 77 | Lesson 15.1 Compare Fractions Using Concrete and Visual Models | Use concrete and visual models to compare two fractions. | 1 |  |
| 78 | Lesson 15.2 <br> Compare Fractions with the Same Denominator | Use concrete or visual models and reasoning strategies to compare two fractions with the same denominator. | 1 |  |
| 79 | Lesson 15.3 <br> Compare Fractions with the Same Numerator | Use concrete or visual models and reasoning strategies to compare two fractions with the same numerator. | 1 |  |
| 80 | Lesson 15.4 Use Reasoning | Use strategies to compare two fractions by reasoning with | 1 | 4 Days |


|  | Strategies to Compare Fractions | same-sized pieces or the same number of pieces. |  |  |
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| 81 | Lesson 16.1 <br> Represent <br> Equivalent <br> Fractions with <br> Smaller Parts | Use concrete and visual models to recognize and generate equivalent fractions in which the same whole is divided into a greater number of smaller equal parts. | 1 |  |
| 82 | Lesson 16.2 <br> Represent <br> Equivalent <br> Fractions with <br> Larger Parts | Use concrete and visual models to recognize and generate equivalent fractions in which the same whole is divided into a smaller number of larger equal parts. | 1 |  |
| 83 | Lesson 16.3 Recognize and Generate Equivalent Fractions | Recognize and generate equivalent fractions using visual models in which the same whole is divided into a smaller number of larger equal parts or a greater number of smaller equal parts. | 1 | 3 Days |
| 84 | Lesson 17.1 <br> Estimate and Measure Liquid Volume | Use reasoning and benchmarks to estimate, and use tools to measure liquid volume in liters. | 1 |  |
| 85 | Lesson 17.2 <br> Estimate and Measure Mass | Use reasoning to estimate, and use tools to measure mass in grams and kilograms. | 1 |  |
| 86 | Lesson 17.3 Solve Problems About Liquid Volume and Mass | Use representations and the four operations to solve onestep word problems involving liquid volume and mass. | 2 | 4 Days |
| 87 | Lesson 18.1 Use Picture Graphs | Use information in a picture graph to solve one-step comparison problems. | 1 |  |
| 88 | Lesson 18.2 Make Picture Graphs | Represent data in picture graphs and use the information to solve one-step comparison problems. | 1 |  |


| 89 | Lesson 18.3 Use Bar Graphs | Use information in a bar graph to solve one-step comparison problems. | 1 |  |
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| 90 | Lesson 18.4 Make Bar Graphs | Represent data in scaled bar graphs and use the information to solve one-step comparison problems. | 1 |  |
| 91 | Lesson 18.5 Use Line Plots to Display <br> Measurement Data | Read and interpret line plots involving data with fractional units of length. | 1 |  |
| 92 | Lesson 18.6 Make Line Plots to Display <br> Measurement Data | Plot fractional data of standard units of length on a line plot. | 1 |  |
| 93 | Lesson 18.7 Solve One- and Two-Step Problems Using Data | Represent data in picture graphs, bar graphs, and line plots and use the information to solve one- and two-step comparison problems. | 1 | 1 Week 2 Days |
| 94 | Lesson 19.1 <br> Describe Shapes | Describe open and closed shapes in terms of their sides, angles, and other attributes. | 1 |  |
| 95 | Lesson 19.2 Describe Angles in Shapes | Describe the angles of polygons and define and identify right angles. | 1 |  |
| 96 | Lesson 19.3 Describe Sides of Shapes | Describe and compare the sides of polygons as equal in length and as parallel. | 1 |  |
| 97 | Lesson 19.4 Define Quadrilaterals | Identify attributes of quadrilaterals and use the attributes to name those quadrilaterals. | 1 | 4 Days |
| 98 | Lesson 20.1 Draw Quadrilaterals | Identify and draw quadrilaterals that may or may not belong to the same subcategory, such as square, rectangle, or rhombus. | 1 |  |



