Mendham Township
Math Curriculum

Grade 2

Learning Outcome	*Common Core Standards*	*Resources*
1st Quarter	*Domain*	
Chapter 1 - Number Concepts • Classify numbers up to 20 as even or odd • Write equations with equal addends to represent even numbers • Use place value to describe the values of digits in 2-digit numbers • Write 2-digit numbers in expanded form, word form, and standard form • Apply place value concepts to find equivalent representations of numbers • Solve problems by finding different combinations of tens and ones to represent s-digit numbers using the strategy *find a pattern* • Extend counting sequences within 100 and 1,000, counting by 1s, 5s, and 100s • Write 3-digit numbers that are represented by groups of tens	Operations and Algebraic Thinking Number and Operations in Base Ten CC.2.OA.3 CC.2.NBT.2 CC2.NBT.3 CC.K-12.MP.3 CC.K-12.MP.7	**HMH GO MATH!** **Chapter 1** **Lessons 1.1 – 1.9** PG: 44-45 TE:1-52B SE: 1-52 SPB: P1–P22
Chapter 2 – Numbers to 1,000 • Understand that each group of 10 is equivalent to 1 hundred • Write 3-digit numbers that are represented by groups of tens • Use concrete and pictorial models to represent 3-digit numbers • Apply place value concepts to write 3-digit numbers that are represented by pictorial models • Use place value to describe the values of digits in numbers to 1,000 • Read and write 3-digit numbers in word form • Write 4-digit numbers in expanded form and in standard form. • Apply place value concepts to find equivalent representations of numbers • Identify 10 more, 10 less, 100 more, or 100 less than a given number • Extend number patterns by counting on by tens or hundreds • Solve problems involving number comparisons by using the strategy *make a model* • Compare 3-digit numbers using the >, =. and < symbols	Number and Operations in Base Ten CC.2.NBT.1 CC.2.NBT.3 CC.2.NBT.4 CC.2.NBT.8 CC.2.NBT.2 CC.K-12.MP.7 CC.K-12.MP.8	**HMH GO MATH!** **Chapter 2** **Lessons 2.1 – 2.12** PG: 46-47 TE:53A-108B SE: 53-108 SPB: P23–P50
Chapter 3 - Basic facts and Relationships • Use doubles facts as a strategy for finding sums for near doubles facts • Recall sums for basic facts using properties and strategies	Operations and Algebraic Thinking CC.2.OA.1 CC.2.OA.2	**HMH GO MATH!** **Chapter 3** **Lessons 3.1-3.11** PG: 48-49

• Recall sums for addition facts using the make a ten strategy • Find sums of three addends by applying the Commutative and Associative Properties of Addition • Use the inverse relationship of addition and subtraction to recall basic facts • Recall differences for basic facts using mental strategies • Find differences on a number line to develop the mental strategy of decomposing to simplify facts • Use bar models to represent a variety of addition and subtraction situations • Write equations to represent and solve a variety of addition and subtraction situations • Solve problems involving equal groups by using the strategy *act it out* • Write equations using repeated addition to find the total number of objects in arrays	CC.2.OA.4 CC.2.NBT.5 CC.2.MD.6 CC.K-12.MP.2 CC.K-12.MP.3	TE: 109A-168B SE: 109-168 SPB: P51–P76
2nd Quarter	***Domain***	
Chapter 4 - 2-Digit Addition • Find a sum by breaking apart a 1-digit addend to make a s-digit addend a multiple of 10 • Use compensation to develop flexible thinking for 2-digit addition • Apply place-value concepts when using a break-apart strategy for 2-digit addition • Model 2-digit addition with regrouping • Draw quick pictures and record 2-digit addition using the standard algorithm • Record 2-digit addition using the standard algorithm • Practice 2-digit addition with and without regrouping • Rewrite horizontal addition problems vertically in the standard algorithm format • Solve problems involving 2-diogit addition by using the strategy draw a diagram • Represent addition situations with number sentences using a symbol for the unknown number • Find sums of three and four 2-digit numbers	Operations and Algebraic Thinking Number and Operations in Base Ten CC.2.OA.1 CC.2.NBT.5 CC.2.NBT.6 CC.2.NBT.9 CC.2.NBT.7 CC.K-12.MP.2 CC.K-12.MP.6	**HMH GO MATH!** **Chapter 4** **Lessons 4.1-4.12** PG: 50-51 TE: 169A-224B SE: 169-224 SPB: P77-104
Chapter 5 – 2-Digit Subtraction • Break apart a 1-digit and a 2-digit subtrahend to subtract it from a 2-digit number • Model 2-digit subtraction with regrouping • Draw quick pictures and record 2-digit subtraction using the standard algorithm • Record 2-digit subtraction using the standard algorithm • Practice 2-digit subtraction with and without regrouping • Rewrite horizontal subtraction problems vertically in the standard algorithm format • Use addition to find differences • Solve problems involving 2-digit subtraction by using the strategy draw a diagram • Represent subtraction situations with number sentences using a symbol for the unknown number	Operations and Algebraic Thinking Number and Operations in base Ten CC.2.OA.1 CC.2.NBT.5 CC2.NBT.9 CC.K-12.MP.5 CC.K-12.MP.6	**HMH GO MATH!** **Chapter 5** **Lessons 5.1-5.11** PG: 52-53 TE:225A-276B SE: 225-276 SPB: P105-130

• Analyze word problems to determine what operations to use to solve multistep problems		
Chapter 6 – 3-Digit Addition and Subtraction • Draw quick pictures to represent 3-digit addition • Apply place value concepts when using a break apart strategy for 3-digit addition • Record 3-digit addition using the standard algorithm with possible regrouping of tens • Record 3-digit addition using the standard algorithm with possible regrouping of both ones and tens • Solve problems involving 3-digit subtraction by using the strategy *make a model* • Record 3-digit subtraction using the standard algorithm with possible regrouping of tens, of hundreds, and of both hundreds and tens. • Record subtraction using the standard algorithm when there are zeros in the minuend	CC.2.NBT.7 CC.K-12.MP.5 CC.K-12.MP.8	**HMH GO MATH!** **Chapter 6** **Lessons 6.1-6.11** PG: 54-55 TE:277A-324B SE: 277-324 SPB: P131-154
3rd Quarter	***Domain***	
Chapter 7 – Money and Time • Find the total values of collections of quarters, dimes, nickels, and pennies • Order coins in a collection by value and then find the total value • Represent money amounts less than a dollar using two different combinations of coins • Show one dollar in a variety of ways • Find and record the total value for money amounts great than $21 • Solve word problems involving money by using the strategy *act it out* • Tell and write time to the hour, half hour, and nearest five minutes • Practice telling time to the nearest five mintues • Tell and write time using A.M. and P.M.	Measurement and Data CC.2.MD.7 CC.2.MD.8 CC.K-12.MP.1 CC.K-12.MP.8	**HMH GO MATH!** **Chapter 7** **Lessons 7.1-7.11** PG: 56 - 57 TE:325A - 384B SE: 325 - 384 SPB: P155 - P180
Chapter 8 – Length in Customary Units • Use concrete models to measure the length of objects in inches • Make an inch ruler and use it to measure the lengths of objects • Estimate the lengths of objects by mentally partitioning the lengths into inches • Measure the lengths of objects to the nearest inch using an inch ruler • Solve addition and subtraction problems involving the lengths of objects by using the strategy *draw a diagram* • Measure the lengths of objects in both inches and feet to explore the inverse relationship between size and number of units • Estimate the length of objects in feet	Measurement and Data CC.2.MD.1 CC.2.MD.2 CC.2.MD.3 CC.2.MD.5 CC2.NBT.6 CC2.NBT.9 CC.K-12.MP.5 CC.K-12.MP.6	**HMH GO MATH!** **Chapter 8** **Lessons 8.1-8.9** PG: 58- 59 TE:385A – 428B SE: 385 - 428 SPB: P181 - 202

• Select appropriate tools for measuring different lengths • Measure the lengths of objects and use a line plot to display the measurement data		
Chapter 9 – Length in Metric Units • Use a concrete model to measure the lengths of objects in centimeters • Estimate lengths of objects in centimeters by comparing them to known lengths • Measure lengths of objects to the nearest centimeter using a centimeter ruler • Solve problems involving adding and subtracting lengths by using the strategy draw a diagram • Measure the lengths of objects in both centimeters and meters to explore the inverse relationship between size and number of units • Estimate the lengths of objects in meters • Measure and then find the difference in the lengths of two objects	Measurement and Data CC.2.MD.1 CC.2.MD.2 CC.2.MD.3 CC.2.MD.4 CC2.NBT.5 CC2.NBT.6 CC.K-12.MP.4 CC.K-12.MP.7	**HMH GO MATH!** **Chapter 9** **Lessons 9.1-9.7** PG: 60 – 61 TE: 429A – 464B SE: 429 - 464 SPB: P203 - 220
4th Quarter	***Domain***	
Chapter 10 — Data • Collect data in a survey and record that data in a tally chart • Interpret data in picture graphs and use that information to solve problems • Make picture graphs to represent data • Interpret data in bar graphs and use that information to solve problems • Make bar graphs to represent data • Solve problems involving data by using the strategy *make a graph*	Measurement and Data CC.2.MD.10 CC.K-12.MP.4 CC.K-12.MP.6	**HMH GO MATH!** **Chapter 10** **Lessons 10.1-10.6** PG: 62 – 63 TE: 465A – 496B SE: 465 - 496 SPB: P221 - 236
Chapter 11 — Geometry and Fraction Concepts • Identify three-dimensional shapes • Identify and describe three-dimensional shapes according to the number of faces, edges, and vertices • Name 3-, 4-, 5-, and 6-sided shapes according to the number of sides and vertices • Identify angles in two-dimensional shapes • Sort two-dimensional shapes according to their attributes • Partition rectangles into equal-size squares and find the total number of these squares • Identify and name equal parts of circles and rectangles as halves, thirds, or fourths • Partition shapes to show halves, thirds, or fourths • Identify and describe one equal part as a half of, a third of, or a fourth of a whole • Solve problems involving wholes divided into equal shares by using the strategy *draw diagram*	Geometry CC.2.G.1 CC.2.G.2 CC.2.G.3 CC2.OA.4 CC.K-12.MP.1 CC.K-12.MP.4	**HMH GO MATH!** **Chapter 11** **Lessons 11.1-11.6** PG: 64 – 65 TE: 497A – 552B SE: 497 - 552 SPB: P237 - 260

Getting Ready for Grade 3 • Find sums on an addition table • Estimate sums: 2-digit and 3-digit addition • Estimate differences: 2-digit subtraction and 3-digit subtraction • Order 3-digit numbers • Find total number of objects in equal groups of 2, 5, and 10 • Size of shares • Explore and solve problems with equal shares • Tell hour before and after in telling time • Find elapsed time in hours and minutes • Measure capacity in nonstandard units • Describe measurement data • Identify fractions in thirds, sixths, fourths, and eighths • Compare fraction models	Operations & Algebraic Thinking CC.2.OA.2 CC.2.OA.4 CC.3.OA.1 CC.3.OA.2 CC.3.OA.3 CC.3.OA.9 Numbers & Operations in Base Ten CC.2.NBT.4 CC.2.NBT.5 CC.2.NBT.7 CC.3.NBT.1 Measurement & Data CC.2.MD.7 CC.2.MD.9 CC.3.MD.1 CC.3.MD.2 CC.23.MD.4 Geometry CC.2.G.3 Number and Operations-Fractions CC.3.NF.1 CC.3.NF.3d	*HMH* **GO MATH! Review and Enrich Lessons 1-20**