Dennis-Yarmouth Regional School District
Mathematics Scope and Sequence
Grade: 1

Unit Name	Unit Description / Overview	Enduring Understandings - Students will understand that…	Essential Questions	Standards
M1:Sums and Differences to Ten	In this first module of Grade 1, students make significant progress towards fluency with addition and subtraction of numbers to 10 (1.OA.6) as they are presented with opportunities intended to advance them from counting all to counting on, which leads many students then to decomposing and composing addends and total amounts. In Kindergarten, students achieved fluency with addition and subtraction facts to 5. This means they can decompose 5 into 4 and 1, 3 and 2, and 5 and 0. They can do this without counting all. They perceive the 3 and 2 embedded within the 5.	Mathematicians think about quantities, and use numbers and pictures to represent their thinking Number words represent amounts Subtraction reverses the actions involved in addition Subtraction can be known as an unknown addend problem Observed patterns help us find and develop strategies	How do mathematicians solve problems? How can you show your thinking? Where is the math happening? Who is doing the math? What are the amounts? (and of what…i.e. what are we counting?) How does your picture match the words in our math story? How can we show this idea using numbers? Would you choose addition or subtraction? Why? How do your numbers match your picture? How can you show parts (total)?	1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to taking from putting together taking apart and comparing with unknowns in all positions e.g. by using objects drawings and equations (number sentences) with a symbol for the unknown number to represent the problem. 1.OA.B.3 Apply properties of operations to add. 1.OA.B.4 Understand subtraction as an unknown-addend problem. 1.OA.C.5 Relate counting to addition and subtraction (e.g. by counting on 2 to add 2). 1.OA.C.6 Add and subtract within 20 demonstrating fluency for addition and subtraction within 10. Use mental strategies such as counting on; making 10 (e.g. 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a 10 (e.g. 13 - 4 = 13 - 3 - 1 = 10 - 1 = 9); using the relationship between addition and subtraction (e.g. knowing that 8 + 4 = 12 one knows 12 - 8 = 4); and creating equivalent but easier or known sums (e.g. adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). 1.OA.D.7 Understand the meaning of the equal sign and determine if equations involving addition and subtraction are true or false. 1.OA.D.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. MP.2 Reason abstractly and quantitatively. MP.6 Attend to precision. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.

Dennis-Yarmouth Regional School District
Mathematics Scope and Sequence
Grade: 1

Unit Name	Unit Description / Overview	Enduring Understandings - Students will understand that…	Essential Questions	Standards
M2: Introduction to Place Value Through Addition and Subtraction Within 20	Module 2 serves as a bridge from problem solving within 10 to work within 100 as students begin to solve addition and subtraction problems involving teen numbers (1.NBT.2ab). In Module 1, students were encouraged to move beyond the Level 1 strategy of counting all to the more efficient counting on. Now, they go beyond Level 2 to learn Level 3 decomposition and composition strategies, informally called make ten or take from ten.1Though many students may continue to count on as their primary means of adding and subtracting, the larger purpose of composing and decomposing ten is to lay the foundation for the role of place value units in addition and subtraction. Meanwhile, from the beginning of the year, fluency activities have focused on the three prerequisite skills for the Level 3 decomposition and composition methods: Partners to ten (K.OA.4). Decompositions for all numbers within 10 (K.OA.3). Representations of teen numbers as 10 + n (K.NBT.1 and 1.NBT.2b). For example, students practice counting the Say Ten way (i.e., ten 1, ten 2, …) from Kindergarten on.	Creating easier problems (Level 3 strategies) allows us to add and subtract more efficiently; make-a- ten methods help us see ten as a unit. Ten ones can be thought of as a unit called a ten. Two digit numerals represent amounts of tens and ones. Decade names represent amounts of tens (ie forty is the word way of talking about 4 tens)	How did you solve ____? How is that same/different from another problem? How does your picture show your method (thinking)? How can we use our unit called “ten” to help us as we add (subtract)? Will that strategy (method) work with other numbers? How does (forty) relate to our units called ten? What does the 4 in (the numeral) 40 mean?	1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to taking from putting together taking apart and comparing with unknowns in all positions e.g. by using objects drawings and equations (number sentences) with a symbol for the unknown number to represent the problem. 1.OA.A.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20 e.g. by using objects drawings and equations with a symbol for the unknown number to represent the problem. 1.OA.B.3 Apply properties of operations to add. 1.OA.B.4 Understand subtraction as an unknown-addend problem. 1.OA.C.6 Add and subtract within 20 demonstrating fluency for addition and subtraction within 10. Use mental strategies such as counting on; making 10 (e.g. 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a 10 (e.g. 13 - 4 = 13 - 3 - 1 = 10 - 1 = 9); using the relationship between addition and subtraction (e.g. knowing that 8 + 4 = 12 one knows 12 - 8 = 4); and creating equivalent but easier or known sums (e.g. adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13). MP.2 Reason abstractly and quantitatively. MP.4 Model with mathematics. MP.7 Look for and make use of structure. MP.8 Look for and express regularity in repeated reasoning.

Dennis-Yarmouth Regional School District
Mathematics Scope and Sequence
Grade: 1

Unit Name	Unit Description / Overview	Enduring Understandings - Students will understand that…	Essential Questions	Standards
M3: Ordering and Comparing Length Measurements as Numbers	Grade 1 Module 3 opens in Topic A by extending students' Kindergarten experiences with direct length comparison to the new learning of indirect comparison whereby the length of one object is used to compare the lengths of two other objects (1.MD.1). "My string is longer than your book. Your book is longer than my pencil. That means my string is longer than my pencil!" Students use the same transitivity, or indirect comparison, to compare short distances within the classroom in order to find the shortest path to their classroom door, which is helpful to know for lining up and for emergencies. Students place one endpoint of a length of string at their desks and then extend the string towards the door to see if it will reach. After using the same piece of string from two students' desks, they make statements such as, "Maya's path is shorter than the string. Bailey's path is longer than the string. That means Bailey's path to the door is longer than Maya's path."	-Objects have many describing attributes (characteristics). -Length describes one characteristic (attribute) about an object (a pencil has length, weight, color etc., as attributes). -Measurement is the process of assigning a number (i.e., of length units) to an amount of an attribute (i.e., length of a pencil). -Aligning endpoints is an important consideration when (assigning a number) and comparing length attributes of 2 objects. -Objects can be compared to a single item characterizing the attribute being compared (prelude to transitivity). -Transitivity ("My string is longer than the pencil. My string is shorter than the book. That means the book is longer than the pencil.") -Marks in a table or squares on a bar graph represent objects with or without a given attribute. -A table (or bar graph) helps us think deeply about information. -We can ask questions that lead us to add or subtract.	How can we describe objects (sets of objects)? How can we decide how much (length) an object has? How can we decide if objects are (the same as, longer than, shorter than) a selected item? What does the number (5) mean as we talk about the (pencil)? How can we be sure our number that tells length is accurate? How can we make our picture (table, graph) match our sorted collection of objects? What do the marks (or filled square spaces) on our table (on our bar graph) mean? What kinds of questions can we ask as we look at our representation (bar graph, picture graph, tally chart)?	1.MD.A.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object. 1.MD.A.2 Express the length of an object as a whole number of length units by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps. Limit to contexts where the object being measured is spanned by a whole number of length units with no gaps or overlaps. 1.MD.C.4 Organize represent and interpret data with up to three categories; ask and answer questions about the total number of data points how many in each category and how many more or less are in one category than in another. 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to taking from putting together taking apart and comparing with unknowns in all positions e.g. by using objects drawings and equations (number sentences) with a symbol for the unknown number to represent the problem. MP.2 Reason abstractly and quantitatively. MP.3 Construct viable arguments and critique the reasoning of others. MP.6 Attend to precision. MP.7 Look for and make use of structure.

Dennis-Yarmouth Regional School District
Mathematics Scope and Sequence
Grade: 1

Unit Name	Unit Description / Overview	Enduring Understandings - Students will understand that…	Essential Questions	Standards
M4: Place Value: Comparison, Addition and Subtraction to 40	Module 4 builds upon Module 2's work with place value within 20, now focusing on the role of place value in the addition and subtraction of numbers to 40.	Place value is the meaning of a position of a number. concrete models, or drawing and the following strategies to add within 100 can be used: place value, properties of operations and the relationship between adding and subtracting	How can making equal groups of ten objects help us count larger quantities? What are some strategies that help me count efficiently? How does using ten as a benchmark number help us add or subtract?	1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: 1.NBT.B.2.a 10 can be thought of as a bundle of ten ones--called a "ten. 1.NBT.B.2.c The numbers 10 20 30 40 50 60 70 80 90 refer to one two three four five six seven eight or nine tens (and 0 ones). 1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits recording the results of comparisons with the symbols > = and 1.NBT.C.4 Add within 100 including adding a two-digit number and a one-digit number and adding a two-digit number and a multiple of 10 using concrete models or drawings and strategies based on place value properties of operations and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers one adds tens and tens ones and ones; and sometimes it is necessary to compose a ten. 1.NBT.C.5 Given a two-digit number mentally find 10 more or 10 less than the number without having to count; explain the reasoning used. Identify arithmetic patterns of 10 more and 10 less than using strategies based on place value. 1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10â90 (positive or zero differences) using concrete models or drawings and strategies based on place value properties of operations and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to taking from putting together taking apart and comparing with unknowns in all positions e.g. by using objects drawings and equations (number sentences) with a symbol for the unknown number to represent the problem. MP.3 Construct viable arguments and critique the reasoning of others. MP.5 Use appropriate tools strategically. MP.6 Attend to precision. MP.7 Look for and make use of structure.
M5: Identifying, Composing, and Partitioning Shapes	Throughout the year, students have explored part–whole relationships in many ways, such as their work with number bonds, tape diagrams, and the relationship between addition and subtraction. In Module 5, students consider part–whole relationships through a geometric lens.	Shapes are all around our world and can be put together or taken apart to form other shapes. Objects can be sorted, described or built based on certain attributes. A region can be divided into equal-sized parts in different ways. Decomposing into more equal shares creates smaller shares.	Why is it important to divide into equal parts? What is half of a whole? What is a fourth of a whole? How can we represent a number in a variety of ways?	1.G.A.1 Distinguish between defining attributes (e.g. triangles are closed and three-sided) versus non-defining attributes (e.g. color orientation overall size); build and draw shapes that possess defining attributes. 1.G.A.2 Compose two-dimensional shapes (rectangles squares trapezoids triangles half-circles and quarter-circles) or three-dimensional shapes (cubes right rectangular prisms right circular cones and right circular cylinders) to create a composite shape and compose new shapes from the composite shape. 1.G.A.3 Partition circles and rectangles into two and four equal shares describe the shares using the words halves fourths and quarters and use the phrases half of fourth of and quarter of. Describe the whole as two of or four of the shares. Understand for these examples that decomposing into more equal shares creates smaller shares. 1.MD.B.3 Tell and write time in hours and half-hours using analog and digital clocks. MP.1 Make sense of problems and persevere in solving them. MP.6 Attend to precision. MP.7 Look for and make use of structure.

Dennis-Yarmouth Regional School District
Mathematics Scope and Sequence
Grade: 1

Unit Name	Unit Description / Overview	Enduring Understandings - Students will understand that…	Essential Questions	Standards
M6: Place Value, Comparison, Addition and Subtraction to 100	In this final module of the Grade 1 curriculum, students bring together their learning from Module 1 through Module 5 to learn the most challenging Grade 1 standards and celebrate their progress.	Two digit numbers are composed of groups of tens and some ones. Decade numbers are groups or units of tens. Commutative and Associative Properties demonstrate decomposing and representing numbers within equations. Counting is connected to adding and subtracting Identification of 10 more/10 less is the same as adding or subtracting ten. Addition can be used to solve subtraction. Decomposing numbers so that the numbers can be recombined for a 10 or group of 10, and some more.	How do addition and subtraction relate to counting? How does understanding properties of operations help me with strategies when I calculate? How does using objects and drawings help me represent problems in multiple ways? What do equations represent?	1.NBT.A.1 Count to 120 starting at any number less than 120. In this range read and write numerals and represent a number of objects with a written numeral. 1.NBT.B.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. 1.NBT.B.2.a 10 can be thought of as a bundle of ten onesâcalled a "ten. 1.NBT.B.2.c The numbers 10 20...90 refer to 1 2 3 4 5 6 7 8 or 9 tens (and 0 ones). 1.NBT.B.3 Compare two two-digit numbers based on meanings of the tens and ones digits recording the results of comparisons with the symbols > = and <. 1.NBT.C.4 Add within 100 including adding a two-digit number and a one-digit number and adding a two-digit number and a multiple of 10 using concrete models or drawings and strategies based on place value properties of operations and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers one adds tens and tens ones and ones; and sometimes it is necessary to compose a ten. 1.NBT.C.5 Given a two-digit number mentally find 10 more or 10 less than the number without having to count; explain the reasoning used. Identify arithmetic patterns of 10 more and 10 less than using strategies based on place value. 1.NBT.C.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences) using concrete models or drawings and strategies based on place value properties of operations and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. 1.OA.A.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to taking from putting together taking apart and comparing with unknowns in all positions e.g. by using objects drawings and equations (number sentences) with a symbol for the unknown number to represent the problem. MP.1 Make sense of problems and persevere in solving them. MP.3 Construct viable arguments and critique the reasoning of others. MP.4 Model with mathematics. MP.5 Use appropriate tools strategically.