
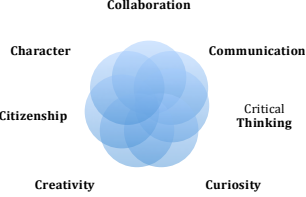


Content Area: Mathematics	Course: Mathematics	Grade Level: 2
	<p><b>R14 The Seven Cs of Learning</b></p> 	
Unit Titles	Length of Unit	
Unit 1- Sums and Differences Within 20	<ul style="list-style-type: none"> <li>• 5 weeks</li> </ul>	
Unit 2- Place Value to 1,000	<ul style="list-style-type: none"> <li>• 6 weeks</li> </ul>	
Unit 3- Geometry and Time	<ul style="list-style-type: none"> <li>• 6 weeks</li> </ul>	
Unit 4- Addition and Subtraction to 1,000 <ul style="list-style-type: none"> <li>○ Part A-Addition and Subtraction to 100</li> <li>○ Part B-Addition and Subtraction to 1,000</li> </ul>	<ul style="list-style-type: none"> <li>• 7 weeks</li> <li>• (4 weeks)</li> <li>• (3 weeks)</li> </ul>	
Unit 5- Measurement and Money	<ul style="list-style-type: none"> <li>• 5 weeks</li> </ul>	
Unit 6- Exploring Early Multiplication and Division Models	<ul style="list-style-type: none"> <li>• 4 weeks</li> </ul>	



Strands	Course Level Expectations
<b>Number and Operations in Base-Ten</b>	<ol style="list-style-type: none"> <li>1. Extend understanding of the base-ten system. This includes ideas of counting in fives, tens, and multiples of hundreds, tens, and ones, as well as number relationships involving these units,</li> <li>2. Understand multi-digit numbers (up to 1000) written in base-ten notation, recognizing that the digits in each place represent amounts of thousands, hundreds, tens, or ones</li> <li>3. Develop fluency with addition and subtraction within 100.</li> <li>4. Solve problems within 1000 by applying their understanding of models for addition and subtraction, and they develop, discuss, and use efficient, accurate, and generalizable methods to compute sums and differences of whole numbers in base-ten notation, using their understanding of place value and the properties of operations</li> </ol>
<b>Operations and Algebraic Thinking</b>	<ol style="list-style-type: none"> <li>1. Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions</li> <li>2. Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.</li> <li>3. Begin building conceptual foundations for multiplication and division</li> </ol>
<b>Geometry</b>	<ol style="list-style-type: none"> <li>1. Describe and analyze shapes by examining their sides and angles.</li> <li>2. Investigate, describe, and reason about decomposing and combining shapes to make other shapes.</li> </ol>
<b>Measurement and Data</b>	<ol style="list-style-type: none"> <li>1. Work with time and money.</li> <li>2. Recognize the need for standard units of measure (centimeter and inch) and they use rulers and other measurement tools with the understanding that linear measure involves an iteration of units</li> <li>3. Draw and interpret data organized in bar and picture graphs</li> </ol>

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<b>Unit Title</b>	Sums and Differences Within 20	<b>Length of Unit</b>	5 weeks
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<b>Inquiry Questions (Engaging &amp; Debatable)</b>	<ul style="list-style-type: none"> <li>• How can we use properties of addition and subtraction to solve one- and two-step word problems with unknowns in all positions?</li> <li>• How can we use mental strategies to solve all sums of two one-digit numbers to 20?</li> <li>• How can we explain why addition and subtraction strategies work?</li> </ul>
<b>Standards</b>	Operations and Algebraic Thinking 2.OA.A1, 2.OA.B2 Number and Operations in Base Thinking 2.NBT.B9
<b>Unit Strands &amp; Concepts</b>	<ul style="list-style-type: none"> <li>• Relationship between addition and subtraction</li> <li>• Meaning of the equal sign</li> <li>• Addition and subtraction strategies</li> <li>• Situations and contexts involving addition and subtraction</li> <li>• Base ten understanding</li> <li>• Unitizing</li> </ul>
<b>Key Vocabulary</b>	Addition, subtraction, word problems, adding to, taking from, putting together, taking apart, comparing, unknowns, equations, symbols, represent, mental strategies, sums, place value.

Standards based on Common Core State Standards

For more information visit: <http://www.corestandards.org/Math/Content/2/introduction/>

<b>Unit Title</b>	<b>Sums and Differences Within 20</b>	<b>Length of Unit</b>	5 weeks
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<b>Critical Content:</b> My students will <b>Know</b> ...	<b>Key Skills:</b> My students will be able to <b>(Do)</b> ...
<ul style="list-style-type: none"> <li>● A group of ten ones can be referred to a unit called a “ten”</li> <li>● Different combinations can make 10.</li> <li>● Subtraction can be represented as an unknown addend addition problem</li> <li>● Recognize and interpret different situations for addition and subtraction</li> <li>● The equal sign means “is the same as” and does not always come before the sum or difference.</li> <li>● Two digits of a two-digit number represent amounts of tens and ones</li> </ul>	<ul style="list-style-type: none"> <li>● Link equations to concrete materials, drawings, and other representations of problem situations</li> <li>● Model and solve multi-step addition and subtraction stories.</li> <li>● Find the number that makes ten when added to a given number 1-9</li> <li>● Fluently add and subtract within 20</li> <li>● Add and subtract within 100 using drawings, objects, 10 frames, number lines, properties of operations, and decomposition strategies</li> <li>● Determine the unknown number in an addition or subtraction equation</li> </ul>

<b>Assessments:</b>	Performance task focused on understanding of addition and subtraction situations, efficiency of strategies used to solve addition and subtraction problems, unitizing and decomposition ability.
<b>Teacher Resources:</b>	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.

<b>Unit Title</b>	<b>Place Value to 1,000</b>	<b>Length of Unit</b>	6 weeks
<b>Inquiry Questions (Engaging &amp; Debatable)</b>	<ul style="list-style-type: none"> <li>• How can we represent three digit numbers in different ways using place value strategies?</li> <li>• Are there other efficient ways to count, other than by ones?</li> <li>• How can we use place value to read and write numbers to 1,000?</li> <li>• How can we compare three digit numbers based on the meanings of the hundreds, tens and ones digits?</li> </ul>		
<b>Standards</b>	Numbers and Base Ten Operations 2.NBT.A1, 2.NBT.A2, 2.NBT.A3, 2.NBT.A4		
<b>Unit Strands &amp; Concepts</b>	<ul style="list-style-type: none"> <li>• Base ten understanding</li> <li>• Unitizing</li> <li>• Place value patterns</li> <li>• Relationship between a digit's position and magnitude</li> </ul>		
<b>Key Vocabulary</b>	hundreds, tens, ones, numbers to 1,000, skip-count, expanded form, compare, greater than, less than, equal to		

<b>Unit Title</b>	<b>Place Value to 1,000</b>	<b>Length of Unit</b>	6 weeks
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<b>Critical Content:</b> My students will <b>Know</b> ...	<b>Key Skills:</b> My students will be able to <b>(Do)</b> ...
<ul style="list-style-type: none"> <li>• A group of 10 tens can be referred to a unit called a “hundred”</li> <li>• The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).</li> <li>• The unit associated with each place is 10 of the unit associated with the place to its right.</li> </ul>	<ul style="list-style-type: none"> <li>• Read and write numbers to 1000 using base ten numerals, number names, and expanded form?</li> <li>• Skip count by 5s, 10s, and 100s within 1000</li> <li>• Compare two three digit numbers based on the meanings of the hundreds tens and ones digits</li> </ul>

<b>Assessments:</b>	Performance assessment focusing on base ten patterns, unitizing, and magnitude.
<b>Teacher Resources:</b>	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.

<b>Unit Title</b>	<b>Geometry and Time</b>	<b>Length of Unit</b>	6 weeks
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<b>Inquiry Questions (Engaging &amp; Debatable)</b>	<ul style="list-style-type: none"> <li>• How can we distinguish, describe and classify shapes using defining attributes?</li> <li>• How can we partition and describe shapes using equal shares?</li> <li>• How do we relate time to our daily activities?</li> </ul>
<b>Standards</b>	<b>Geometry</b> 2.GA.1, 2.GA.2, 2.GA.3, <b>Measurement and Data</b> 2.MD.D7
<b>Unit Strands &amp; Concepts</b>	<ul style="list-style-type: none"> <li>• Spatial reasoning</li> <li>• Geometric Attributes</li> <li>• Composition and decomposition of shapes</li> <li>• Clocks are used to read time of the day</li> </ul>
<b>Key Vocabulary</b>	Attributes, angles, faces, circles, triangles, squares, rectangles, rhombuses, trapezoids, pentagons, hexagons, quadrilaterals, polygons, cubes, partition, rows, columns, equal shares, whole, halves, thirds, fourths, Analog clock, digital clock, a.m., p.m.



<b>Unit Title</b>	<b>Geometry and Time</b>	<b>Length of Unit</b>	6 weeks
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<b>Critical Content: My students will Know...</b>	<b>Key Skills: My students will be able to (Do)...</b>
<ul style="list-style-type: none"> <li>• Equal shares of identical wholes need not have the same shape.</li> <li>• Shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals).</li> <li>• Part-whole relationships as well as the properties of the original and composite shapes.</li> <li>• Plane shapes and solid figures are found all around us.</li> <li>• Decomposing into more equal shares creates smaller shares</li> <li>• Recognize the shape by its attributes not by its orientation</li> <li>• Relate time to daily activities</li> </ul>	<ul style="list-style-type: none"> <li>• Recognize and draw shapes having specified attributes</li> <li>• Use length to identify the properties of shapes</li> <li>• Recognize right angles</li> <li>• Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths</li> <li>• Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</li> <li>• Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories</li> <li>• Tell and write time on both an analog and digital clock to the nearest five minutes</li> <li>• Distinguish between a.m. and p.m.</li> </ul>

<b>Assessments:</b>	Performance task focused on classifying two shapes by attribute, identifying geometric properties, partitioning shapes, and telling time.
<b>Teacher Resources:</b>	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.

<b>Unit Title</b>	<b>Part A-Addition and Subtraction to 100</b>	<b>Length of Unit</b>	4 weeks
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<b>Inquiry Questions (Engaging &amp; Debatable)</b>	<ul style="list-style-type: none"> <li>• How can we relate the properties of addition and subtraction to support addition and subtraction within 100?</li> <li>• How can we use different strategies to solve and explain addition and subtraction problems with unknowns in all positions?</li> <li>• How can we add multiple addends using strategies based on place value and properties of operations?</li> </ul>
<b>Standards</b>	<b>Operations and Algebraic Thinking</b> 2.OA.A1, <b>Numbers and Base Ten Operations</b> 2.NBT.B5, 2.NBT.B6, 2.NBT.B8, 2.NBT.B9
<b>Unit Strands &amp; Concepts</b>	<ul style="list-style-type: none"> <li>• Unitizing</li> <li>• Composing and decomposing</li> <li>• Base ten and place value patterns</li> <li>• Relationship between addition and subtraction</li> <li>• Meaning of the equal sign</li> <li>• Addition and subtraction strategies</li> <li>• Situations and contexts involving addition and subtraction</li> </ul>
<b>Key Vocabulary</b>	Addition, subtraction, word problems, adding to, taking from, putting together, taking apart, compare, unknowns, symbol, place value, mental math

<b>Unit Title</b>	<b>Part A-Addition and Subtraction to 100</b>	<b>Length of Unit</b>	4 weeks
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<b>Critical Content: My students will Know...</b>	<b>Key Skills: My students will be able to (Do)...</b>
<ul style="list-style-type: none"> <li>● Whole numbers can be added and subtracted with or without regrouping</li> <li>● In adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten</li> <li>● In subtracting two-digit numbers, one subtracts tens and tens, ones and ones; sometimes it is necessary to decompose a ten</li> <li>● Subtraction can be represented as an unknown addend addition problem</li> <li>● Recognize and interpret different situations for addition and subtraction</li> <li>● The equal sign means “is the same as” and does not always come before the sum or difference.</li> <li>● Sometimes it may be necessary to compose more than one ten</li> </ul>	<ul style="list-style-type: none"> <li>● Fluently add within 100 using concrete models, drawings, and strategies based on place value and the properties of operations</li> <li>● Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used</li> <li>● Link equations to concrete materials, drawings, and other representations of problem situations</li> <li>● Model and solve addition and subtraction stories</li> <li>● Justify the choice of and accuracy of a given addition or subtraction strategy</li> <li>● Add up to four two-digit numbers using strategies based on place value and properties of operations</li> </ul>

<b>Assessments:</b>	Performance task focused on composing and decomposing, unitizing, base ten patterns, and understanding addition and subtraction situations and strategies
<b>Teacher Resources:</b>	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.

<b>Unit Title</b>	<b>Part B-Addition and Subtraction to 1,000</b>	<b>Length of Unit</b>	3 weeks
<b>Inquiry Questions (Engaging &amp; Debatable)</b>	<ul style="list-style-type: none"> <li>• How can we relate the properties of addition and subtraction, including composing and decomposing tens or hundreds, to support addition and subtraction within 1,000?</li> <li>• How can we use different strategies to solve and explain addition and subtraction problems with unknowns in all positions?</li> <li>• How can we add multiple addends using strategies based on place value and properties of operations?</li> <li>• How can we relate different strategies used to solve addition and subtraction problems to a written method?</li> </ul>		
<b>Standards</b>	<b>Numbers and Base Ten Operations</b> 2.NBT.B6, 2.NBT.B7, 2.NBT.B8, 2.NBT.B9		
<b>Unit Strands &amp; Concepts</b>	<ul style="list-style-type: none"> <li>• Unitizing</li> <li>• Composing and decomposing</li> <li>• Base ten and place value patterns</li> <li>• Relationship between addition and subtraction</li> <li>• Meaning of the equal sign</li> <li>• Addition and subtraction strategies</li> <li>• Situations and contexts involving addition and subtraction</li> </ul>		
<b>Key Vocabulary</b>	Addition, subtraction, word problems, adding to, taking from, putting together, taking apart, compare, unknowns, symbol, place value, mental math, hundreds, tens, ones, compose, decompose.		

<b>Unit Title</b>	<b>Part B-Addition and Subtraction to 1,000</b>	<b>Length of Unit</b>	3 weeks
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<b>Critical Content:</b> My students will <b>Know</b> ...	<b>Key Skills:</b> My students will be able to <b>(Do)</b> ...
<ul style="list-style-type: none"> <li>● Whole numbers can be added and subtracted with or without regrouping</li> <li>● In adding and subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens and/or hundreds..</li> <li>● Subtraction can be represented as an unknown addend addition problem</li> <li>● Recognize and interpret different situations for addition and subtraction</li> <li>● The equal sign means “is the same as” and does not always come before the sum or difference.</li> <li>● Sometimes it may be necessary to compose or decompose more than one ten</li> </ul>	<ul style="list-style-type: none"> <li>● Add within 1000 using concrete models, drawings, and strategies based on place value and the properties of operations</li> <li>● Link equations to concrete materials, drawings, and other representations of problem situations</li> <li>● Model and solve addition and subtraction stories</li> <li>● Mentally add or subtract 10 or 100 from a given number 100-900</li> <li>● Justify the choice of and accuracy of a given addition or subtraction strategy</li> </ul>

<b>Assessments:</b>	Performance task focused on composing and decomposing, unitizing, base ten patterns, and understanding addition and subtraction situations and strategies.
<b>Teacher Resources:</b>	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.

<b>Unit Title</b>	<b>Measurement and Money</b>	<b>Length of Unit</b>	5 weeks
<b>Inquiry Questions (Engaging &amp; Debatable)</b>	<ul style="list-style-type: none"> <li>● How can we use different tools and units of measure to describe and compare different lengths?</li> <li>● How can we use addition and subtraction to solve word problems involving lengths that are given in the same units?</li> <li>● How are number lines related to length?</li> <li>● How can we use a student created number line diagram to solve addition and subtraction problems to 100?</li> <li>● How can we organize and display data in different ways to answer questions?</li> <li>● How do we solve problems including money?</li> </ul>		
<b>Unit Strands &amp; Standards</b>	<b>Measurement and Data</b> 2.MD.A1, 2.MD.A2, 2.MD.A3, 2.MD.A4, 2.MD.B5, 2.MD.B6, 2, 2.MD.C8, 2.MD.D9, 2.MD.D10		
<b>Concepts</b>	<ul style="list-style-type: none"> <li>● Direct and indirect comparison</li> <li>● Inverse relationship between size of a unit and number of units needed to cover a specific area</li> <li>● Representing and analyzing data</li> <li>● Continuous attributes of measurement</li> <li>● Accumulation of length</li> </ul>		
<b>Vocabulary</b>	Length, ruler, yardstick, meter stick, measuring tape, unit, estimate, inches, feet, centimeters, meters, number line, number line diagram, equally spaced points, data, line plot, horizontal scale, picture graph, bar graph, scale, dollar bill, quarter, dime, nickel, pennies, dollar (\$) and cent (¢) symbols		

<b>Unit Title</b>	<b>Measurement and Money</b>	<b>Length of Unit</b>	5 weeks
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<b>Critical Content: My students will Know...</b>	<b>Key Skills: My students will be able to (Do)...</b>
<ul style="list-style-type: none"> <li>• “One” represents the space from the beginning of the ruler to the hash mark, not the hash mark itself</li> <li>• Objects can be measured through both direct and indirect comparison</li> <li>• The size of the unit of measure must be considered when comparing lengths</li> <li>• The numerals on a ruler indicate the number of length units so far</li> <li>• Connect measurement with physical units</li> <li>• Concept of the inverse relationship between the size of the unit of length and the number of units required to cover a specific length or distance.</li> <li>• That a number line diagram is like a ruler in that consecutive whole numbers are 1 unit apart</li> </ul>	<ul style="list-style-type: none"> <li>• Measure length with a variety of tools, such as rulers, meter sticks, and measuring tapes</li> <li>• Measure an object twice using different lengths for the two measurements; describe how the two measurements relate to the size unit chosen</li> <li>• Measure to determine how much longer one object is than another</li> <li>• Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units</li> <li>• Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers</li> <li>• Estimate lengths using units of inches, feet, centimeters, and meters.</li> <li>• Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies</li> <li>• Display measurement data in a line plot</li> <li>• Draw a picture graph and bar graph (single unit scale) to represent data with up to four categories</li> <li>• Solve simple put-together, take-apart, and compare problems using information presented in a bar graph</li> </ul>

<b>Assessments:</b>	Performance task focused on measuring length using a variety of tools, solving contextualized problems involving length units and money, and analyzing and displaying data
<b>Teacher Resources:</b>	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.

<b>Unit Title</b>	<b>Exploring Early Multiplication and Division Models</b>	<b>Length of Unit</b>	4 weeks
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<b>Inquiry Questions (Engaging &amp; Debatable)</b>	<ul style="list-style-type: none"> <li>• How can we determine if a group has an odd or even number of members?</li> <li>• How can we use a rectangular array, and partition a rectangle into equal rows and columns of same size squares, to determine the total number of objects in a group?</li> <li>• How can we write equations to express an even number as a sum of two equal addends, and express the total number of objects in an array as the total sum of equal addends?</li> <li>• How can we partition and describe circles and rectangles into equal shares?</li> </ul>
<b>Unit Strands &amp; Standards</b>	<b>Operations and Algebraic Thinking</b> 2.OA.C3, 2.OA.C4, 2.GA.2, 2.GA.3
<b>Concepts</b>	<ul style="list-style-type: none"> <li>• Spatial structuring</li> <li>• Tiling</li> <li>• Composing and decomposing</li> <li>• Arithmetic patterns</li> </ul>
<b>Vocabulary</b>	Odd, even, pairs, equation, sum, addends, rectangular array, row, column, partition, equal shares, halves, thirds, half of, a third of, etc.



<b>Unit Title</b>	<b>Exploring Early Multiplication and Division Models</b>	<b>Length of Unit</b>	4 weeks
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<b>Critical Content:</b> My students will <b>Know</b> ...	<b>Key Skills:</b> My students will be able to <b>(Do)</b> ...
<ul style="list-style-type: none"> <li>● See an object such as a row in two ways: as a composite of multiple squares and as a single entity, a row (a unit of units).</li> <li>● Properties of odd and even numbers</li> <li>● Tiling involves covering a given area in same size square units without any overlaps</li> <li>● That equal shares of identical wholes need not have the same shape?</li> </ul>	<ul style="list-style-type: none"> <li>● Decompose shapes into regions that are congruent or have equal area</li> <li>● Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.</li> <li>● Determine whether a group of object has an odd or even number of members</li> <li>● Write equations to express even numbers as the sum of two equal addends</li> <li>● Use addition to find the total number of objects arranged in a rectangular array (up to 5 rows and 5 columns)</li> <li>● Write an equation to express the sum of equal addends represented in a rectangular array</li> </ul>

<b>Assessments:</b>	Performance assessment focused on decomposing and partitioning shapes, properties of odd and even numbers, and early multiplicative reasoning.
<b>Teacher Resources:</b>	MyMath, Engage NY, 3 Act Task Bank, CCSS aligned anchor tasks, Illustrative Mathematics, Georgia Department of Education CCSS aligned tasks, North Carolina Department of Instruction, CCSS aligned tasks.