

# GRADE 2

## First Trimester

	Common Core State Standard	Assessment	Resources	Vocabulary
	<p><b>Add and subtract within 20.</b></p> <p><a href="#">CCSS.Math.Content.2.OA.B.2</a></p> <p>Fluently add and subtract within 20 using mental strategies.<sup>2</sup> <b>By end of Grade 2, know from memory all sums and differences of two one-digit numbers.</b></p>	<p><b>Unit 1 Fact Strategies up to 20</b></p>	<p><b>Primary:</b> Eureka Math (formerly Engage NY) Module 1</p> <p><b>Supplement:</b>  <b>Daily Math Reinforcers - ADD2</b> - selected pages done as math warm-up  <b>Investigations Unit 1</b></p> <ul style="list-style-type: none"> <li>(the amount of Investigations will depend on how students come from first grade; go back to earlier lessons than indicated)</li> </ul>	<p>addends  count on  difference  expression  number sentence  sum  operation  "make 10"  "take from 10"  composition  decompose  recompose  precise  like units  number bond  "say 10" counting  Doubles  Doubles plus one</p>

			<ul style="list-style-type: none"> <li>• Include the Investigations sections on introducing time (Session 1.1) and money (Session 2.2 and 3) as part of math meeting to prepare for later in the yr.</li> <li>• Use first grade Investigations game “Tens Plus” from to correspond with EM lesson 4</li> <li>• As needed, include the Investigations games from the Investigations Student Math Handbook to reinforce fact knowledge (Teacher information found in Unit 1, Lessons 2.6, 3.2, 4.7)</li> <li>• Xtramath.com for fact practice</li> </ul>	
	<b>Represent and solve problems involving addition and subtraction.</b>	<b>Unit 1 Fact Strategies up to 20</b>	<b>Eureka Module 1 - particularly the application problems</b>	<b>Previous vocabulary</b>  <b>New Vocabulary</b>

	<p><b><u>CCSS.Math.Content.2.OA.A.1</u></b>  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, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.<sup>1</sup></p>		<p><b>Daily Math Reinforcers - ADD2</b></p> <p><b>Investigations Unit 1</b></p> <ul style="list-style-type: none"> <li>Lesson 2.1, 4.1, 4.3, 4.4, 4.6</li> </ul> <p><b>Supplement: OnCore Mathematics</b></p>	<p><b>Explain Solution</b>  <b>Solution sentence</b>  <b>RDW (Read, Draw, Write) Strategy</b></p>
	<p><b>Use place value understanding and properties of operations to add and subtract.</b></p> <p><b><u>CCSS.Math.Content.2.NBT.B.5</u></b>  Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</p>	<p><b>Unit 2 Place Value to 1,000</b></p>	<p><b>Engage NY Module 3</b></p>	
	<p><b><u>CCSS.Math.Content.2.NBT.B.9</u></b>  Explain why addition and subtraction strategies work, using place value and the properties of operations.<sup>1</sup></p>	<p><b>Unit 2 Place Value to 1,000</b></p>	<p><b>Engage NY Module 3</b></p>	<p><b>“turn around” fact</b></p>
	<p><b>Understand place value.</b></p> <p><b><u>CCSS.Math.Content.2.NBT.A.1</u></b>  Understand that the three digits of a</p>	<p><b>Unit 2 Place Value to 1,000</b></p>	<p><b>Engage NY Module 3</b></p> <p><b>OnCore Mathematics Lessons 19-33 as needed, but definitely</b></p>	

	three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones.		<b>Lessons 26, 30, 33</b>	
	Understand the following as special cases: <a href="#">CCSS.Math.Content.2.NBT.A.1.a</a> 100 can be thought of as a bundle of ten tens — called a "hundred."	<b>Unit 2 Place Value to 1,000</b>	<b>Engage NY Module 3</b>	
	<a href="#">CCSS.Math.Content.2.NBT.A.1.b</a> 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)	<b>Unit 2 Place Value to 1,000</b>	<b>Engage NY Module 3</b>	
	<a href="#">CCSS.Math.Content.2.NBT.A.2</a> Count within 1000; skip-count by 5s, 10s, and 100s.	<b>Unit 2 Place Value to 1,000</b>  <i>Note: check this</i>	<b>Engage NY Module 3</b>	
	<a href="#">CCSS.Math.Content.2.NBT.A.3</a> Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	<b>Unit 2 Place Value to 1,000</b>	<b>Engage NY Module 3</b>	
	<a href="#">CCSS.Math.Content.2.NBT.A.4</a> Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.	<b>Unit 2 Place Value to 1,000</b>	<b>Engage NY Module 3</b>	
	<a href="#">CCSS.Math.Content.2.NBT.B.6</a> Add up to four two-digit numbers using			

	strategies based on place value and properties of operations.			
	<i>Note: see how to can work in more of the ENY Module 2 - metric measurement - as a way of teaching base-10</i>			
	<p><b>Reason with shapes and their attributes.</b></p> <p><a href="#"><u>CCSS.Math.Content.2.G.A.1</u></a></p> <p>Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.</p> <p>Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.</p>	<b>Unit 3 Geometry</b>	<p><b>Engage NY Module 8, Topics A and B</b></p> <ul style="list-style-type: none"> <li>• Note the shapes mentioned in the standard. Engage NY goes beyond, which can be used to enrich.</li> <li>• At this point in the year, we do only quarters and halves with the analog clock</li> </ul> <p><b>Supplement with Investigations Unit 2: Lessons 1.1 (Quick Images), 2.1 (assessment is optional, but activity is important), 2.2</b></p>	<p><b>Angle</b></p> <p><b>Attributes</b></p> <p><b>Cube</b></p> <p><b>Face (a two-dimensional side of a three-dimensional shape)</b></p> <p><b>Parallel</b></p> <p><b>Parallelogram</b></p> <p><b>Pentagon</b></p> <p><b>Polygon</b></p> <p><b>Quadrilateral</b></p> <p><b>Right angle (e.g., a square corner)</b></p> <p><b>Tangrams</b></p> <p><b>Two-dimensional shapes - Circle, Half-circle, Hexagon</b></p> <p><b>Quarter-circle</b></p> <p><b>Rectangle, Rhombus, Square, Trapezoid, Triangle</b></p>

*Second Trimester*

	Common Core State Standard	Assessment	Resources	Vocabulary
	<p><b>Use place value understanding and properties of operations to add and subtract.</b></p> <p><a href="#">CCSS.Math.Content.2.NBT.B.5</a></p> <p>Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction</p>	<p><b>Unit 4 Fluency with Addition and Subtraction within 100</b></p>	<p><b>Engage NY Module 4 (do NOT use the sections on the algorithm)</b></p>	<p><b>Compose</b> (e.g., to make 1 larger unit from 10 smaller units)</p> <p><b>Decompose</b> (e.g., to break 1 larger unit into 10 smaller units)</p> <p><b>Equation</b> (two expressions with an equal sign between them; that is, an equation is a statement that two expressions are equal; however, there is no guarantee that the statement is true)</p> <p><b>Simplifying strategy</b> (e.g., to solve <math>299 + 6</math>, think <math>299 + 1 + 5 = 300 + 5 = 305</math>)</p> <p><b>"Totals below"</b></p>

	<p><b><a href="#">CCSS.Math.Content.2.NBT.B.6</a></b> Add up to four two-digit numbers using strategies based on place value and properties of operations.</p>	Unit 4 Fluency with Addition and Subtraction within 100		
	<p><b>Represent and solve problems involving addition and subtraction.</b> <b><a href="#">CCSS.Math.Content.2.OA.A.1</a></b> 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, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.<sup>1</sup></p>	Unit 4 Fluency with Addition and Subtraction within 100		
	<p><b><a href="#">CCSS.Math.Content.2.MD.B.6</a></b> Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.</p>	Unit 4 Fluency with Addition and Subtraction within 100		
	<p><b>Measure and estimate lengths in standard units.</b> <b><a href="#">CCSS.Math.Content.2.MD.A.1</a></b> Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and</p>	Unit 5 Measurement with Standard Units	Engage NY Modules 2 and 7 Investigations Unit 9	

	measuring tapes.			
	<a href="#">CCSS.Math.Content.2.MD.A.2</a> Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	<b>Unit 5 Measurement with Standard Units</b>	<b>Engage NY Modules 2 and 7 Investigations Unit 9</b>	
	<a href="#">CCSS.Math.Content.2.MD.A.3</a> Estimate lengths using units of inches, feet, centimeters, and meters	<b>Unit 5 Measurement with Standard Units</b>	<b>Engage NY Module 7 Investigations Unit 9</b>	
	<a href="#">CCSS.Math.Content.2.MD.A.4</a> Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	<b>Unit 5 Measurement with Standard Units</b>	<b>Engage NY Module 7 Investigations Unit 9</b>	
	<b>Relate addition and subtraction to length.</b> <a href="#">CCSS.Math.Content.2.MD.B.6</a> Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	<b>Unit 5 Measurement with Standard Units</b>	<b>Engage NY Module 7 Investigations Unit 9</b>	



*Third Trimester*

	Common Core State Standard	Assessment	Resources	Vocabulary
	<a href="#"><u>CCSS.Math.Content.2.NBT.B.8</u></a> Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.	Unit 6 Addition and Subtraction within 1000	Engage NY Module 5	
	<a href="#"><u>CCSS.Math.Content.2.NBT.B.7</u></a> Add and subtract within 1000, 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. Understand that in adding or 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 or hundreds.	Unit 6 Addition and Subtraction within 1000	Engage NY Module 5	
	<a href="#"><u>CCSS.Math.Content.2.NBT.B.9</u></a> Explain why addition and subtraction strategies work, using place value and the properties of operations. <sup>1</sup>	Unit 6 Addition and Subtraction within 1000	Engage NY Module 5	

	<p><b><u>CCSS.Math.Content.2.MD.C.8</u></b></p> <p>Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?</p>	<b>Unit 7 Money</b>	<p><b>Engage NY Module 7, Topic B</b></p> <p><b>(Money work should have been on-going throughout year in math meetings and through a classroom store. This time period should emphasize word problems)</b></p>	<p><b>\$ and ¢ symbols</b></p> <p><b>Penny</b></p> <p><b>Nickel</b></p> <p><b>Dime</b></p> <p><b>Quarter</b></p> <p><b>Half-dollar</b></p> <p><b>Amount combination making change value</b></p>
	<p><b>Work with time and money.</b></p> <p><b><u>CCSS.Math.Content.2.MD.C.7</u></b></p> <p>Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p>	<b>Unit 8 Time</b>	<p><b>Engage NY Module 8, Topic D, Lessons 14-15</b></p> <ul style="list-style-type: none"> <li>• <b>Groundwork should have been laid in previous math meetings and fraction units</b></li> <li>• <b>Use elapsed time only as an extension</b></li> </ul>	<p><b>Analog</b></p> <p><b>Digital</b></p> <p><b>a.m./p.m.</b></p> <p><b><i>Eclipse (optional)</i></b></p> <p><b>Halves</b></p> <p><b>Half-past</b></p> <p><b>Hour</b></p> <p><b>Minute</b></p> <p><b>O'clock</b></p> <p><b>Quarter</b></p> <p><b>Quarter past</b></p> <p><b>Quarter to ('til)</b></p>
	<p><b><u>CCSS.Math.Content.2.MD.B.5</u></b></p> <p>Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown</p>	<b>Unit 9 Representing, Analyzing, and Interpreting Data</b>	<b>Engage NY Module Topics</b>	

	number to represent the problem			
	<a href="#">CCSS.Math.Content.2.MD.B.6</a> Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	Unit 9 Representing, Analyzing, and Interpreting Data		
	<b>Represent and interpret data.</b> <a href="#">CCSS.Math.Content.2.MD.D.9</a> Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	Unit 9 Representing, Analyzing, and Interpreting Data	Engage NY Module 7  Investigations Unit 4, page 23	
	<b>Represent and interpret data</b> <a href="#">CCSS.Math.Content.2.MD.D.10</a> Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	Unit 9 Representing, Analyzing, and Interpreting Data	Investigations Unit 4, pages 18A, 18B, 35	Bar graph Category Data Degree Legend <i>Line plot (extension)</i> Picture graph Scale Survey Symbol table
	<a href="#">CCSS.Math.Content.2.G.A.2</a>	Unit 10 Multiplication	Engage NY Module	

	Partition a rectangle into rows and columns of same-size squares and count to find the total number of them. Work with equal groups of objects to gain foundations for multiplication.	<b>and Division Readiness</b>	<b>Investigations Unit 2, pages 17-21A, 22-26</b>	
	<a href="#"><u>CCSS.Math.Content.2.OA.C.3</u></a> Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	<b>Unit 10 Multiplication and Division Readiness</b>	<b>Investigations Unit 2, pages 12, 27- 28D; Unit 3, pages 42-43, 45-48, 50-52; Unit 9, pages 1-11, 13-15, 60-61</b>	
	<a href="#"><u>CCSS.Math.Content.2.OA.C.4</u></a> Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	<b>Unit 10 Multiplication and Division Readiness</b>		
	<a href="#"><u>CCSS.Math.Content.2.NBT.A.2</u></a> Count within 1000; skip-count by 5s, 10s, and 100s.	<b>Unit 10 Multiplication and Division Readiness</b>		