

**2021.2022, Third Grade, Mathematics**

<p><b>Ongoing Mathematical Practices:</b></p> <ol style="list-style-type: none"><li>1. Make sense of problems and persevere in solving them.</li><li>2. Reason abstractly and quantitatively.</li><li>3. Construct viable arguments and critique the reasoning of others.</li><li>4. Model with mathematics.</li><li>5. Use appropriate tools strategically.</li><li>6. Attend to precision.</li><li>7. Look for and make use of structure.</li><li>8. Look for and express regularity in repeated reasoning.</li></ol>	<p><b>Effective Teaching Practices</b></p> <ol style="list-style-type: none"><li>1. Establish mathematics goals to focus learning.</li><li>2. Implement tasks that promote reasoning and problem solving</li><li>3. Use and connect mathematical representations.</li><li>4. Facilitate meaningful mathematical discourse.</li><li>5. Pose purposeful questions.</li><li>6. Build procedural fluency from conceptual understanding.</li><li>7. Support productive struggle in learning mathematics.</li><li>8. Elicit and use evidence of student thinking.</li></ol>
<p><b>Ongoing fluency expectations:</b></p> <p>*3.OA.C.7 Multiply/divide within 100. (By end of 3rd grade, know from memory all products of two one-digit numbers and related division facts.)</p> <p>* 3.NBT.A.2 Add/subtract within 1,000.</p>	<p><b>Ongoing resources</b></p> <p><i>student journals</i></p> <p><u>Number Talks</u></p> <p>Online Resources: <a href="#">Xtramath</a> and Freckle Ed</p>
<p><b>Literacy Skills for Mathematical Proficiency:</b></p> <ol style="list-style-type: none"><li>1. Use multiple reading strategies.</li><li>2. Understand and use correct mathematical vocabulary.</li><li>3. Discuss and articulate mathematical ideas.</li><li>4. Write mathematical arguments.</li></ol>	<p><b>Go Math</b></p> <p>Q1 chapters 1- 4 through mid-chapter ✓</p> <p>Q2 chapter 4 cont. after mid chapter ✓- chapter 7</p> <p>Q3 chapters 8 - 11 <b>High Stakes Test Prep wb by request</b></p> <p>Q4 chapter 12 (TNSS 3.G.3 embedded in 3.G.1)</p> <p><b>Getting Ready for Grade 4 (Planning Guide online)</b></p>

2021.22, Third Grade, Mathematics, Quarter 1

Content Standards	Student Friendly "I Can" Statements
<p>3.WCE.M.1 Recall basic multiplication facts through 10 times 10 along with the related division facts, by end of year.</p>	<p><b>I can</b> recall multiplication facts through 10 x 10 and relate them to division.</p>
<p><b>3.OA.D.9</b> Identify arithmetic patterns (including patterns in the addition and multiplication tables) and explain them using properties of operations. For example, analyze patterns in the multiplication table and observe that 4 times a number is always even (because <math>4 \times 6 = (2 \times 2) \times 6 = 2 \times (2 \times 6)</math>, which uses the associative property of multiplication). (Q1, Q2) (See Table 3 - Properties of Operations).</p>	<p><b>I can</b> identify and describe arithmetic patterns in number charts, charts, addition tables, and multiplication tables.  <b>I can</b> analyze and explain arithmetic patterns using properties of operations.  <b>I can</b> explain why an even number times any number is always even. (For example, I Can explain why 4 times a number is always even and why 4 can be decomposed into two equal addends.)</p>
<p><b>3.NBT.A.1</b> Use place value understanding to round whole numbers to the nearest 10 or 100.</p>	<p><b>I can</b> use place value understanding to round whole numbers to the nearest 10 and 100.</p>
<p><b>*3.NBT.A.2</b> Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	<p><b>I can</b> fluently add and subtract within 1000 using an algorithm and strategy based on place value.  <b>I can</b> write an equation to show the relationship between addition and subtraction.  <b>I can</b> use strategies (such as applying the commutative or associative property, adding on, using an <b>open number line</b>, drawing models, decomposing, <b>compensation</b>, etc.) for adding and subtracting within 1,000 with ease.</p>
<p><b>3.OA.D.8</b> Solve two-step contextual problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (Q1, Q2) (See Table 1 - Addition and Subtraction Situations and</p>	<p><b>I can</b> solve two-step real-world problems involving both addition/subtraction and multiplication/division situations with unknowns in a variety of positions.  <b>I can</b> represent an equation using a letter or symbol for the unknown quantity.  <b>I can</b> decide if my answers are reasonable using mental math and estimation strategies including rounding.</p>

Content Standards	Student Friendly “I Can” Statements
<p><i>Table 2 - Multiplication and Division Situations.)</i>            (This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order, i.e., Order of Operations.)</p>	
<p><b>3.MD.B.3</b> Draw a scaled pictograph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled graphs.</p>	<p><b>I can</b> read, draw, and interpret scaled bar graphs and picture graphs in order to solve one- and two-step “how many more” and “how many less” problems.  <b>I can</b> choose a proper scale for a bar graph or picture graph, with several categories.  <b>I can</b> create a scaled picture graph or bar graph with several categories to represent data (e.g., one square in a bar graph or one picture might represent 5 objects).</p>
<p><b>3.MD.B.4</b> <i>Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units: whole numbers, halves, or quarters. (Q1, Q3)</i></p>	<p><b>I can</b> use a ruler to measure lengths in whole, half, and quarter (fourth) inches.  <b>I can</b> generate and record measurement data using whole, half, and quarter (fourth) inches.  <b>I can</b> create a line plot with a horizontal scale marked off in whole, half, or quarter (fourth) units.</p>
<p><b>3.OA.A.1</b> Interpret the factors and products in whole number multiplication equations (e.g., <math>4 \times 7</math> is 4 groups of 7 objects with a total of 28 objects or 4 strings measuring 7 inches each with a total of 28 inches).</p>	<p><b>I can</b> illustrate products of whole numbers in relations to factors (e.g., <math>35 = 5 \times 7</math> can be interpreted as 5 groups of 7, an array with 5 rows and 7 columns, the area of a 5-by-7 rectangle, 5 rows of 7 objects).  <b>I can</b> multiply to find the product of two single digit whole numbers.  <b>I can</b> recognize multiplication as repeated addition.  <b>I can</b> use skip counting as a strategy to find a product of two factors.  <b>I can</b> interpret the factors and product in a given whole number equation within 100 using the math language of groups and objects in real world situations.</p>
<p><b>3.OA.A.3</b> <i>Multiply and divide within 100 to solve contextual problems, with unknowns in all positions, in situations involving equal groups, arrays, and</i></p>	<p><b>I can</b> represent multiplication and division word problems using drawings, concrete models, and equations with unknowns in all positions.</p>

Content Standards	Student Friendly “I Can” Statements
<p><i>measurement quantities using strategies based on place value, the properties of operations, and the relationship between multiplication and division (e.g., contexts including computations such as <math>3 \times ? = 24</math>, <math>6 \times 16 = ?</math>, <math>? \div 8 = 3</math>, or <math>96 \div 6 = ?</math>) (Q1, Q2) (See Table 2 - Multiplication and Division Situations).</i></p>	<p><b>I can</b> determine when to multiply and divide in one -step word problems.  <b>I can</b> solve word problems involving equal groups, arrays, using drawings and equations...with a symbol for the unknown number to represent the problem.</p>
<p><b>3.OA.B.5</b> Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) Examples: If <math>6 \times 4 = 24</math> is known, then <math>4 \times 6 = 24</math> is also known (Commutative property of multiplication). <math>3 \times 5 \times 2</math> can be solved by <math>(3 \times 5) \times 2</math> or <math>3 \times (5 \times 2)</math> (Associative property of multiplication). One way to find <math>8 \times 7</math> is by using <math>8 \times (5 + 2) = (8 \times 5) + (8 \times 2)</math>. By knowing that <math>8 \times 5 = 40</math> and <math>8 \times 2 = 16</math>, then <math>8 \times 7 = 40 + 16 = 56</math> (Distributive property of multiplication over addition). (Q1, Q2)</p>	<p><b>I can</b> distinguish between the properties of multiplication.  <b>I can</b> apply the properties of multiplication to solve problems more efficiently.  <b>I can</b> justify my thinking using algebraic properties as proof.  <b>I can</b> explain the commutative, associative, and distributive property of multiplication.  <b>I can</b> apply the commutative, associative, and distributive properties to decompose, regroup, and/or reorder factors to make it easier to multiply two or more factors.</p>
<p><b>*3.OA.C.7</b> Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. By the end of 3rd grade, know from memory all products of two one-digit numbers and related division facts. (Q1, Q2)</p>	<p><b>I can</b> use concrete models, drawings, and equations to solve multiplication and division problems.  <b>I can</b> multiply any two numbers with a product within 100 with ease by choosing strategies that will get to the answer quickly.  <b>I can</b> divide whole numbers with a dividend within 100 by a single-digit divisor without remainders.  <b>I can</b> fluently and accurately express multiplication facts through 10 x 10 and relate them to division.  <b>I can</b> recall from memory the product of any two one-digit numbers and their related division facts.</p>

2021.22, Third Grade, Mathematics, Quarter 2

Content Standards	Student Friendly “I Can” Statements
<p>3.WCE.M.2 Read, write, and compare whole numbers to millions. (Q2, Q4)</p>	<p><b>I can</b> recognize, write, compare, and use whole numbers to millions.</p>
<p><b>3.OA.D.9</b> Identify arithmetic patterns (including patterns in the addition and multiplication tables) and explain them using properties of operations. For example, analyze patterns in the multiplication table and observe that 4 times a number is always even (because <math>4 \times 6 = (2 \times 2) \times 6 = 2 \times (2 \times 6)</math>, which uses the associative property of multiplication). (Q1, Q2) (See Table 3 - Properties of Operations).</p>	<p><b>I can</b> identify and describe arithmetic patterns in number charts, charts, addition tables, and multiplication tables.  <b>I can</b> analyze and explain arithmetic patterns using properties of operations.  <b>I can</b> explain why an even number times any number is always even. (For example, I Can explain why 4 times a number is always even and why 4 can be decomposed into two equal addends.)</p>
<p><b>*3.OA.C.7</b> Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. By the end of 3rd grade, know from memory all products of two one-digit numbers and related division facts. (Q1, Q2)</p>	<p><b>I can</b> use concrete models, drawings, and equations to solve multiplication and division problems.  <b>I can</b> multiply any two numbers with a product within 100 with ease by choosing strategies that will get to the answer quickly.  <b>I can</b> divide whole numbers with a dividend within 100 by a single-digit divisor without remainders.  <b>I can</b> fluently and accurately express multiplication facts through <math>10 \times 10</math> and relate them to division.  <b>I can</b> recall from memory the product of any two one-digit numbers and their related division facts.</p>
<p><b>3.OA.B.5</b> Apply properties of operations as strategies to multiply and divide. (Students need not use formal terms for these properties.) Examples: If <math>6 \times 4 = 24</math> is known, then <math>4 \times 6 = 24</math> is also known (Commutative property of multiplication). <math>3 \times 5 \times 2</math> can be solved by <math>(3 \times 5) \times 2</math> or <math>3 \times (5 \times 2)</math> (Associative property of multiplication). One way to find <math>8 \times 7</math> is by using <math>8 \times (5 + 2) = (8 \times 5) + (8 \times 2)</math>. By knowing that <math>8 \times 5 = 40</math> and <math>8 \times 2 = 16</math>, then <math>8 \times 7 = 40 + 16 = 56</math> (Distributive property of multiplication over addition). (Q1, Q2)</p>	<p><b>I can</b> distinguish between the properties of multiplication.  <b>I can</b> apply the properties of multiplication to solve problems more efficiently.  <b>I can</b> justify my thinking using algebraic properties as proof.  <b>I can</b> explain the commutative, associative, and distributive property of multiplication.</p>

Content Standards	Student Friendly “I Can” Statements
	<p><b>I can</b> apply the commutative, associative, and distributive properties to decompose, regroup, and/or reorder factors to make it easier to multiply two or more factors.</p>
<p><b>3.OA.D.8</b> Solve two-step contextual problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. (Q1, Q2) (See Table 1 - Addition and Subtraction Situations and Table 2 - Multiplication and Division Situations.) (This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order, i.e., Order of Operations.)</p>	<p><b>I can</b> solve two-step real-world problems involving both addition/subtraction and multiplication/division situations with unknowns in a variety of positions. <b>I can</b> represent an equation using a letter or symbol for the unknown quantity. <b>I can</b> decide if my answers are reasonable using mental math and estimation strategies including rounding.</p>
<p><b>3.OA.A.4</b> Determine the unknown whole number in a multiplication or division equation relating three whole numbers within 100. For example, determine the unknown number that makes the equation true in each of the equations: <math>8 \times ? = 48</math>, <math>5 = ? \div 3</math>, <math>6 \times 6 = ?</math></p>	<p><b>I can</b> solve equations by finding the missing factor, product, divisor, dividend, or quotient. <b>I can</b> generate the unknown number, no matter its position, in multiplication and division equations.</p>
<p><b>3.NBT.A.3</b> Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., <math>9 \times 80</math>, <math>5 \times 60</math>) using strategies based on place value and properties of operations.</p>	<p><b>I can</b> multiply one-digit numbers by 10. <b>I can</b> use place value strategies to multiply one-digit numbers by multiples of 10.</p>
<p><b>3.OA.A.3</b> Multiply and divide within 100 to solve contextual problems, with unknowns in all positions, in situations involving equal groups, arrays, and measurement quantities using strategies based on place value, the properties of operations, and the relationship between multiplication and division (e.g., contexts including computations such as <math>3 \times ? = 24</math>, <math>6 \times 16 = ?</math>, <math>? \div 8 = 3</math>, or <math>96 \div 6 = ?</math>) (Q1, Q2) (See Table 2 - Multiplication and Division Situations).</p>	<p><b>I can</b> represent multiplication and division word problems using drawings, concrete models, and equations with unknowns in all positions. <b>I can</b> determine when to multiply and divide in one-step word problems. <b>I can</b> solve word problems involving equal groups, arrays, using drawings and equations...with a symbol for the unknown number to represent the problem.</p>

Content Standards	Student Friendly “I Can” Statements
<p><b>3.OA.A.2</b> Interpret the dividend, divisor, and quotient in whole number division equations (<i>e.g., <math>28 \div 7</math> can be interpreted as 28 objects divided into 7 equal groups with 4 objects in each group or 28 objects divided so there are 7 objects in each of the 4 equal groups</i>).</p>	<p><b>I can</b> explain and draw division as a set of objects partitioned into an equal number of shares or groups.</p> <p><b>I can</b> describe a context in which a number of shares or a number of groups can be expressed by dividing or as division.</p> <p><b>I can</b> identify parts of division equations (dividend, divisor, and quotient).</p> <p><b>I can</b> illustrate quotients in relation to divisors and dividends (<i>e.g. <math>56 \div 8 = 7</math> can be interpreted as 56 objects divided into 8 equal groups or 56 objects divided so there are 8 in each group</i>) as in bar modeling.</p> <p><b>I can</b> describe the inverse relationship between multiplication and division.</p>
<p><b>3.OA.B.6</b> Understand division as an unknown-factor problem. <i>For example, find <math>32 \div 8</math> by finding the number that makes 32 when multiplied by 8.</i></p>	<p><b>I can</b> change a division problem into a multiplication problem with an unknown factor.</p> <p><b>I can</b> use multiplication to solve division problems.</p> <p><b>I can</b> recognize and explain the relationship between multiplication and division.</p>
<p><b>3.WCE.M.3</b> Solve problems that involve the inverse relationship between multiplication and division. (Q2, Q4)</p>	<p><b>I can</b> contextualize problems using the relationship between multiplication and division as a strategy.</p>

2021.22, Third Grade, Mathematics, Quarter 3

Content Standards	Student Friendly "I Can" Statements
<p><b>3.NF.A.1</b> Understand a fraction <math>\frac{1}{b}</math> as the quantity formed by 1 part when a whole is partitioned into <math>b</math> equal parts (unit fraction); understand a fraction <math>\frac{a}{b}</math> as the quantity formed by <math>a</math> parts of size <math>\frac{1}{b}</math>. For example, <math>\frac{3}{4}</math> represents a quantity formed by 3 parts of size <math>\frac{1}{4}</math>.</p>	<p><b>I can</b> explain any unit fraction <math>\frac{1}{b}</math> as 1 part of a whole.</p> <p><b>I can</b> explain any fraction <math>\frac{a}{b}</math> as "<math>a</math>" (numerator) representing the number of parts and "<math>b</math>" (denominator) representing the total number of equal parts in the whole; for example, <math>\frac{3}{4}</math> represents a quantity formed by 3 parts of size <math>\frac{1}{4}</math>.</p> <p><i>* Limit denominators of fractions in this cluster to 2, 3, 4, 6, and 8.</i></p>
<p>3.WCE.M.4 Recognize and use different models of fractions by matching the spoken, written, concrete, and pictorial representations of fractions with denominators up to tenths.</p>	<p><b>I can</b> represent fractions with denominators up to ten using various models including number lines, pictures, sets, circles, and unit bars. (The denominator of 100 could be added as an extension.)</p>
<p><b>3.NF.A.2</b> Understand a fraction as a number on the number line. Represent fractions on a number line.</p> <p><b>a.</b> Represent a fraction <math>\frac{1}{b}</math> on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into <math>b</math> equal parts. Recognize that each part has size <math>\frac{1}{b}</math> and that the endpoint locates the number <math>\frac{1}{b}</math> on the number line.</p> <p><i>For example, on a number line from 0 to 1, students can partition it into 4 equal parts and recognize that each part represents a length of <math>\frac{1}{4}</math> and the first part has an endpoint at <math>\frac{1}{4}</math> on the number line.</i></p> <p><b>b.</b> Represent a fraction <math>\frac{a}{b}</math> on a number line diagram by marking off <math>a</math> lengths <math>\frac{1}{b}</math> from 0. Recognize that the resulting interval has size <math>\frac{a}{b}</math> and that its endpoint locates the number <math>\frac{a}{b}</math> on the number line.</p> <p><i>For example <math>\frac{5}{3}</math> is the distance from 0 when there are 5 iterations of <math>\frac{1}{3}</math>.</i></p>	<p><b>I can</b> explain and show how <math>\frac{1}{b}</math> can be represented on a number line as a number that is located a distance of <math>\frac{1}{b}</math> between 0 and 1.</p> <p><b>I can</b> explain and show how <math>\frac{1}{b}</math> can be represented on a number line as the size of each part when a whole is partitioned into <math>b</math> equal groups.</p> <p><b>I can</b> represent a unit fraction <math>\frac{1}{b}</math> on a number line between 0 and 1 by creating a number line with the appropriate number of tick marks and spaces between 0 and 1.</p> <p><b>I can</b> represent any fraction <math>\frac{a}{b}</math> on a number line.</p>

Content Standards	Student Friendly “I Can” Statements
<p>3.WCE.M.5 Determine if fractions in various contexts are less than, equal to, or greater than one.</p>	<p><b>I can</b> identify various representations of fractions (oral, written, and concrete representations.)</p> <p><b>I can</b> compare fractions.</p>
<p>3.WCE.M.6 Recognize, compare, and order fractions with common numerators or common denominators.</p>	<p><b>I can</b> order fractions from least to greatest or from greatest to least.</p> <p><b>I can</b> use the benchmark fractions of half or relate to one whole to make comparisons between given fractions.</p>
<p><b>3.NF.A.3</b> Explain equivalence of fractions and compare fractions by reasoning about their size.</p> <p><b>a.</b> Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line.</p> <p><b>b.</b> Recognize and generate simple equivalent fractions (e.g. <math>\frac{1}{2} = \frac{2}{4}</math>) and explain why the fractions are equivalent using a visual fraction model.</p> <p><b>c.</b> Express whole numbers as fractions and recognize fractions that are equivalent to whole numbers. For example, express 3 in the form <math>3 = \frac{3}{1}</math>; recognize that <math>\frac{6}{1} = 6</math>; locate <math>\frac{4}{4}</math> and 1 at the same point on a number line diagram.</p> <p><b>d.</b> Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Use the symbols <math>&gt;</math>, <math>=</math>, or <math>&lt;</math> to show the relationship and justify the conclusions.</p>	<p><b>I can</b> use models to show and explain equivalent fractions with denominators of 2, 3, 4, 6, and 8.</p> <p><b>I can</b> locate equivalent fractions on a number line.</p> <p><b>I can</b> determine that two fractions are equivalent when they are the same size or at the same point on a number line.</p> <p><b>I can</b> use different visual fraction models to compare fractions.</p> <p><b>I can</b> create equivalent fractions and represent them with pictures and models.</p> <p><b>I can</b> use models to show and explain whole numbers as fractions.</p> <p><b>I can</b> locate whole numbers as fractions on a number line.</p> <p><b>I can</b> use models to compare two fractions and record the comparison using <math>&gt;</math>, <math>&lt;</math>, or <math>=</math>.</p> <p><b>I can</b> explain how the size of equal parts can be used to compare two fractions with the same numerator.</p> <p><b>I can</b> use visual models to name fractions as less than, equal to, or greater than one.</p>

Content Standards	Student Friendly “I Can” Statements
<p>3.WCE.M.7 Memorize calendar units of time; 1 year = 365 days, 1 year = 12 months, 1 year = 52 weeks, 1 week = 7 days, 1 month is approximately 4 weeks, and 1 day = 24 hours.</p>	<p><b>I can</b> convert from memory units of time.  1 year = 12 months  1 year = 365 days  1 year = 52 weeks  1 week = 7 days  1 month is about (<math>\approx</math>) 4 weeks  1 day = 24 hours</p>
<p><b>3.MD.A.1</b> Tell and write time to the nearest minute and measure time intervals in minutes. Solve contextual problems involving addition and subtraction of time intervals in minutes. <i>For example, students may use a number line to determine the difference between the start time and the end time of lunch.</i></p>	<p><b>I can</b> say and write time to the nearest minute.  <b>I can</b> measure duration of time in minutes.  <b>I can</b> create and solve addition and subtraction word problems involving intervals of time measured in minutes (elapsed time). <i>Students may use a number line to determine the difference between the start time and the end time of lunch.</i></p>
<p><b>3.MD.B.4</b> Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units: whole numbers, halves, or quarters. (Q1, Q3)</p>	<p><b>I can</b> use a ruler to measure lengths in whole, half, and quarter (fourth) inches.  <b>I can</b> gather and record measurement data using whole, half, and quarter (fourth) inches.  <b>I can</b> create a line plot with a horizontal scale marked off in whole, half, or quarter (fourth) units.</p>
<p><b>3.MD.A.2</b> Measure the mass of objects and liquid volume using standard units of grams (g), kilograms (kg), milliliters (ml), and liters (l). Estimate the mass of objects and liquid volume using benchmarks. <i>For example, a large paper clip is about one gram, so a box of about 100 large clips is about 100 grams.</i></p>	<p><b>I can</b> estimate prior to measuring.  <b>I can</b> measure liquid volumes and masses of objects using standard units of measure.  <b>I can</b> use the four operations to solve one- and two-step word problems involving masses and volume.  <b>I can</b> use drawings to represent one- and two-step word problems involving mass and volumes.</p>

Content Standards	Student Friendly “I Can” Statements
<p>3.WCE.M.8 Choose reasonable units of measure, estimate common measurements using benchmarks, and use appropriate tools to make measurements.</p>	<p><b>I can</b> choose the correct unit of measurement for a given problem solving situation.</p> <p><b>I can</b> choose appropriate tools with which to measure (e.g., cm and in. ruler, meter and yardstick, scale, graduated cylinders, etc.)</p>
<p><b>3.MD.C.5</b> Recognize that plane figures have an area and understand concepts of area measurement.</p> <p><b>a.</b> Understand that a square with side length 1 unit, called "a unit square," is said to have "one square unit" of area and can be used to measure area.</p> <p><b>b.</b> Understand that a plane figure which can be covered without gaps or overlaps by <math>n</math> unit squares is said to have an area of <math>n</math> square units.</p>	<p><b>I can</b> define a unit square.</p> <p><b>I can</b> describe area as the measure of space within a plane figure and explain why area is measured in square units.</p> <p><b>I can</b> explain why we use squares to measure area.</p> <p><b>I can</b> explain why measuring area and length are different.</p>
<p><b>3.MD.C.6</b> Measure areas by counting unit squares (square centimeters, square meters, square inches, square feet, and improvised units).</p>	<p><b>I can</b> determine the measure of the area of a plane figure by covering it with square units - with no gaps or overlaps- and counting the number of unit squares used.</p> <p><b>I can</b> represent the area of a plane figure as “<math>n</math>” square units (<i>not units squared</i>).</p>
<p><b>3.MD.C.7</b> Relate area of rectangles to the operations of multiplication and addition.</p> <p><b>a.</b> Find the area of a rectangle with whole-number side lengths by tiling it and show that the area is the same as would be found by multiplying the side lengths.</p> <p><b>b.</b> Multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real-world and mathematical problems and represent whole-number products as rectangular areas in mathematical reasoning.</p>	<p><b>I can</b> use tiles to find the area of rectangles.</p> <p><b>I can</b> explain the relationship between tiling and multiplying side lengths to find the area of rectangles.</p> <p><b>I can</b> multiply adjacent side lengths of rectangles to solve word problems.</p> <p><b>I can</b> use area models to explain the distributive property.</p> <p><b>I can</b> decompose an irregular figure into non- overlapping rectangles and calculate the partial areas of each.</p> <p><b>I can</b> explain area as additive and use this understanding to solve word problems.</p>

Content Standards	Student Friendly “I Can” Statements
<p><b>c.</b> Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths <math>a</math> and <math>b+c</math> is the sum of <math>a \times b</math> and <math>a \times c</math>. Use area models to represent the distributive property in mathematical reasoning. <i>For example, in a rectangle with dimensions 4 by 6, students can decompose the rectangle into <math>4 \times 3</math> and <math>4 \times 3</math> to find the total area of <math>4 \times 6</math>. (See Table 3 - Properties of Operations)</i></p> <p><b>d.</b> Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real-world problems.</p>	
<p><b>3.MD.D.8</b> Solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters. (Q3)</p>	<p><b>I can</b> calculate the perimeter of shapes made from polygons in real-world problems and mathematical problems.</p> <p><b>I can</b> calculate the perimeter of a polygon with a missing side length.</p> <p><b>I can</b> construct shapes with different areas given the same perimeter.</p> <p><b>I can</b> construct shapes with different perimeters given the same area.</p>

2021.22, Third Grade, Mathematics, Quarter 4

Content Standards	Student Friendly “I Can” Statements
3.WCE.M.9 Recognize the relationships among cups, pints, quarts, and gallons.	<p><b>I can</b> convert standard measurements of volume.</p> <p>1 cup = 8 fluid ounces            1 pint = 2 cups            1 quart = 2 pints            1 gallon = 4 quarts</p>
<p><b>3.G.A.1</b> Understand that shapes in different categories may share attributes and that the shared attributes can define a larger category. Recognize rhombuses, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories.</p>	<p><b>I can</b> identify and define quadrilaterals (rhombuses, rectangles, and squares) based on their attributes.</p> <p><b>I can</b> describe, analyze, and compare properties of two quadrilaterals.</p> <p><b>I can</b> compare and classify (group) shapes by attributes, sides, and vertices.</p> <p><b>I can</b> draw quadrilaterals with specific attributes.</p>
<p><b>3.G.A.2</b> Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. <i>For example, partition a shape into 4 parts with equal area and describe the area of each part as 1/4 of the area of the shape.</i></p>	<p><b>I can</b> partition (divide) shapes into equal parts with equal areas and express the area of one part as a unit fraction (with denominators of 2, 3, 4, 6, or 8) of the whole.</p> <p><b>I can</b> explain any unit fraction (1/b) as one part of a whole divided into b equal parts (e.g., <math>\frac{1}{2}</math>, <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{6}</math>, <math>\frac{1}{8}</math>).</p>
<p><b>3.G.A.3 TNSSM</b> Determine if a figure is a polygon.</p>	<p><b>I can</b> determine if a figure is a polygon.</p> <p><b>I can</b> draw examples of polygons.</p>
<p>3.WCE.M.2 <i>Read, write, and compare whole numbers to millions. (Q2, Q4)</i></p>	<p><b>I can</b> recognize, write, compare, and use whole numbers to millions.</p>
<p>3.WCE.M.10 Identify the place value of numbers in the tenths and hundredths positions.</p>	<p><b>I can</b> identify the place value of numbers in the tenths and hundredths positions.</p>
<p>3.WCE.M.3 <i>Solve problems that involve the inverse relationship between multiplication and division. (Q2, Q4)</i></p>	<p><b>I can</b> contextualize problems using the relationship between multiplication and division as a strategy.</p>

Content Standards	Student Friendly “I Can” Statements
3.WCE.M.11 Determine the correct change from a transaction up to a dollar.	<b>I can</b> apply strategies to accurately determine and count the correct change from a transaction of a dollar or less.

[Embedded K-8 TN Computer Science Standards:](#) referenced in resource column

**FCO.6** Select and use appropriate word processing, spreadsheets, and multimedia applications.

**AIT.3** Determine the best technology and appropriate tool to address a variety of tasks and problems.

**AIT.4** Use multiple processes and diverse perspectives to explore alternative solutions.

**AIT.8** Identify that various algorithms can achieve the same result and determine the most efficient sequence.

#### Getting Ready for Grade 4

Content Standards	Student Friendly “I Can” Statements
<p><b>*3.OA.C.7</b> Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that <math>8 \times 5 = 40</math>, one knows <math>40 \div 5 = 8</math>) or properties of operations. (By the end of 3rd grade, know from memory all products of two one-digit numbers and related division facts.)</p> <p>3.WCE.M.1 Recall basic multiplication facts through 10 times 10 along with the related division facts, by end of year.</p>	<p><b>I can</b> divide whole numbers with a dividend within 100 by a single-digit divisor without remainders.</p> <p><b>I can</b> fluently and accurately express multiplication facts through <math>10 \times 10</math> and relate them to division.</p> <p><b>I can</b> recall from memory the product of any two one-digit numbers and their related division facts.</p>
<p><b>*3.NBT.A.2</b> Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p>	<p><b>I can</b> fluently add and subtract within 1000 using an algorithm and strategy based on place value.</p> <p><b>I can</b> use strategies (such as applying the commutative or associative property, adding on, using an <b>open number line</b>, drawing models, <b>compensation</b>, etc.) for adding and subtracting within 1,000 with ease.</p>