2022.2023, Third Grade, Mathematics

Ongoing Mathematical Practices:	Effective Teaching Practices
1. Make sense of problems and persevere in solving them.	1. Establish mathematics goals to focus learning.
2. Reason abstractly and quantitatively.	2. Implement tasks that promote reasoning and problem solving
3. Construct viable arguments and critique the reasoning of others.	3. Use and connect mathematical representations.
4. Model with mathematics.	4. Facilitate meaningful mathematical discourse.
5. Use appropriate tools strategically.	5. Pose purposeful questions.
6. Attend to precision.	6. Build procedural fluency from conceptual understanding.
7. Look for and make use of structure.	7. Support productive struggle in learning mathematics.
8. Look for and express regularity in repeated reasoning.	8. Elicit and use evidence of student thinking.
Ongoing fluency expectations: *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.) * 3.NBT.A.2 Add/subtract within 1,000.	Ongoing resources student journals <u>Number Talks</u> Online Resources: <i>Xtramath</i> and Freckle Ed

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

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.)	
3.MD.B.3 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.	 I can 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. I can choose a proper scale for a bar graph or picture graph, with several categories. I can 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).
3.MD.B.4 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 can use a ruler to measure lengths in whole, half, and quarter (fourth) inches. I can generate and record measurement data using whole, half, and quarter (fourth) inches. I can create a line plot with a horizontal scale marked off in whole, half, or quarter (fourth) units.
3.OA.A.1 Interpret the factors and products in whole number multiplication equations (e.g., 4 x 7 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).	 I can illustrate products of whole numbers in relations to factors (e.g., 35 = 5 x 7 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). I can multiply to find the product of two single digit whole numbers. I can recognize multiplication as repeated addition. I can use skip counting as a strategy to find a product of two factors. I can 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.
3.0A.A.3 Multiply and divide within 100 to solve contextual problems, with unknowns in all positions, in situations involving equal groups, arrays, and	I can represent multiplication and division word problems using drawings, concrete models, and equations with unknowns in all positions.

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

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

	I can apply the commutative, associative, and distributive properties to decompose, regroup, and/or reorder factors to make it easier to multiply two or more factors.
3.OA.D.8 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.)	 I can solve two-step real-world problems involving both addition/subtraction and multiplication/division situations with unknowns in a variety of positions. I can represent an equation using a letter or symbol for the unknown quantity. I can decide if my answers are reasonable using mental math and estimation strategies including rounding.
3.OA.A.4 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: $8 \times ?= 48, 5 = ? \div 3, 6 \times 6 = ?$	 I can solve equations by finding the missing factor, product, divisor, dividend, or quotient. I can generate the unknown number, no matter its position, in multiplication and division equations.
3.NBT.A.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (<i>e.g., 9 x 80, 5 x 60</i>) using strategies based on place value and properties of operations.	I can multiply one-digit numbers by 10. I can use place value strategies to multiply one-digit numbers by multiples of 10.
3.OA.A.3 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 $3 \times ? = 24$, $6 \times 16 = ?$, $? \div 8 = 3$, or $96 \div 6 = ?$) (Q1, Q2) (See Table 2 - Multiplication and Division Situations).	 I can represent multiplication and division word problems using drawings, concrete models, and equations with unknowns in all positions. I can determine when to multiply and divide in one-step word problems. I can solve word problems involving equal groups, arrays, using drawings and equationswith a symbol for the unknown number to represent the problem.

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

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Content Standards	Student Friendly "I Can" Statements
3.NF.A.1 Understand a fraction, $\frac{1}{b}$, as the quantity formed by 1 part when a whole is partitioned into <i>b</i> equal parts (unit fraction); understand a fraction $\frac{a}{b}$ as the quantity formed by <i>a</i> parts of size $\frac{1}{b}$. For example, $\frac{3}{4}$ represents a quantity formed by 3 parts of size $\frac{1}{4}$.	I can explain any unit fraction $(\frac{1}{b})$ as 1 part of a whole. I can explain any fraction $\frac{a}{b}$ as "a" (numerator) representing the number of parts and "b" (denominator) representing the total number of equal parts in the whole; for example, $\frac{3}{4}$ represents a quantity formed by 3 parts of size $\frac{1}{4}$. * Limit denominators of fractions in this cluster to 2, 3, 4, 6, and 8.
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.	 I can 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.)
3.NF.A.2 Understand a fraction as a number on the number line. Represent fractions on a number line. a. Represent a fraction $\frac{1}{b}$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into <i>b</i> equal parts. Recognize that each part has size $\frac{1}{b}$ and that the endpoint locates the number $\frac{1}{b}$ on the number line. 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 $\frac{1}{4}$ and the first part has an endpoint at $\frac{1}{4}$ on the number line. b. Represent a fraction $\frac{a}{b}$ on a number line diagram by marking off a lengths $\frac{1}{b}$ from 0. Recognize that the resulting interval has size $\frac{a}{b}$ and that its endpoint locates the number $\frac{a}{b}$ on the number line. For example, $\frac{5}{3}$ is the distance from 0 when there are 5 iterations of $\frac{1}{3}$.	I can explain and show how $\frac{1}{b}$ can be represented on a number line as a number that is located a distance of $\frac{1}{b}$ between 0 and 1. I can explain and show how $\frac{1}{b}$ can be represented on a number line as the size of each part when a whole is partitioned into <i>b</i> equal groups. I can represent a unit fraction $\frac{1}{b}$ 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. I can represent any fraction $\frac{a}{b}$ on a number line.

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

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.	I can 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 (≈) 4 weeks 1 day = 24 hours
3.MD.A.1 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. For example, students may use a number line to determine the difference between the start time and the end time of lunch.	 I can say and write time to the nearest minute. I can measure duration of time in minutes. I can create and solve addition and subtraction word problems involving intervals of time measured in minutes (elapsed time). Students may use a number line to determine the difference between the start time and the end time of lunch.
3.MD.B.4 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 can use a ruler to measure lengths in whole, half, and quarter (fourth) inches. I can gather and record measurement data using whole, half, and quarter (fourth) inches. I can create a line plot with a horizontal scale marked off in whole, half, or quarter (fourth) units.
3.MD.A.2 Measure the mass of objects and liquid volume using standard units of grams (g), kilograms (kg), milliliters (ml), and liters (<i>I</i>). 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>	 I can estimate prior to measuring. I can measure liquid volumes and masses of objects using standard units of measure. I can use the four operations to solve one- and two-step word problems involving masses and volume. I can use drawings to represent one- and two-step word problems involving mass and volumes.

3.WCE.M.8 Choose reasonable units of measure, estimate common measurements using benchmarks, and use appropriate tools to make measurements.	 I can choose the correct unit of measurement for a given problem solving situation. I can choose appropriate tools with which to measure (e.g., cm and in. ruler, meter and yardstick, scale, graduated cylinders, etc.)
 3.MD.C.5 Recognize that plane figures have an area and understand concepts of area measurement. a. 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. b. Understand that a plane figure which can be covered without gaps or overlaps by <i>n</i> unit squares is said to have an area of <i>n</i> square units. 	 I can define a unit square. I can describe area as the measure of space within a plane figure and explain why area is measured in square units. I can explain why we use squares to measure area. I can explain why measuring area and length are different.
3.MD.C.6 Measure areas by counting unit squares (square centimeters, square meters, square inches, square feet, and improvised units).	 I can 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. I can represent the area of a plane figure as "n" square units (not units squared).
 3.MD.C.7 Relate area of rectangles to the operations of multiplication and addition. a. 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. 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. 	 I can use tiles to find the area of rectangles. I can explain the relationship between tiling and multiplying side lengths to find the area of rectangles. I can multiply adjacent side lengths of rectangles to solve word problems. I can use area models to explain the distributive property. I can decompose an irregular figure into non- overlapping rectangles and calculate the partial areas of each. I can explain area as additive and use this understanding to solve word problems.

 c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths <i>a</i> and <i>b</i>+<i>c</i> is the sum of <i>a x b</i> and <i>a x c</i>. Use area models to represent the distributive property in mathematical reasoning. For example, in a rectangle with dimensions 4 by 6, students can decompose the rectangle into 4 x 3 and 4 x 3 to find the total area of 4 x 6. (See Table 3 - Properties of Operations) d. 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. 	
3.MD.D.8 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)	 I can calculate the perimeter of shapes made from polygons in real-world problems and mathematical problems. I can calculate the perimeter of a polygon with a missing side length. I can construct shapes with different areas given the same perimeter. I can construct shapes with different perimeters given the same area.

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Content Standards	Student Friendly "I Can" Statements
3.WCE.M.9 Recognize the relationships among cups, pints, quarts, and gallons.	<pre>I can convert standard measurements of volume. 1 cup = 8 fluid ounces 1 pint = 2 cups 1 quart = 2 pints 1 gallon = 4 quarts</pre>
3.G.A.1 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.	 I can identify and define quadrilaterals (rhombuses, rectangles, and squares) based on their attributes. I can describe, analyze, and compare properties of two quadrilaterals. I can compare and classify (group) shapes by attributes, sides, and vertices. I can draw quadrilaterals with specific attributes.
3.G.A.2 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>	I can 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. I can explain any unit fraction (1/b) as one part of a whole divided into b equal parts (e.g., 1/2,1/3, 1/4, 1/6, 1/8).
3.G.A.3 TNSSM Determine if a figure is a polygon.	I can determine if a figure is a polygon. I can draw examples of polygons.
3.WCE.M.2 Read, write, and compare whole numbers to millions. (Q2, Q4)	<i>I can</i> recognize, write, compare, and use whole numbers to millions.
3.WCE.M.10 Identify the place value of numbers in the tenths and hundredths positions.	I can identify the place value of numbers in the tenths and hundredths positions.
3.WCE.M.3 Solve problems that involve the inverse relationship between multiplication and division. (Q2, Q4)	I can contextualize problems using the relationship between multiplication and division as a strategy.

3.WCE.M.11 Determine the correct change from a transaction up to a dollar.	I can 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

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