



Content Area: Math

Grade Level: 3rd

Curriculum Map/Scope & Sequence (2021)

<u>Unit Name/Time Period</u>	<u>BIG Ideas/Skills</u>	<u>IL Priority Learning Standards</u>	<u>I CAN Statements</u>	<u>Assessments</u>
August September	<ul style="list-style-type: none"> - Addition - Subtraction - Rounding - Data 	<p>3. NBT.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.</p> <p>3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.</p> <p>3.MD.3-1 Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. For example, draw a bar graph in which each square in the bar graph might represent 5 pets.</p> <p>3.MD.3-3 Solve a put-together problem using information presented in a scaled bar graph, then use the result to answer a “how many more” or “how many less” problem using information presented in the scaled bar graph.</p> <p>3.C.4 - 7 Distinguish correct explanation/reasoning from that which is flawed, and – if there is a flaw in the argument – present corrected reasoning. Content Scope: Knowledge and skills articulated in 2.NBT</p>	<p>I can identify the digit, place, and value of a number and add and subtract 2- and 3-digit numbers.</p> <p>I can round numbers to the nearest 10 and 100.</p> <p>I can draw a picture graph, bar graph, and line plot.</p> <p>I can create a picture or bar graph to show data and solve problems using the information from the graphs.</p> <p>I can read flawed ‘student’ reasoning involving place value, rounding, addition and subtraction, then correct and improve it.</p>	<p>Ticket out the door</p> <p>Kahoot</p> <p>Lesson quiz</p> <p>Mid-Chap Check</p> <p>Chapter Test</p>
October	Multiplication	3.OA.1 Interpret products of whole numbers, e.g., interpret 5×7 as the total number of objects in 5 groups of 7 objects each. For example, describe a context in which a total number of objects can be expressed as 5×7 .	I can find the answer to multiplication problems by using grouping, arrays, repeated addition, and number lines.	<p>Ticket out the door</p> <p>Kahoot</p> <p>Lesson quiz</p>

		<p>3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10-90 (e.g., 9×80, 5×60) using strategies based on place value and properties of operations</p> <p>*3.Int.4 Use information presented in a scaled bar graph to solve a two-step “how many more” or “how many less” problem requiring a substantial addition, subtraction, or multiplication step, drawing on knowledge and skills articulated in 3.NBT.</p> <p>3.C.1-1 Base explanations/reasoning on the properties of operations. Content Scope: Knowledge and skills articulated in 3.OA.5</p> <p>3.C.1-2 Base explanations/reasoning on the properties of operations. Content Scope: Knowledge and skills articulated in 3.OA.9</p> <p>3.C.4-1 Distinguish correct explanation/reasoning from that which is flawed, and – if there is a flaw in the argument – present corrected reasoning. Content Scope: Knowledge and skills articulated in 3.OA.5</p>	<p>I can multiply 1 digit by a multiple of 10.</p> <p>I can use patterns and properties to solve multiplication and addition problems.</p> <p>I can answer questions using graphs.</p> <p>I can use patterns to determine correct and flawed then correct and improve it.</p> <p>I can apply properties of operations as strategies to multiply and divide.</p>	<p>Mid-Chap Check</p> <p>Chapter Test</p>
November	Multiplication & Division	<p>3.OA.2 Interpret whole-number quotients of whole numbers, e.g., interpret $56 \div 8$ as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. For example, describe a context in which a number of shares or a number of groups can be expressed as $56 \div 8$.</p> <p>3.OA.3-1 Use multiplication within 100 (both factors less than or equal to 10) to solve word problems in situations involving equal groups, arrays, or area, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>3.OA.3-3 Use division within 100 (quotients related to products having both factors less than or equal to 10) to solve word problems in situations involving equal groups, arrays, or area, e.g., by using drawings and</p>	<p>I can understand division by determining how many equal parts are in a group.</p> <p>I can use multiplication within 100 to solve word problems</p> <p>I can solve word problems involving equal groups and arrays using drawings and equations.</p>	<p>Ticket out the door</p> <p>Kahoot</p> <p>Lesson quiz</p> <p>Mid-Chap Check</p> <p>Chapter Test</p>

		<p>equations with a symbol for the unknown number to represent the problem.</p> <p>3.OA.3-4 Use division within 100 (quotients related to products having both factors less than or equal to 10) to solve word problems in situations involving measurement quantities other than area, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>3.OA.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. For example, determine the unknown number that makes the equation true in each of the equations $8 \times ? = 48$, $5 = \heartsuit \div 3$, $6 \times 6 = ?$.</p> <p>3.OA.6 Understand division as an unknown-factor problem. For example, find $32 \div 8$ by finding the number that makes 32 when multiplied by 8.</p> <p>3.C.2 Base explanations/reasoning on the relationship between multiplication and division. Content Scope: Knowledge and skills articulated in 3.OA.6</p> <p>3.C.4-2 Distinguish correct explanation/reasoning from that which is flawed, and – if there is a flaw in the argument – present corrected reasoning. (For example, some flawed ‘student’ reasoning is presented and the task is to correct and improve it.) Content Scope: Knowledge and skills articulated in 3.OA.6</p>	<p>I can solve word problems involving measurement quantities using drawings and equations.</p> <p>I can determine the unknown whole number in a multiplication or division problem.</p> <p>I can understand division as an unknown-factor problem.</p> <p>I can turn a division problem into a multiplication problem with an unknown factor.</p> <p>I can use my understanding about the relationship between multiplication and division to correct and improve flawed reasoning.</p>	
December	Division	<p>3.OA.8 Solve two-step word 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.</p> <p>3.Int.1* Given a two-step problem situation with the four operations, round the values in the problem, then use the rounded values to produce an approximate solution.</p>	<p>I can find the unknown number in a division equation.</p> <p>I can solve one-step and two-step word problems using rounding, addition, subtraction, multiplication, and division.</p>	<p>Ticket out the door</p> <p>Kahoot</p> <p>Lesson quiz</p> <p>Mid-Chap Check</p> <p>Chapter Test</p>

		<p>3.Int.2* Solve two-step word problems using the four operations requiring a substantial addition, subtraction, or multiplication step, drawing on knowledge and skills articulated in 3.NBT.</p> <p>3.C.4-3 Distinguish correct explanation/reasoning from that which is flawed, and – if there is a flaw in the argument – present corrected reasoning. Content Scope: Knowledge and skills articulated in 3.OA.8</p>	<p>I can solve two-step word problems using the four operations, write equations using a letter for the unknown number. I can read another student's reasoning then correct and improve it.</p>	
January	Geometry Perimeter & Area	<p>3.G1 Understand that 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). 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>3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement. a. 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. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.</p> <p>3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).</p> <p>3.MD.7b-1 Relate area to the operations of multiplication and addition. b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems.</p> <p>3.MD.7d Relate area to the operations of multiplication and addition.</p>	<p>I can use attributes to identify shapes and classify shapes into categories. I can define quadrilaterals and recognize rhombuses, rectangles, and squares as being examples of quadrilaterals, and draw other quadrilaterals.</p> <p>I can define area as the measurement of space with a plane figure and explain why area is measured in square units.</p> <p>I can use unit squares to measure the area of a shape.</p> <p>I can represent whole-number sums and products as rectangular areas.</p>	<p>Ticket out the door</p> <p>Kahoot</p> <p>Lesson quiz</p> <p>Mid-Chap Check</p> <p>Chapter Test</p>

		<p>3.MD.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.</p> <p>3.Int.3* Solve real world and mathematical problems involving perimeters of polygons requiring a substantial addition, subtraction, or multiplication step, drawing on knowledge and skills articulated in 3.NBT</p> <p>3.C.3-2 Base explanations/reasoning on concrete referents such as diagrams (whether provided in the prompt or constructed by the student in her response). Content Scope: Knowledge and skills articulated in 3.MD.5, 3.MD.6, 3.MD.7</p>	<p>I can find the area of irregular figures by finding the area of each part and adding them together to solve real world problems.</p> <p>I can solve real world problems involving perimeters of polygons.</p> <p>I can find the area of irregular figures by finding the area of each part and adding them together.</p> <p>I can apply this technique to solve real world problems involving rectangles with the same perimeter and different areas or with the same area and different perimeters.</p>	
February	Fractions	<p>3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a part of size $1/b$.</p> <p>3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram.</p> <p>a. Represent a fraction $1/b$ on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into b equal parts. Recognize that each part has size $1/b$ and that the endpoint of the part based at 0 locates the number $1/b$ on the number line. b. Represent a fraction a/b on a number line diagram by marking off a lengths $1/b$ from 0. Recognize that the resulting interval has size a/b and that its endpoint locates the number a/b on the number line.</p>	<p>I can identify the numerator and denominator with fractions as part of a whole or part of a group.</p> <p>I can find a fraction on a number line and the distance between an equally divided line.</p> <p>I can explain how the parts represent the fraction a/b.</p> <p>I can compare fractions and find and explain equivalent fractions.</p> <p>I can identify two fractions as equivalent (equal) if they are the</p>	<p>Ticket out the door</p> <p>Kahoot</p> <p>Lesson quiz</p> <p>Mid-Chap Check</p> <p>Chapter Test</p>

		<p>3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.</p> <p>a. Understand two fractions as equivalent (equal) if they are the same size. b. Understand two fractions as equivalent (equal) if they are the same point on a number line. Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. Examples: Express 3 in the form $3 = 3/1$; recognize that $6/1 = 6$; locate $4/4$ and 1 at the same point of 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. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.</p> <p>3.C.3-1 Base arithmetic explanations/reasoning on concrete referents such as diagrams (whether provided in the prompt or constructed by the student in her response), connecting the diagrams to a written (symbolic) method. Content Scope: Knowledge and skills articulated in 3.NF.3b, 3.NF.3d</p> <p>3.G2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. 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.</p> <p>3.NF.A.Int.1 In a contextual situation involving a whole number and two fractions not equal to a whole number, represent all three numbers on a number line diagram, then choose the fraction closest in value to the whole number.</p> <p>3.C.4 - 4 Distinguish correct explanation/reasoning from that which is flawed, and – if there is a flaw in the argument – present corrected reasoning. Content Scope: Knowledge and skills articulated in 3.NF.3b, 3.NF.3d</p>	<p>same size, or the same point on a number line.</p> <p>I can compare two fractions with the same numerator or the same denominator by explaining their size.</p> <p>if understand I can only compare fractions that have the same whole and can explain and compare fractions with the symbols $>$, $=$, or $<$.</p> <p>I can explain diagrams involving fractions.</p> <p>I can divide shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.</p> <p>I can divide shapes into parts with equal areas and show those areas as fractions.</p> <p>I can read flawed 'student' reasoning involving fractions then correct and improve it.</p>	
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March	Time, Measurement, Liquid volume, & Mass	<p>3.MD.1-1 Tell and write time to the nearest minute and measure time intervals in minutes.</p> <p>3.MD.1-2 Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.</p> <p>3.MD.2-1 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).</p> <p>3.MD.2-2 Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.</p> <p>3.MD.2-3 Measure or estimate liquid volumes or masses of objects using standard units of grams (g), kilograms (kg), and liters (l), then use the estimated value(s) to estimate the answer to a one-step word problem by using addition, subtraction, multiplication, or division. Content Scope: 3.MD.2</p> <p>3.MD.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.</p> <p>3.MD.5 Recognize area as an attribute of plane figures and understand concepts of area measurement. a. 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. A plane figure which can be covered without gaps or overlaps by n unit squares is said to have an area of n square units.</p>	<p>I can tell and write time to the nearest minute.</p> <p>I can solve word problems involving time by adding and subtracting.</p> <p>I can measure liquids and solids with liters, grams, and kilograms.</p> <p>I can solve word problems involving mass and volume by using addition, subtraction, multiplication, and division.</p> <p>I can measure and estimate volumes and masses of objects. I can measure lengths to the nearest $\frac{1}{4}$ inch.</p> <p>I can create a line plot from measurement data where the measured objects have been measured to the nearest whole number, half, or quarter.</p> <p>I can define area as the measurement of space with a plane figure and explain why area is measured in square units.</p> <p>I can use unit squares to measure the area of a shape.</p> <p>I can multiply side lengths to find areas of rectangles when solving real world problems.</p>	<p>Ticket out the door</p> <p>Kahoot</p> <p>Lesson quiz</p> <p>Mid-Chap Check Chapter Test</p>

		<p>3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).</p> <p>3.MD.7b-1 Relate area to the operations of multiplication and addition. b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems.</p> <p>3.MD.7d Relate area to the operations of multiplication and addition. 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.</p> <p>3.MD.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.</p> <p>3.OA.3-2 Use multiplication within 100 (both factors less than or equal to 10) to solve word problems in situations involving measurement quantities other than area, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.</p> <p>*3.Int.5 Add, subtract, or multiply to solve a one-step word problem involving masses or volumes that are given in the same units, where a substantial addition, subtraction, or multiplication step is required drawing on knowledge and skills articulated in 3.NBT, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.</p> <p>3.C.1-3 Base explanations/reasoning on the properties of operations. Content Scope: Knowledge and skills articulated in 3.MD.7</p>	<p>I can find area of irregular figures by finding the area of each part and add them together.</p> <p>I can solve word problems involving measurements.</p> <p>I can represent multiplication and division word problems using drawings and equations with unknowns in all positions.</p> <p>I can solve word problems involving mass or volume using addition, subtraction or multiplication by using drawings.</p> <p>I can find the area of a figure using multiplication or addition.</p> <p>I can read flawed 'student' reasoning about an area of a figure, determine if it is correct and improve it.</p>	
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		3.C.4 - 5 Distinguish correct explanation/reasoning from that which is flawed, and – if there is a flaw in the argument – present corrected reasoning. Content Scope: Knowledge and skills articulated in 3.MD.7		
April	-Problem Solving -Knowledge/Skill Articulation	<p>3.OA.7-1 Fluently multiply and divide within 25. By the end of Grade 3, know from memory all products of two one-digit numbers.</p> <p>3.OA.7-2 Fluently multiply and divide within 100. By the end of Grade 3, know from memory all products of two one-digit numbers.</p> <p>3.C.4 - 6 Distinguish correct explanation/reasoning from that which is flawed, and – if there is a flaw in the argument – present corrected reasoning. Content Scope: Knowledge and skills articulated in 3.OA.9</p> <p>3.C.5 - 1 Present solutions to two -step problems in the form of valid chains of reasoning, using symbols such as equals signs appropriately (for example, rubrics award less than full credit for the presence of nonsense statements such as $1 + 4 = 5 + 7 = 12$, even if the final answer is correct), or identify or describe errors in solutions to two -step problems and present corrected solutions. Content Scope: Knowledge and skills articulated in 3.OA.8</p>	<p>I can memorize multiplication facts up to 10×10.</p> <p>I can memorize division facts up to $100 \div 10$</p> <p>I can identify flawed 'student' reasoning involving patterns, correct and improve it.</p> <p>I can solve two-step word problems using the four operations, write equations using a letter for the unknown number, decide if my answers are reasonable using mental math and estimation strategies. I can solve problems using the order of operations.</p>	<p>Ticket out the door</p> <p>Kahoot</p> <p>Lesson quiz</p> <p>Mid-Chap Check</p> <p>Chapter Test</p>
May	-Knowledge/Skill Articulation - Reasoning - Modeling	<p>3.C.5 - 2 Present solutions to multi -step problems in the form of valid chains of reasoning, using symbols such as equals signs appropriately (for example, rubrics award less than full credit for the presence of nonsense statements such as $1 + 4 = 5 + 7 = 12$, even if the final answer is correct), or identify or describe errors in solutions to multi -step problems and present corrected solutions. Content Scope: Knowledge and skills articulated in 3.MD.7b, 3.MD.7d</p> <p>3.C.6-1 Base explanations/reasoning on a number line diagram (whether provided in the prompt or constructed by the student in her response). Content scope: Knowledge and skills articulated in 3.NF.2</p>		<p>Ticket out the door</p> <p>Kahoot</p> <p>Lesson quiz</p> <p>Mid-Chap Check</p> <p>Chapter Test</p>

3.C.6-2 Base explanations/reasoning on a number line diagram (whether provided in the prompt or constructed by the student in her response). Content scope: Knowledge and skills articulated in 3.MD.1

3.D.1 Solve multi-step contextual word problems with degree of difficulty appropriate to Grade 3, requiring application of knowledge and skills articulated in Type I, Sub-Claim A Evidence Statements.

3.D.2 Solve multi-step contextual problems with degree of difficulty appropriate to Grade 3, requiring application of knowledge and skills articulated in 2.OA.A, 2.OA.B, 2.NBT, and/or 2.MD.B.