Derry & Garriga Elementary
3rd Grade Math Curriculum Map
2016-2017

Week	Dates	Topic(s)/Student Expectation (SE)/Focus Skill	Student Expectation (SE)/Underlying Processes and Mathematical Tools
1	8/22-8/26 1st Quarter Unit 01: Foundations of Number (10 days)	***Number and Operations*** - *represent and compare whole numbers and understand relationships related to place value* **3.2A**- compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate **3.2B**- describe the mathematical relationships found in the base-10 place value system through the hundred thousands place	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
2	8/29-9/2	***Number and Operations***- *represent and compare whole numbers and understand relationships related to place value* **3.2D**- compare and order whole numbers up to 100,000 and represent comparisons using the symbols >, <, or =.	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
3	9/5-9/9 *Holiday 9/5*	***Number and Operations***: *represent and compare whole numbers and understand relationships related to place value* **3.2C**- represent a number on a number line as being between two consecutive multiples of 10; 100; 1,000; or 10,000 and use words to describe relative size of numbers in order to round whole numbers	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and

	Unit 02: Addition and Subtraction (9 days)	***Number and operations**- develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy* **3.4A**- solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction;		evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication
4	9/12-9/16	***Number and Operations**- develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy* **3.4B**- round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems **3.4C**- determine the value of a collection of coins and bills		3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
5	9/19-9/23 **Unit 3:**	***Number and Operations**- develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy* **3.4D**- determine the total number of objects when equally-sized groups of objects are combined or arranged in arrays up to 10 by 10 **3.4E**- represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting		3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including

	Building an Understanding of Multiplication (12 days)		symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
6	9/26-9/30	*Number and Operations- develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy* **3.4F**- recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts **3.4K**- solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts *Algebraic Reasoning- analyze and create patterns and relationships* **3.5B**- represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations **3.5C**- describe a multiplication expression as a comparison such as 3 x 24 represents 3 times as much as 24 *Geometry and Measurement - analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6C**- determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
7	10/3-10/7 **Unit 4: Relating Multiplication to Division (7 days)**	*Complete Unit 3 first 2 days* *Number and Operations- develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy* **3.4F**- recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts **3.4G**- use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties **3.4H**- determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally **3.4I**- determine if a number is even or odd using divisibility rules **3.4J**- determine a quotient using the relationship between multiplication and division **3.4K**- solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models,	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and

		including arrays, area models, and equal groups; properties of operations; or recall of facts	arguments using precise mathematical language in written or oral communication
8	10/10-10/14 10/10 Staff Development	*Algebraic reasoning*- *analyze and create patterns and relationships* **3.5D**- determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication\
9	10/17-10/21 2nd Quarter **Unit 5:** **Application of** **Multiplication** **and Division** **(10 days)**	*Number and Operations*- *develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy* **3.4G**- use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties **3.4I**- determine if a number is even or odd using divisibility rules **3.4J**- determine a quotient using the relationship between multiplication and division	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication
10	10/24-10/28	*Number and Operations*- *develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy*	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates

		3.4K- solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts ***Algebraic Reasoning**- analyze and create patterns and relationships* **3.5B**- represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations ***Geometry and Measurement**- analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6C**- determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row	analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
11	10/31-11/4 **Unit 6: Algebraic Reasoning- All Operations (15 days)**	***Number and Operations**- develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy* **3.4A**- solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction **3.4G**- use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties **3.4K**- solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
12	11/7-11/11	***Algebraic Reasoning**- analyze and create patterns and relationships* **3.5A**- represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations **3.5B**- represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations **3.5D**- determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives,

		3.5E- represent real-world relationships using number pairs in a table and verbal descriptions	paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
13	11/14-11/18	*Geometry and Measurement- analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6D**- decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area *Data and Analysis- solve problems by collecting, organizing, displaying, and interpreting data* **3.8A**- summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals **3.8B**- solve one- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
14	11/21-11/25	***Thanksgiving Break***	
15	11/28-12/2 **Unit 7: Representing Fractions (8 days)**	*Number and Operations- represent and explain fractional units* **3.3A**- represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models, including strip diagrams and number lines	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and

		3.3B- determine the corresponding fraction greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 given a specified point on a number line *Number and Operations- represent and explain fractional units* **3.3C**- explain that the unit fraction 1/*b* represents the quantity formed by one part of a whole that has been partitioned into *b* equal parts where *b* is a non-zero whole number **3.3D**- compose and decompose a fraction *a/b* with a numerator greater than zero and less than or equal to *b* as a sum of parts 1/*b*	number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication	
16	12/5-12/9 **Unit 8: Fractions- Equivalency and Comparisons (9 days)**	*Complete Unit 7 first three days* *Number and Operations- represent and explain fractional units* **3.3F**- represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.	
17	12/12-12/16	*Number and Operations- represent and explain fractional units* **3.3G**- explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;	

			3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
18	12/19-12/20	**Number and Operations**- *represent and explain fractional units* **3.3H**- compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
19	12/21-1/6 1/3 Work Day 1/4-1/6 Staff Development	***Christmas Break***	
20	1/9-1/13 3rd Quarter **Unit 9:**	**Number and Operations**- *represent and explain fractional units* **3.3B**- determine the corresponding fraction greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 given a specified point on a number line	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;

	Essential Fractional Understandings (6 days)	**3.3E**- solve problems involving partitioning an object or a set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8 **3.3F**- represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines **3.3G**- explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model **3.3H**- compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models	3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
21	1/16-1/20 **Unit 10: Two-and Three-Dimensional Figures (14 days)**	*Complete Unit 9 First day* ***Geometry and measurement**- analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6A**- classify and sort two- and three-dimensional solids, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
22	1/23-1/27	***Geometry and measurement**- analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6B**- use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and

			their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
23	1/30-2/3	*Geometry and measurement- analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6B**- use attributes to recognize rhombuses, parallelograms, trapezoids, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
24	2/6-2/10 **Unit 11: Measureable Attributes of Geometric Figures (5 days)**	*Geometry and Measurement- analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6C**- determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row *Geometry and measurement- select appropriate units, strategies, and tools to solve problems involving customary and metric measurement* **3.7B**- determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and

			communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
25	2/13-2/17 **Unit 12: Measurement (20 days)**	***Geometry and Measurement***- *analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6C**- determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row **3.6D**- decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area ***Geometry and measurement***- *select appropriate units, strategies, and tools to solve problems involving customary and metric measurement* **3.7B**- determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
26	2/20-2/24	***Geometry and Measurement***- *select appropriate units, strategies, and tools to solve problems involving customary and metric measurement* **3.7C**- determine the solutions to problems involving addition and subtraction of time intervals in minutes using pictorial models or tools such as a 15-minute event plus a 30-minute event equals 45 minutes	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and

		communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
27	2/27-3/3 2/28 Math Simulated Assessment 3/1 Reading Simulated Assessment	***Geometry and Measurement***- *select appropriate units, strategies, and tools to solve problems involving customary and metric measurement* **3.7D**- determine when it is appropriate to use measurements of liquid volume (capacity) or weight **3.7E**- determine liquid volume (capacity) or weight using appropriate units and tools	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
28	3/6-3/10 TELPAS Window 3/6-4/5	***Data Analysis*** - *solve problems by collecting, organizing, displaying, and interpreting data* **3.8A**- summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication

29	3/13-3/17	*Spring Break*	
30	3/20-3/24 4th Quarter 3/20 Staff Development **Unit 13: Personal Financial Literacy (5 days)**	***Personal Financial Literacy**- manage one's financial resources effectively for lifetime financial security* **3.9A**- explain the connection between human capital/labor and income **3.9B**- describe the relationship between the availability or scarcity of resources and how that impacts cost **3.9C**- identify the costs and benefits of planned and unplanned spending decisions **3.9D**- explain that credit is used when wants or needs exceed the ability to pay and that it is the borrower's responsibility to pay it back to the lender, usually with interest **3.9E**- list reasons to save and explain the benefit of a savings plan including for college **3.9F**- identify decisions involving income, spending, saving, credit, and charitable giving	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
31	3/27-3/31 **Unit 14: Data Analysis (7 days)**	*Complete Unit 13 first day* ***Data Analysis** - solve problems by collecting, organizing, displaying, and interpreting data* **3.8A**- summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals ***Data Analysis** - solve problems by collecting, organizing, displaying, and interpreting data* **3.8A**- summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication

| 32 | 4/3-4/7

4/3-21
STAAR
Alt. 2
Window

Unit 15:
Tying it All Up
(20 days) | *Complete Unit 14 first three days*

***Number and operations**- represent and compare whole numbers and* understand relationships related to place value

3.2A- compose and decompose numbers up to 100,000 as a sum of so many ten thousands, so many thousands, so many hundreds, so many tens, and so many ones using objects, pictorial models, and numbers, including expanded notation as appropriate
3.2B- describe the mathematical relationships found in the base-10 place value system through the hundred thousands place
3.2C- represent a number on a number line as being between two consecutive multiples of 10; 100; 1,000; or 10,000 and use words to describe relative size of numbers in order to round whole numbers
3.2D- compare and order whole numbers up to 100,000 and represent comparisons using the symbols >, <, or =

***Number and operations**- represent and explain fractional units*

3.3A- represent fractions greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 using concrete objects and pictorial models, including strip diagrams and number lines
3.3B- determine the corresponding fraction greater than zero and less than or equal to one with denominators of 2, 3, 4, 6, and 8 given a specified point on a number line
3.3C- explain that the unit fraction $1/b$ represents the quantity formed by one part of a whole that has been partitioned into b equal parts where b is a non-zero whole number
3.3D- compose and decompose a fraction a/b with a numerator greater than zero and less than or equal to b as a sum of parts $1/b$
3.3E- solve problems involving partitioning an object or a set of objects among two or more recipients using pictorial representations of fractions with denominators of 2, 3, 4, 6, and 8
3.3F- represent equivalent fractions with denominators of 2, 3, 4, 6, and 8 using a variety of objects and pictorial models, including number lines
3.3G- explain that two fractions are equivalent if and only if they are both represented by the same point on the number line or represent the same portion of a same size whole for an area model
3.3H- compare two fractions having the same numerator or denominator in problems by reasoning about their sizes and justifying the conclusion using symbols, words, objects, and pictorial models

***Number and operations**- develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy*

3.4A- solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction
3.4B- round to the nearest 10 or 100 or use compatible numbers to estimate solutions to addition and subtraction problems
3.4C- determine the value of a collection of coins and bills
3.4D- determine the total number of objects when equally-sized groups of | 3.1A apply mathematics to problems arising in everyday life, society, and the workplace;
3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution;
3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems;
3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate;
3.1E create and use representations to organize, record, and communicate mathematical ideas;
3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and
3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication. |

		objects are combined or arranged in arrays up to 10 by 10	
33	4/10-4/14 4/14 Holiday	***Number and operations**- develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy* **3.4E**- represent multiplication facts by using a variety of approaches such as repeated addition, equal-sized groups, arrays, area models, equal jumps on a number line, and skip counting **3.4F**- recall facts to multiply up to 10 by 10 with automaticity and recall the corresponding division facts **3.4G**- use strategies and algorithms, including the standard algorithm, to multiply a two-digit number by a one-digit number. Strategies may include mental math, partial products, and the commutative, associative, and distributive properties **3.4H**- determine the number of objects in each group when a set of objects is partitioned into equal shares or a set of objects is shared equally **3.4I**- determine if a number is even or odd using divisibility rules **3.4J**- determine a quotient using the relationship between multiplication and division **3.4K**- solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts ***Algebraic reasoning**- analyze and create patterns and relationships* **3.5A**- represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations **3.5B**- represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations **3.5C**- describe a multiplication expression as a comparison such as 3 x 24 represents 3 times as much as 24 **3.5D**- determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is either a missing factor or product **3.5E**- represent real-world relationships using number pairs in a table and verbal descriptions ***Geometry and measurement**- analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6A**- classify and sort two- and three-dimensional solids, including cones, cylinders, spheres, triangular and rectangular prisms, and cubes, based on attributes using formal geometric language **3.6B**- use attributes to recognize rhombuses, parallelograms, trapezoids,	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

		rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories **3.6C**- determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row	
34	4/17-4/21 4/17 Holiday	*Geometry and measurement*- *analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6D**- decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area **3.6E**- decompose two congruent two-dimensional figures into parts with equal areas and express the area of each part as a unit fraction of the whole and recognize that equal shares of identical wholes need not have the same shape *Geometry and measurement*- *select appropriate units, strategies, and tools to solve problems involving customary and metric measurement* **3.7A**- represent fractions of halves, fourths, and eighths as distances from zero on a number line **3.7B**- determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems **3.7C**- determine the solutions to problems involving addition and subtraction of time intervals in minutes using pictorial models or tools such as a 15-minute event plus a 30-minute event equals 45 minutes **3.7D**- determine when it is appropriate to use measurements of liquid volume (capacity) or weight **3.7E**- determine liquid volume (capacity) or weight using appropriate units and tools *Data analysis*- *solve problems by collecting, organizing, displaying, and interpreting data* 3.8A- summarize a data set with multiple categories using a frequency table, dot plot, pictograph, or bar graph with scaled intervals 3.8B- solve one- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals *Personal financial literacy*- *manage one's financial resources effectively for lifetime financial security* **3.9A**- explain the connection between human capital/labor and income; **3.9B**- describe the relationship between the availability or scarcity of resources and how that impacts cost **3.9D**- explain that credit is used when wants or needs exceed the ability to pay and that it is the borrower's responsibility to pay it back to the lender, usually with interest **3.9E**- list reasons to save and explain the benefit of a savings plan, including for college	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

35	4/24-4/28	*Review* **Geometry and Measurement**- *analyze attributes of two-dimensional geometric figures to develop generalizations about their properties* **3.6C**- determine the area of rectangles with whole number side lengths in problems using multiplication related to the number of rows times the number of unit squares in each row **3.6D**- decompose composite figures formed by rectangles into non-overlapping rectangles to determine the area of the original figure using the additive property of area	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
36	5/1-5/5	**Geometry and measurement-** *select appropriate units, strategies, and tools to solve problems involving customary and metric measurement* **3.7B**- determine the perimeter of a polygon or a missing length when given perimeter and remaining side lengths in problems **3.7C**- determine the solutions to problems involving addition and subtraction of time intervals in minutes using pictorial models or tools such as a 15-minute event plus a 30-minute event equals 45 minutes **3.7D**- determine when it is appropriate to use measurements of liquid volume (capacity) or weight **3.7E**- determine liquid volume (capacity) or weight using appropriate units and tools	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

37	5/8-5/12 **Unit 16:** **Essential** **Operational** **Understandings** **(9 days)** Math STAAR 5/8 Reading STAAR 5/9	***Number and Operations***- *develop and use strategies and methods for whole number computations in order to solve problems with efficiency and accuracy* **3.4A**- solve with fluency one-step and two-step problems involving addition and subtraction within 1,000 using strategies based on place value, properties of operations, and the relationship between addition and subtraction **3.4K**- solve one-step and two-step problems involving multiplication and division within 100 using strategies based on objects; pictorial models, including arrays, area models, and equal groups; properties of operations; or recall of facts	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.
38	5/15-5/19 5/19 Teacher Workday	***Algebraic Reasoning***- *analyze and create patterns and relationships* **3.5A**- represent one- and two-step problems involving addition and subtraction of whole numbers to 1,000 using pictorial models, number lines, and equations **3.5B**- represent and solve one- and two-step multiplication and division problems within 100 using arrays, strip diagrams, and equations ***Data analysis***- *solve problems by collecting, organizing, displaying, and interpreting data* **3.8B**- solve one- and two-step problems using categorical data represented with a frequency table, dot plot, pictograph, or bar graph with scaled intervals	3.1A apply mathematics to problems arising in everyday life, society, and the workplace; 3.1B use problem-solving model that incorporates analyzing given info., formulating a plan or strategy, determining a solution, justifying the solution, and evaluating the problem-solving process and the reasonableness of the solution; 3.1C select tools, including real objects, manipulatives, paper and pencil, and technology as appropriate, and techniques, including mental math, estimation, and number sense as appropriate, to solve problems; 3.1D communicate mathematical ideas, reasoning, and their implications using multiple representations, including symbols, diagrams, graphs, and language as appropriate; 3.1E create and use representations to organize, record, and communicate mathematical ideas; 3.1F analyze mathematical relationships to connect and communicate mathematical ideas; and 3.1G display, explain, and justify mathematical ideas and arguments using precise mathematical language in written or oral communication.

(This timeline is subject to change in order to meet the needs of students.)