

Course Name:	3rd Grade Math		
Credits:	N/A		
Prerequisites:	N/A		
Description:	In Grade 3, instructional time should focus on four critical areas: 1) develop an understanding of operations and algebraic thinking: multiplication and division and strategies for multiplication and division within 100; 2) develop an understanding of numbers and operations in base ten: adding and subtracting within 1000 using regrouping; 3) develop an understanding of measurement and data; use rectangular arrays to find area and perimeter; and 4) develop an understanding of fractions and geometry: divide shapes into parts with equal areas to find unit fractions and understand fractions as a whole differentiating between numerator and denominator.		
Academic Standards:	Wisconsin State Standards in Mathematics (2011)		
Units:	Unit Length:	Unit Standards:	Unit Outcomes:
Multiplication and Division with 0-5, 9, and 10	30 days (+ on going through out 4 quarters)	CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.8, CC.3.OA.9, CC.k-12.MP.1,CC.k-12.MP.2,CC.k-12.MP.3, CC.k-12.MP.4, CC.k-12.MP.5,CC.k-12.MP.6, CC.k-12.MP.7,CC.k-12.MP.8	Students will understand that multiplication and division are inverse operations, and that there are patterns in arithmetic and the larger world. Students will observe that mathematical explanations can be given using words, pictures, numbers, or symbols.
Multiplication and Division with 6s, 7s, 8s and Multiply with Multiples of 10	22 days	CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.8, CC.3.OA.9, CC.3.NBT.3, CC.3.MD.5, CC.3.MD.7	Students will understand that multiplication and division are inverse operations and that there are patterns in arithmetic and the larger world. Students will observe that mathematical explanations can be given using words, pictures, numbers, or symbols.
Measurement, Time, and Graphs	23 days	CC.3.OA.3, CC.3.NBT.2, CC.3.MD.1, CC.3.MD.2, CC.3.MD.3, CC.3.MD.4	Students independently use their learning to measure and describe attributes of real world objects using quantified unit amounts. They will independently use their learning to solve real world problems involving time and elapsed time. They will use their learning to represent a data set with a scaled picture or bar graph and solve problems using that information.
Multidigit Addition and Subtraction	25 days	CC.3.NBT.1, CC.3.NBT.2	Students understand every number in a multi digit number has a value based on its location. Students know that each place value implies 10 units. Students interpret sums and differences of larger digit numbers in real world problems.

Write Equations to Solve Word Problems	17 days	CC.3.OA.3, CC.3.OA.4, CC.3.OA.8, CC.3.NBT.1, CC.3.NBT.2	Students use drawings and equations with a symbol for the unknown number to represent the problem. Students use information presented in scaled bar graphs to solve comparison problems. Students will use properties of operations to explain patterns.
Polygons, Perimeter, and Area	17 days	CC.3.G.1, CC.3.G.2, CC.3.MD.5, CC.3.MD.5a, CC.3.MD.5b, CC.3.MD.6, CC.3.MD.7, CC.3.MD.7a, CC.3.MD.7b, CC.3.MD.7c, CC.3.MD.7d, CC.3.MD.8, CC.3.G.1	Students identify, classify, and describe properties of standard two-and three-dimensional shapes independently in order to recognize geometry in the world around them. Students use their understanding of geometric measurement and use the concept of area to relate area to multiplication and division. Students recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
Explore Fractions	16 days	CC.3.NF.1, CC.3.NF.2a, CC.3.NF.2b, CC.3.NF.3d, CC.3.G.2, CC.3.NF.3a, CC.3.NF.3b, CC.3.NF.3c, CC.3.NF.3d	Students develop an understanding of fractions as numbers and like whole numbers fractions have a place on the number line. Students refer to a fraction as relative to the size of the whole and know that different but equivalent fractions can be used to represent the same amount. Students can now independently use their learning to represent and interpret real world items as fractional parts by reasoning with shapes and their attributes.
Geometry	13 days	CC.4.MD.5, CC.4.MD.5a, CC.4.MD.5b, CC.4.MD.6, CC.4.MD.7, CC.4.G.1, CC.4.G.2, CC.4.G.3, CC.4.OA.5	Students classify and draw angles, triangles, and quadrilaterals. They identify and draw parallel and perpendicular lines, as well as lines of symmetry in geometric figures.

Unit 1 Name: Multiplication and Division with 0-5, 9, and 10	Length: 30 days (+ on going through out 4 quarters)
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.8, CC.3.OA.9, CC.k-12.MP.1,CC.k-12.MP.2,CC.k-12.MP.3, CC.k-12.MP.4, CC.k-12.MP.5,CC.k-12.MP.6, CC.k-12.MP.7,CC.k-12.MP.8	Outcomes: Students will understand that multiplication and division are inverse operations, and that there are patterns in arithmetic and the larger world. Students will observe that mathematical explanations can be given using words, pictures, numbers, or symbols.
Essential Questions: How can you use your knowledge of multiplication and division to solve problems or answer questions? How do you write a good mathematical explanation? What patterns can be found in multiplication tables? How can you write a story to describe a multiplication and a division fact?	Learning Targets: Students will interpret and solve word problems with products and quotients of whole numbers using different mathematical tools. Students will understand the inverse relationship of addition, subtraction, multiplication, and division. Students will appropriately apply the associative, commutative, and distributive properties of operations as a strategy to multiply and divide. Students will demonstrate understanding of multiplication and division tables 0-5, 9 and 10. Students will demonstrate understanding and the ability to solve two-step word problems including an unknown quantity. Students will demonstrate the ability to identify patterns on addition and multiplication tables and explain how they work.
Topic 1: Meanings of Multiplication and Division: 5s and 2s	Length: 10 days
Standard(s): CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, 3.OA.9	Academic Vocabulary: count-by, equation, multiplication, factor, product, multiplier, multiples, equal groups, equal shares drawing, function table, array, row, column,
Lesson Frame: Multiply with 5	I can identify and use patterns to multiply with 5
Lesson Frame: Multiplication as Equal Groups	I can use multiplication and drawings to represent equal groups situations
Lesson Frame: Multiplication and Arrays	I can use multiplication and drawings to represent array situations and the Commutative Property.
Lesson Frame: The Meaning of Division	I can relate division to multiplication with an unknown factor.
Lesson Frame: Multiply and Divide with 2	I can identify patterns in 2s count-bys and multiplications and relate multiplication and division.
Lesson Frame: Building Fluency with 2s and 5s	I can build fluency with 2s and 5s multiplications and divisions
Performance Tasks: Remembering Sheets, weekly fact fluency checks, Quick Quiz 1	Notes:
Topic 2: Patterns and Strategies: 9s and 10s	Length: 5 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.6, 3.OA.7, CC.3.OA.9	Academic Vocabulary: equation, variable, quick 9s, multiplier finger, fast array drawing
Lesson Frame: Multiply and Divide with 10	I can explore patterns in 10s count-bys, multiplications, and divisions and represent and solve problems involving multiplication and division with 10.
Lesson Frame: Multiply and divide with 9	I can identify patterns in 9s multiplications and divisions and learn a strategy for quickly multiplying and dividing with 9s.
Lesson Frame: Building Fluency with 2s, 5s, 9s, and 10s	I can build fluency with 2s, 5s, 9s, and 10s multiplications and divisions.

Performance Task: Remembering Sheets, weekly fact fluency checks, Quick Quiz 2	Notes:
Topic 3: Strategies for Factors and Products: 3s and 4s	Length: 8 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.9, CC.3.MD.5a, 5b, CC.3.MD.6, 7a, 7b, 7c, 7d	Academic Vocabulary: product, multiplier, commutative, divisor
Lesson Frame: Multiply and Divide with 3	I can look for patterns in and practice 3s count-bys, multiplications, and divisions.
Lesson Frame: Multiplication and Area	I can use the area model for multiplications.
Lesson Frame: Multiply and Divide with 4	I can look for patterns in 4s multiplications and count-bys and learn a strategy for finding 4s and solving problems involving 4s.
Lesson Frame: Use the Strategy Cards	I can develop multiplication and division strategies and use them to solve problems.
Lesson Frame: Building Fluency with 2s, 3s, 4s, 5s, 9s, and 10s	I can build fluency with 2s, 3s, 4s, 5s, 9s, and 10s multiplications and divisions.
Performance Tasks: Remembering Sheets, weekly fact fluency checks, Quick Quiz 3	Notes:
Topic 4: Multiply with 1 and 0	Length: 8 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.9	Academic Vocabulary: Commutative Property of Multiplication, Associative Property of Multiplication, Identity Property of Multiplication, Zero Property of Multiplication, equal groups, array, multiples, quotient, divisor
Lesson Frame: Multiply and Divide with 0 and 1	I can use multiplication properties and division rules as strategies to multiply and divide with 1 and 0.
Lesson Frame: Solve and Create Word Problems	I can identify, solve, and create word problems for multiplication and division.
Lesson Frame: Play Multiplication and Division Games	I can practice with 2s, 3s, 4s, 5s, 9s, and 10s multiplications and divisions.
Lesson Frame: Building Fluency with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s	I can practice with 0s, 1s, 2s, 3s, 4s, 5s, 9s, and 10s multiplications and divisions.
Performance Tasks: Remembering Sheets, weekly fact fluency checks, Quick Quiz 4, Unit 1 Review, Unit 1 Test	Notes:

Unit Name: Multiplication and Division with 6s, 7s, 8s and Multiply with Multiples of 10	Length: 22 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.8, CC.3.OA.9, CC.3.NBT.3, CC.3.MD.5, CC.3.MD.7	Outcomes: Students will understand that multiplication and division are inverse operations and that there are patterns in arithmetic and the larger world. Students will observe that mathematical explanations can be given using words, pictures, numbers, or symbols.
Essential Questions: How can you use your knowledge of multiplication and division to solve problems or answer questions? How do you write a good mathematical explanation? What patterns can be found in multiplication tables? How can you write a story to describe a multiplication and a division fact?	Learning Targets: Students will interpret and solve word problems with products and quotients of whole numbers using different mathematical tools. Students will understand the inverse relationship of addition, subtraction, multiplication, and division. Students will appropriately apply the associative, commutative, and distributive properties of operations as a strategy to multiply and divide. Students will demonstrate understanding of multiplication and division tables 6-8 and square numbers while continuing to build fluency with 0-5, 9, and 10. Students will demonstrate understanding and the ability to solve two-step word problems including an unknown quantity. Students will demonstrate the ability to identify patterns on addition and multiplication tables and explain how they work. Students will develop and understanding of multiplying with multiples of 10.
Topic 1: The Remaining Multiplications	Length: 11 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.9, CC.3.NBT.3, CC.3.MD.5a-b, CC.3.MD.7a-b	Academic Vocabulary: length, width, area, fast area drawing, fast array drawing, array problem, equal groups problem, area problem, square number
Lesson Frame: Multiply and Divide with 6	I can explore patterns in 6s count-bys, multiplications, and divisions, and solve multiplication problems.
Lesson Frame: Solve Area Word Problems	I can develop strategies for solving real-world area problems.
Lesson Frame: Multiply and Divide with 8	I can explore patterns in 8s count-bys, multiplications, and divisions, and solve multiplication problems.
Lesson Frame: Write Word Problems and Equations	I can write multiplication and division problems of various types.
Lesson Frame: Multiply and Divide with 7	I can explore patterns in 7s count-bys, multiplications, and divisions and solve word problems.
Lesson Frame: Square Numbers	I can understand what a square number is and describe square number patterns in the multiplication table.
Lesson Frame: Practice with 6s, 7s, and 8s	I can practice 6s, 7s, 8s ,multiplications and divisions.
Lesson Frame: Building Fluency with 0s - 10s	I can build fluency with 0s-10s.
Performance Tasks: Quick Quiz 1, weekly fact fluency checks	Notes:

Topic 2: Problem Solving and Multiples of 10	Length: 11 days
Standards: CC.3.OA.1, CC.3.OA.2, CC.3.OA.3, CC.3.OA.4, CC.3.OA.5, CC.3.OA.6, 3.OA.7, CC.3.OA.8, CC.3.OA.9, CC.3.NBT.3	Academic Vocabulary: expression, evaluate, multiple
Lesson Frame: Equations and Word Problems	I can represent and solve word problems using the four operations.
Lesson Frame: Write First Step Questions for Two Step Problems	I can develop strategies for solving two step word problems.
Lesson Frame: Make Sense of Two Step Word Problems	I can develop strategies for solving two step word problems.
Lesson Frame: Multiply with Multiples of 10	I can use place value and properties to multiply one digit numbers by multiples of 10.
Lesson Frame: Play Multiplication and Division Games	I can use strategies to fluently multiply and divide within 100 and solve two step word problems.
Lesson Frame: Building Fluency with 0s-10s	I can build fluency with 0-10s multiplications and divisions
Performance Tasks: Quick Quiz 2, weekly fact fluency checks, Unit 2 Review, Unit 2 Test	Notes:

Unit 3 Name: Measurement, Time, and Graphs	Length: 23 days
Standards: CC.3.OA.3, CC.3.NBT.2, CC.3.MD.1, CC.3.MD.2, CC.3.MD.3, CC.3.MD.4	Outcomes: Students independently use their learning to measure and describe attributes of real world objects using quantified unit amounts. They will independently use their learning to solve real world problems involving time and elapsed time. They will use their learning to represent a data set with a scaled picture or bar graph and solve problems using that information.
Essential Questions: What are the different types of measurement units? What are some ways to measure weight and time? How can we represent real world measurement situations visually? How do we measure time and intervals of time? Why do we analyze data? Describe when using a graph would be meaningful?	Learning Targets: Tell and write time to the nearest minute. Solve word problems involving time intervals. Use number lines to represent time intervals. Use drawings to represent a problem involving liquid volume and mass. Represent and interpret data. Generate measurement data and make a line plot.
Topic 1: Length, Capacity, Weight, and Mass	Length: 7 days
Standard(s): CC.3.OA.3, CC.3.MD.2, CC.3.MD.4	Academic Vocabulary: inch, foot, ruler, line segment, cup, fluid ounce, pint, quart, gallon, liquid volume, liter, milliliter, liquid volume, weight, pound ounce, mass, gram, kilogram
Lesson Frame: Customary Units of Length	I can measure length in inches, half inches, and quarter inches with a ruler.
Lesson Frame: Customary Units of Liquid Volume	I can use customary units of liquid volume.
Lesson Frame: Metric Units of Liquid Volume	I can use metric units of liquid volume.
Lesson Frame: Customary Units of Weight and Metric Units of Mass	I can measure and estimate weight and mass.
Lesson Frame: Solve Word Problems Involving Liquid Volume and Mass	I can solve word problems involving liquid volumes or masses using addition, subtraction, multiplication, and division.
Performance Tasks: Quick Quiz 1, Remembering Pages, weekly fact fluency checks	Notes:
Topic 2: Time and Data	Length: 11 days
Standard(s): CC.3.MD.1	Academic Vocabulary: A.M., P.M., elapsed time
Lesson Frame: Tell Time	I can tell and write time to the minute, quarter hour, half hour, and hour.
Lesson Frame: Before and After the Hour	I can tell and write the time before and after the hour to the nearest minute.
Lesson Frame: Elapsed Time	I can find elapsed time.
Lesson Frame: Add and Subtract Time	I can solve word problems involving addition and subtraction of time intervals in minutes.

Lesson Frame: Solve Word Problems Involving Time	I can solve word problems involving addition and subtraction of intervals of time.
Performance Tasks: Quick Quiz 2, Remembering pages, weekly fact fluency checks	Notes:
Topic 3: Pictographs, Bar Graphs, and Line Plots	Length: 10 days
Standards: CC.3.OA.3, CC.3.NBT.2, CC.3.MD.1, CC.3.MD.3, CC.3.MD.4	Academic Vocabulary: vertical axis, horizontal axis, vertical bar graph, horizontal bar graph, pictograph, axes, scale, key
Lesson Frame: Read and Create Pictographs and Bar Graphs	I can draw scaled pictographs and bar graphs and solve comparison problems using data in pictographs and bar graphs.
Lesson Frame: Read and Create Bar Graphs with Multi Digit Numbers	I can analyze to create horizontal and vertical bar graphs.
Lesson Frame: Represent and Organize Data	I can construct and analyse frequency tables and line plots.
Lesson Frame: Use Graphs to Solve Time and Measurement Problems	I can solve word problems using data in line plots and scaled bar graphs.
Performance Tasks: Quick Quiz 3, Remembering pages, weekly fact fluency checks, Unit 3 Review, Unit 3 Test	Notes:

Unit 4 Name: Multidigit Addition and Subtraction	Length: 25 days
Standards: CC.3.NBT.1, CC.3.NBT.2	Outcomes: Students understand every number in a multidigit number has a value based on its location. Students know that each place value implies 10 units. Students interpret sums and differences of larger digit numbers in real world problems.
Essential Questions: How does place value support addition and subtraction? How can you use addition and subtraction to solve problems? What does it mean when a number is rounded? In what situations would rounding/estimating numbers be useful?	Learning Targets: Students use place value understanding to round whole numbers to the nearest 10 and 100. Students 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.
Topic 1: Understand Place Value and Rounding	Length: 7 days
Standards: CC.3.NBT.1, CC.3.NBT.2	Academic Vocabulary: Place value, place value drawing, ten stick, hundred stick, thousand bar
Lesson Frame: Make Place Value Drawings	I can make and interpret place value drawings.
Lesson Frame: Build Numbers	I can identify the value of a digit.
Lesson Frame: Place Value in Word Problems	I can use an understanding of place value to group and ungroup multi digit numbers and solve word problems.
Lesson Frame: Practice with Place Value	I can identify numbers from scrambled place value names and solve word problems.
Lesson Frame: Round to the Nearest Hundred	I can round numbers to the nearest hundred to estimate sums and differences.
Lesson Frame: Round to the Nearest Ten	I can round numbers to the nearest ten to estimate sums and differences.
Performance Tasks: Quick Quiz 1, Remembering pages, weekly fact fluency checks	Notes:
Topic 2: Addition and Subtraction Strategies and Group to Add	Length: 6 days
Standard(s): CC.3.NBT.1, CC.3.NBT.2	Academic Vocabulary: proof drawing, show all totals method, new groups below method, new groups above method, expression, grouping
Lesson Frame: Explore Multidigit Addition	I can discuss and apply multidigit addition methods.
Lesson Frame: Discuss Addition Methods	I can apply and discuss multidigit addition methods with place value alignment.
Lesson Frame: The Grouping Concept in Addition	I can decide when and how to group in multidigit addition.
Lesson Frame: Practice Addition	I can identify and explain errors in addition and solve word problems.
Performance Tasks: Quick Quiz 2, Remembering pages, weekly fact fluency checks	Notes:

Topic 3: Ungroup to Subtract	Length: 12 days
Standards: CC.3.OA.8, CC.3.OA.9, CC.3.NBT.1, CC.3.NBT.2	Academic Vocabulary: ungrouping, subtract, grouping, math mountain, addend, total, associative property of addition, commutative property of addition, identity property of addition
Lesson Frame: Ungroup to Subtract	I can explore methods for subtracting multi digit numbers.
Lesson Frame: Subtract Across Zeros	I can subtract with zeros in the top number.
Lesson Frame: Discuss Methods of Subtracting	I can subtract using two different methods.
Lesson Frame: Relate Addition and Subtraction	I can relate grouping in addition and ungrouping in subtraction.
Lesson Frame: Subtraction Practice	I can practice and discuss subtraction methods.
Lesson Frame: Addition and Subtraction Practice	I can practice and discuss addition and subtraction methods.
Lesson Frame: Solve Word Problems	I can solve word problems that involve two or more steps and assess reasonableness.
Performance Tasks: Quick Quiz 3, Remembering pages, weekly fact fluency checks	Notes:

Unit 5 Name: Write Equations to Solve Word Problems	Length: 17 days
Standards: CC.3.OA.3, CC.3.OA.4, CC.3.OA.8, CC.3.NBT.1, CC.3.NBT.2	Outcomes: Students use drawings and equations with a symbol for the unknown number to represent the problem. Students use information presented in scaled bar graphs to solve comparison problems. Students will use properties of operations to explain patterns.
Essential Questions: How can visual models and equations assist you in solving for the unknown in word problems? How can using the properties of operations help you to explain patterns in one and two step word problems, solve them, and write equations of your own?	Learning Targets: Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities. Solve two-step word problems using the four operations. Solve one- and two-step "how many more" and "how many less" problems. Identify arithmetic patterns (including patterns in the addition table or multiplication table).
Topic 1: Addition and Subtraction Situations	Length: 9 days
Standard(s): CC.3.OA.3, CC.3.OA.4, CC.3.NBT.1, CC.3.NBT.2	Academic Vocabulary: unknown addend, equation, total, sum, equality, inequality, addend, add to, take from, put together/take apart, expression, unknown start, situation equation, solution equation, compare, equal to (=), greater than (>), comparison problem, comparison bars, unknown amount
Lesson Frame: Addition and Subtraction Situations	I can solve addition and subtraction word problems.
Lesson Frame: Word Problems with Unknown Addends or Unknown Factors	I can represent and solve word problems with unknown addends and unknown factors.
Lesson Frame: Word Problems with Unknown Starts	I can solve word problems with unknown starts and write situation and solution equations for word problems.
Lesson Frame: Comparison Problems	I can solve comparison word problems.
Lesson Frame: Comparison Problems with Misleading Language	I can represent and solve comparison word problems with misleading language.
Lesson Frame: Word Problems with Extra, Hidden, or Not Enough Information	I can represent and solve word problems with extra, hidden or not enough information.
Performance Tasks: Quick Quiz 1, Remembering pages, weekly fact fluency checks	Notes:
Topic 2: Solve Two Step Word Problems	Length: 9 days

Standard(s): CC.3.OA.3, CC.3.OA.8, CC.3.NBT.2	Academic Vocabulary: Associative Property of Addition, Commutative Property of Addition, Identity Property of Addition, Associative Property of Multiplication, Commutative Property of Multiplication, Identity Property of Multiplication, Zero Property of Multiplication, Distributive Property of Multiplication
Lesson Frame: Write First Step Questions for Two Step Problems	I can use addition subtraction multiplication, and division to solve two step problems.
Lesson Frame: Solve Two Step Word Problems	I can solve word problems requiring two steps.
Lesson Frame: Equations and Two Step Word Problems	I can Solve word problems requiring two operations.
Lesson Frame: Practice with Two Step Word Problems	I can solve word problems using two step equations and decide if answers are reasonable.
Performance Tasks: Quick Quiz 2, Remembering pages, weekly fact fluency checks Unit 5 Review, Unit 5 Test	Notes:

Unit 6 Name: Polygons, Perimeter, and Area	Length: 17 days
Standard(s): CC.3.G.1, CC.3.G.2, CC.3.MD.5, CC.3.MD.5a, CC.3.MD.5b, CC.3.MD.6, CC.3.MD.7, CC.3.MD.7a, CC.3.MD.7b, CC.3.MD.7c, CC.3.MD.7d, CC.3.MD.8, CC.3.G.1	Outcomes: Students identify, classify, and describe properties of standard two- and three-dimensional shapes independently in order to recognize geometry in the world around them. Students use their understanding of geometric measurement and use the concept of area to relate area to multiplication and division. Students recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.
Essential Questions: What is a solid figure? How can you describe parts of solid figures? What is a polygon? How can you describe triangles? What are some special names for quadrilaterals? How can you use the attributes of two- and three-dimensional shapes to classify them? What are some ways to determine the area of rectangles? How are perimeter and area related? How do we use multiplication to find area?	Learning Targets: Recognize attributes of triangles, quadrilaterals, and other polygons. Decompose polygons into triangles and compose polygons from triangles. Recognize perimeter and area as attributes of plane figures and find ways to measure both attributes. Investigate the relationship between perimeter and area. Solve real world problems involving area, perimeter, and unknown side lengths.
Topic 1: Analyzing Triangles and Quadrilaterals	Length: 5 days
Standard(s): CC.3.G.1, CC.3.G.2	Academic Vocabulary: angle, concave, convex, decagon, hexagon, octagon, polygon, pentagon, ray, right angle, opposite, parallelogram, rectangle, rhombus, square, trapezoid, parallel, quadrilateral,
Lesson Frame: Triangles	I can understand the relationship between angles, triangles, and polygons.
Lesson Frame: Parallelograms, Rectangles, Square, and Rhombuses	I can explore the relationships among parallelograms, rectangles, squares, rhombuses, and trapezoids.
Lesson Frame: Draw Quadrilaterals	I can draw quadrilaterals.
Lesson Frame: Classify Quadrilaterals	I can describe the relationships among various types of quadrilaterals and draw quadrilaterals that match a description.
Performance Tasks: Quick Quiz 1, Remembering pages, weekly fact fluency checks	Notes:
Topic 2: Area and Perimeter	Length: 11 days

Standard(s): CC.3.G.1, CC.3.MD.5, CC.3.MD.5a, CC.3.MD.5b, CC.3.MD.6, CC.3.MD.7, CC.3.MD.7a, CC.3.MD.7b, CC.3.MD.7c, CC.3.MD.7d, CC.3.MD.8, CC.3.G.1	Academic Vocabulary: area, perimeter, unit square, side length, decompose, rectilinear polygon, dimensions, tangram
Lesson Frame: Perimeter and Area	I can develop concepts of perimeter and area.
Lesson Frame: Side Lengths with Area and Perimeter	I can use side lengths in area and perimeter calculations and problems.
Lesson Frame: Compare Areas and Perimeters	I can recognize that rectangles with the same perimeter can have different areas, and rectangles with the same area can have different perimeters.
Lesson Frame: Area of Rectilinear Figures	I can find the area of figures by decomposing them into rectangles.
Lesson Frame: Solve Perimeter and Area Problems	I can use concepts of perimeter and area to solve real world problems.
Lesson Frame: Tangram Shapes and Area	I can use tangram shapes to find areas of figures.
Performance Tasks: Quick Quiz 2, Remembering pages, weekly fact fluency checks, Unit 6 Review, Unit 6 Test	Notes:

Unit 7 Name: Explore Fractions	Length: 16 days
Standards: CC.3.NF.1, CC.3.NF.2a, CC.3.NF.2b, CC.3.NF.3d, CC.3.G.2, CC.3.NF.3a, CC.3.NF.3b, CC.3.NF.3c, CC.3.NF.3d	Outcomes: Students develop and understanding of fractions as numbers, and like whole numbers fractions have a place on the number line. Students refer to a fraction as relative to the size of the whole, and know that different but equivalent fractions can be used to represent the same amount. Students can now independently use their learning to represent and interpret real world items as fractional parts by reasoning with shapes and their attributes.
Essential Questions: What is a unit fraction? How do we use a number line to show fractions? How can fractions be used to represent numbers and their parts? How can we show equivalent fractions? How can we compare fractions with the same numerator or the same denominator?	Learning Targets: Understand the meaning of fractions and see that fractions must be equal parts of the same whole. Build non-unit fractions from unit fractions. Represent fractions in various ways, including fraction bars, number lines, and fraction strips. Compare unit fractions and compare fractions with either the same numerator or the same denominator. Find equivalent fractions.
Topic 1: Fraction Concepts	Length: 8 days
Standards: CC.3.NF.1, CC.3.NF.2a, CC.3.NF.2b, CC.3.NF.3d, CC.3.G.2	Academic Vocabulary: fraction, numerator, denominator, unit fraction, whole, number line, locate
Lesson Frame: Understand Fractions	I can develop a conceptual understanding of unit fractions and how they are used to build other fractions.
Lesson Frame: Model Fractions	I can use fraction bars and number lines to represent fractions.
Lesson Frame: Locate Fractions on the Number Line	I can locate fractions on the number line.
Lesson Frame: Compare Unit Fractions	I can use fraction bars and number lines to compare unit fractions.
Lesson Frame: Compare Fractions	I can use fraction circles to develop understanding of comparing fractions with the same denominator or with the same numerator.
Performance Tasks: Quick Quiz 1, Remembering pages, weekly fact fluency checks	Notes:
Topic 2: Equivalent Fractions	Length: 8 days
Standard(s): CC.3.NF.1, CC.3.NF.2a, CC.3.NF.2b, CC.3.NF.3d, CC.3.G.2, CC.3.NF.3a, CC.3.NF.3b, CC.3.NF.3c, CC.3.NF.3d	Academic Vocabulary: equivalent fractions, denominator, numerator, equivalence chain, equivalent
Lesson Frame: Introduce Equivalence	I can develop understanding of equivalent fractions.
Lesson Frame: Equivalent Fractions	I can find two or more equivalent fractions using number lines.
Lesson Frame: Problem Solving with Fractions	I can use fraction concepts to solve real world problems.
Performance Tasks: Quick Quiz 2, Remembering pages, weekly fact fluency checks, Unit 7 Review, Unit 7 Test	Notes:

Unit Name: Geometry	Length: 13 days
Standards: CC.4.MD.5, CC.4.MD.5a, CC.MD.5b, CC.4.MD.6, CC.4.MD.7, CC.4.G.1, CC.4.G.2, CC.4.G.3, CC.4.OA.5	Outcomes: Students classify and draw angles, triangles, and quadrilaterals. They identify and draw parallel and perpendicular lines, as well as lines of symmetry in geometric figures.
Essential Questions: How are the different types of lines and angles related to the creation of polygons?	Learning Targets: Use a protractor to measure angles. Use an equation with a symbol for an unknown angle measure.
Topic 1: Measuring and Drawing Angles	Length: 3 days
Standard(s): CC.4.MD.5, CC.4.MD.5a, CC.MD.5b, CC.4.MD.6, CC.4.MD.7, CC.4.G.1	Academic Vocabulary: point, line, line segment, endpoint, angle, ray, vertex, right angle, acute angle, obtuse angle, straight angle, degree, protractor, circle, reflex angle
Lesson Frame: Points, Rays, and Angles	I can draw and describe points, rays, angles, and other simple geometric figures.
Lesson Frame: Measuring Angles	I can draw and measure angles.
Lesson Frame: Circles and Angles	I can identify, measure, and draw angles in a circle.
Performance Tasks: Quick Quiz 1	Notes:
Topic 2: Triangles and Angle Measurements	Length: 3 days
Standard(s): CC.4.MD.6, CC.4.MD.7, CC.4.G.1, CC.4.G.2	Academic Vocabulary: triangle, right triangle, obtuse triangle, acute triangle, congruent, equilateral triangle, isosceles triangle, scalene triangle, adjacent angles, compose, decompose
Lesson Frame: Name Triangles	I can draw and classify triangles by their angles and sides.
Lesson Frame: Compose and Decompose Angles	I can find unknown angle measures.
Lesson Frame: Real World Problems	I can add and subtract angle measures in real world situations.
Performance Tasks: Quick Quiz 2	Notes:
Topic 3: Analyzing Quadrilaterals	Length: 3 days
Standard(s): CC.4.G.1, CC.4.G.2	Academic Vocabulary: parallel, perpendicular, quadrilateral, adjacent, opposite, trapezoid, parallelogram, rhombus, rectangle, square, diagonal, congruent, vertex
Lesson Frame: Parallel and Perpendicular Lines and Line Segments	I can demonstrate understanding of parallel and perpendicular figures.
Lesson Frame: Classify Quadrilaterals	I can name and classify quadrilaterals based on sides and angles.
Lesson Frame: Decompose Quadrilaterals and Triangles	I can decompose quadrilaterals and triangles into other figures.

Performance Tasks: Quick Quiz 3	Notes:
Topic 4: Analyzing Polygons	Length: 4 days
Standard(s): CC.4.G.1, CC.4.G.2, CC.4.G.3, CC.4.OA.5	Academic Vocabulary: polygon, line symmetry, line of symmetry
Lesson Frame: Classify Polygons	I can sort triangles and quadrilaterals by a number of different rules.
Lesson Frame: Line Symmetry	I can recognize and draw lines of symmetry and determine when figures have line symmetry.
Lesson Frame: Unit Review and Test	I can classify and draw angles, triangles, and quadrilaterals and identify and draw parallel and perpendicular lines, as well as lines of symmetry in geometric figures.
Performance Tasks: Quick Quiz 4, Unit 8 Review, Unit 8 Test	Notes: