RSU 54/MSAD 54 Math Curriculum

Content Area: Math Grade: Grade 3
Unit: Operations and Algebraic Thinking

Common Core State Standards Domain: Operations and Algebraic Thinking

Common Core State Standards	RSU 54/MSAD 54 Objectives	Instructional Resources/Activities
Represent and solve problems involving multiplication and division.	**Represent and solve problems involving multiplication and division.**	
1. Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. *For example, describe a context in which a total number of objects can be expressed as 5 × 7.*	1.Understand products of whole numbers as the total number of objects in equal groups.	1. Scott Foresman, Lessons 5-1, 5-2 1. Teaching Arithmetic: Introducing Multiplication, Chapters 1-3, 8. 1. Zeroing In on Number and Operations, "Properties of Multiplication" 1. Each Orange Had Eight Slices, Paul Giganti (read aloud) 1. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see array picture cards) 1. Mastering the Basic Math Facts in Multiplication and Division, Chapter One 1. Amanda Bean's Amazing Dream, Cindy Neuschwander (read aloud) 1. Zeroing in on Number and Operations, "Meaning of Multiplication." 1. Game: "Groups Galore" (resource packet)
2. Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. *For example, describe a context in which a number of shares or a*	2. Understand quotients of whole numbers as the number of objects in each of the equal groups or as the number of equal groups.	2. Scott Foresman, Lessons 7-1, 7-2 2. Teaching Arithmetic; Introducing Division, Chapters 1-4 2. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see sharing or grouping) 2. Mastering the Basic Math Facts in Multiplication and Division, Chapter One 2. The Doorbell Rang, Pat Hutchins (read aloud) 2. Zeroing in on Number and Operations, "Meaning of Division," "Connecting Division to Multiplication" 2. Game: "Keep the Leftovers" (resource packet)

number of groups can be expressed as 56 ÷ 8.		
3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.[1]	3. Apply multiplication and division concepts for solving math story problems within 100 using equal groups, arrays, and measurement quantities. For example, students will use symbols to represent unknown products, unknown group sizes, or unknown number of groups. (See Table 2 CCSS)	3. Scott Foresman, Lessons 5-3, 7-3 3. Teaching Arithmetic: Introducing Multiplication, Chapter 4 3. Teaching Arithmetic; Introducing Division, Chapter 13 3. Zeroing In on Number and Operations, "Problem Posing" 3. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see *Number Story Arrays* and *Sharing Marbles Equally)* 3. Six Dinner Sid, Inga Moore (read aloud) 3. The Great Divide, Dayle Ann Dodds (read aloud) 3. Mastering the Basic Math Facts in Multiplication and Division, Chapter One 3. Activities: "In the Garden," "Sowing Seeds," "Fresh From the Garden," " By the Bushel" (resource packet)
4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = _ ÷ 3, 6 × 6 = ?*	4. Apply multiplication and division concepts for solving equations with three related whole numbers within 100 using equal groups, arrays, and measurement quantities. For example, students will use symbols to represent unknown.	4. Mastering the Basic Math Facts in Multiplication and Division 4. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see *Missing Numbers,* and *What is the Missing Number)* 4. Games: "Array Game," "How Long, How Many?" (resource packet) 4. Activities: "Arrays" (resource packet)
Understand properties of multiplication and the relationship between multiplication and division.	**Understand properties of multiplication and the relationship between multiplication and division.**	
5. Apply properties of operations as	5. Understand and apply properties of	5. Scott Foresman, Lessons 5-2, 6-9 5. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see *Split a Factor* and

strategies to multiply and divide.[2] *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*	multiplication and division (commutative, associative, distributive) as strategies while using objects, pictures, words and symbols in order to develop understanding of these properties.	*Decompose a Factor)* 5. Zeroing In on Number and Operations, "Properties of Multiplication," "Connecting Division to Multiplication"
6.Understand division as an unknown-factor problem. *For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.*	6. Make connections between multiplication and division as inverse operations while understanding division as a missing factor problem.	6. Zeroing In on Number and Operations, "Connecting Division to Multiplication" 6. One Hundred Hungry Ants, Elinor J. Pinczes (read aloud)
Multiply and divide within 100.	**Multiply and divide within 100.**	
7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-	7. Recall multiplication facts from memory for two one-digit numbers.	7. Mastering the Basic Math Facts in Multiplication and Division 7. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see *Split a Factor* and *Decompose a Factor)* 7. Fastt Math 7. Paper and Pencil resources such as Mad Minutes, Rocket Math 7. Games: "Fishy Multiplication," "Product Comparing," "Side by Side," "Get This…I've Got It," "Multiplication Baseball" (resource packet)

digit numbers.		
Solve problems involving the four operations, and identify and explain patterns in arithmetic.	**Solve problems involving the four operations, and identify and explain patterns in arithmetic.**	
8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.[3]	8a. Solve one and two-step word problems using the four operations. 8b. Use equations to model the solution with a letter (or box) standing for the unknown quantity. 8c. Check solutions using mental math and estimation strategies.	8a-c. Scott Foresman, Lessons 1-6 and 1-14 8a-c. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see *Two Step Word Problems*) 8a-c. Math Problem Booklets (locally produced) 8a. Zeroing In on Number and Operations, "Problem Solving with all Operations" *8a.* Scott Foresman, Lessons 1-9, 1-12, 1-13, 3-1 to 3-4, 3-6 to 3-10, 3-12, 5-3 8a. Teaching Arithmetic: Introducing Multiplication, Chapters 1, 4-6 8c. Game: "Get This...I've Got It" (resource packet)
9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*	9. Recognize patterns in arithmetic while making connections to the properties of multiplication.	9. Scott Foresman, Lessons 5-5 to 5-10 9. Teaching Arithmetic: Introducing Multiplication, Chapter 10. 9. Zeroing In on Number and Operations, "Multiples of 10, 100 and 1000" *9.* Mastering the Basic Math Facts in Multiplication and Division 9. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see *Using Number Patterns to Describe Multiples, and Using Patterns in the Multiplication Table*)
	Represent and solve problems involving addition and subtraction. 10. Use addition and subtraction within 1000	10. Scott Foresman, Lesson 2-2 10. Zeroing In on Number and Operations, "Problem

	to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. **Add and subtract within 20.** 11. Fluently add and subtract within 20 using mental strategies.[1] By end of Grade 3, know from memory all basic addition and subtraction facts. [1]See standard 1.OA.6 for a list of mental strategies. 1. OA.6. Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., 8 + 6 = 8 + 2 + 4 = 10 + 4 = 14); decomposing a number leading to a ten (e.g., 13 – 4 = 13 – 3 – 1 = 10 – 1 = 9); using the relationship between addition and subtraction (e.g., knowing that 8 + 4 = 12, one knows 12 – 8 = 4); and creating equivalent but easier or known sums (e.g., adding 6 + 7 by creating the known equivalent 6 + 6 + 1 = 12 + 1 = 13).	Posing," "Mental Computation" 10. Math Problem Booklets (locally produced) 10. NECAP/MEA sample items 10. Scott Foresman, Problem of the Day 11. Daily Fact Practice (paper and pencil, Fastt Math) 11. Mastering the Basic Math Facts in Addition and Subtraction 11. Fastt Math 11. Daily Mental Math 11. Games: "Doubles & Doubles Plus One," "Teen Take Away," ""Fast Ten—Yes or No?" (resource packet) 11. Activity: "Power Towers" (resource packet) **Additional Resource:** Calendar Math

RSU 54/MSAD 54 Math Curriculum

Content Area: Math Grade: Grade 3
Unit: Numbers and Operations in Base Ten

Common Core State Standards Domain: Numbers and Operations in Base Ten

Common Core State Standards	RSU 54/MSAD 54 Objectives	Instructional Resources/Activities
Use place value understanding and properties of operations to perform multi-digit arithmetic.[1]	**Use place value understanding and properties of operations to perform multi-digit arithmetic.[1]**	
1. Use place value understanding to round whole numbers to the nearest 10 or 100.	1. Use place value understanding to order and round whole numbers to the nearest 10 or 100. Use hundreds charts or number lines to justify reasoning.	1. Scott Foresman Lessons 1-7, 1-8, 1-10 1. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see *Round Up or Down?, Round to the Nearest Ten, Round to the Nearest 100*) 1. Zeroing In on Number and Operations, "In Order" 1. Games: "Try for $5,000," "Rounding Game," "From Here to There," "Number Maker" (resource packet)
2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	2. Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	2. Scott Foresman, Lessons 2-3, 3-2, 3-3, 3-7, 3-8 2. Zeroing In on Number and Operations, "Adding Numbers in the Thousands" (modify for within 1000), "Column Addition" 2. Games: "The $1,000 Club," "Empty the Bank," "Double Trouble," "Close to 50," "How Close to 0?" "Get to 100"" "Plus-Minus, Stay the Same," "PIG," "Race to 200" (resource packet)
3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.	3. Apply place value understanding to multiplication of one-digit whole numbers by multiples of 10 in the range 10–90. This standard expects that students go beyond tricks that hinder understanding such as	3. Zeroing In on Number and Operations, "Multiples of 10, 100 and 1000" 3. Mastering the Basic Math Facts in Multiplication and Division, Chapter Three

	"just adding zeros" and explain and reason about their products. For example, for the problem 50 x 4, students should think of this as 4 groups of 5 tens or 20 tens. Twenty tens equals 200.	
	4. Extend place value understanding to thousands.	4. Teaching Arithmetic: Lessons for Extending Place Value, Ch. 1-4, 11. 4. Activities: "Create an Address Number," Calculator Questions," "Math Number Sense," "Place Value Assessment," "Place Value Riddles," "Activities with Place Value Blocks" (resource packet) **Additional Resource:** Calendar Math

RSU 54/MSAD 54 Math Curriculum

Content Area: Math Grade: Grade 3
Unit: Number and Operations- Fractions

Common Core State Standards Domain: Number and Operations- Fractions

Common Core State Standards	RSU 54/MSAD 54 Objectives	Instructional Resources/Activities
Develop understanding of fractions as numbers. *The grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6 and 8.	**Develop understanding of fractions as numbers.** *The grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6 and 8.	
1. Understand a fraction 1/*b* as the quantity formed by 1 part when a whole is partitioned into *b* equal parts; understand a fraction *a*/*b* as the quantity formed by *a* parts of size 1/*b*.	1. Understand a fraction as part of a whole. Students should focus on the concept that a fraction is made up (composed) of many pieces of a unit fraction, which has a numerator of 1. For example, the fraction 3/5 is composed of 3 pieces that each have a size of 1/5.	1. Scott Foresman, Lessons 9-1 to 9-3 1. Teaching Arithmetic Introducing Fractions Ch. 4 1. Marilyn Burns Fraction Kit, Introductory Lessons 1. Zeroing In on Number and Operations, "Finding Parts and Making Wholes" 1. "Fun with Pattern Block Fractions," http://illuminations.nctm.org/LessonDetail.aspx?id=U113 1. Game: "Make a Pound" (resource packet)
2. Understand a fraction as a number on the number line; represent fractions on a number line diagram. 2a. Represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as the whole and	2a. Represent fractions on a number line by partitioning the line into equal regions.	2a. Zeroing In on Number and Operations, "Number Lines and Benchmark Fractions" 2a. The Hershey's Milk Chocolate Bar Fractions Book, Jerry Pollotta (read aloud)

partitioning it into *b* equal parts. Recognize that each part has size 1/*b* and that the endpoint of the part based at 0 locates the number 1/*b* on the number line.		
2b. Represent a fraction *a*/*b* on a number line diagram by marking off a lengths 1/*b* from 0. Recognize that the resulting interval has size *a*/*b* and that its endpoint locates the number *a*/*b* on the number line.	2b. Understand that a fraction on a number line is the sum of its unit fractions.	2b. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see Fraction Number Lines)
3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.		
3a. Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	3a. Understand two fractions as equivalent (equal) if they are the same size or the same point on a number line.	3a-b. Scott Foresman Lessons 9-3, 9-4 3a. Scott Foresman Lesson 9-6 3a. Zeroing In on Number and Operations, "Number Lines and Benchmark Fractions"
3b. Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model.	3b. Recognize and generate simple equivalent fractions, e.g., 1/2 = 2/4, 4/6 = 2/3). Explain why the fractions are equivalent, e.g., by using a visual fraction model.	3b. About Teaching Mathematics: Introducing Fractions Wipeout Game p. 236; also in Fraction Kit manual, and p. 153 in Teaching Arithmetic: Introducing Fractions 3b. Investigations, Investigation 2: Pattern Block Cookies Session 3 (resource packet) 3b. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see *Create Equivalent Fractions*). 3b. Fraction Kit activity, "What's Missing," p. 149 in

		Teaching Arithmetic, Introducing Fractions
3c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.*	3c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. *Examples: Express 3 in the form 3 = 3/1 or 6/2; recognize that 6/1 and 12/2 = 6; locate 4/4 or 2/2 and 1 at the same point of a number line diagram. Develop this understanding especially through halves.*	3c. Develop this understanding through activities with the fraction kit by asking questions such as: "How can we show different ways to make one whole using just one color?" "How would we show those as fractions?" "What do you notice about the fractions that equal one whole?" "How many halves would you need to make three wholes? Four? Five?" "How would we represent those fractions?" "What do you notice about fractions with halves that make whole numbers?"
3d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	3d. Compare fractions with or without visual fraction models including number lines. Experiences should encourage students to reason about the size of pieces, the fact that 1/3 of a cake is larger than ¼ of the same cake. Since the same cake (the whole) is split into equal pieces, thirds are larger than fourths. In this standard, students should also reason that comparisons are only valid if the wholes are identical.	3d. About Teaching Mathematics: Introducing Fractions Wipeout Game p. 236; also in Fraction Kit manual 3d. Marilyn Burns Fraction Kit, activities, especially making the kit, Cover Up, Uncover 3d. Teaching Arithmetic Introducing Fractions, Chapters 13-14 3d. Scott Foresman, Lesson 9-4 **Additional Resource:** Calendar Math

RSU 54/MSAD 54 Math Curriculum

Content Area: Math Grade: Grade 3
Unit: Measurement and Data

Common Core State Standards Domain: Measurement and Data

Common Core State Standards	RSU 54/MSAD 54 Objectives	Instructional Resources/Activities
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	**Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.**	
1. Tell and write time to the nearest minute and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	1. Tell and write time to the nearest minute and measure elapsed time in minutes for math story problems.	1. Scott Foresman, Lessons 4-1 to 4-3 1. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (*Elapsed Time Ruler, Elapsed Time Word Problems*)
2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).[1] Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to	2a. Measure and estimate liquid volumes and masses of objects using standard units of measurement. 2b. Add, subtract, multiply, or divide liquid volumes or masses of the same units to solve one-step word problems.	2a. Scott Foresman, Lessons 12-1, 12-2, 12-4, 12-5, 2a. Navigating through Measurement in Grades 3-5, Chapter 1, Chapter 2 2a. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (More or Less than a Liter, Capacity Line-Up) 2a.www.pbskids.org/cyberchase/math-games/can-you-fill-it/ 2b. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (*Volume and Mass Word Problems, Estimating Weight*)

represent the problem.[2]		
Represent and interpret data. 3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.*	**Represent and interpret data.** 3a. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. 3b. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.*	3a. Scott Foresman, Lessons 4-7, 4-11, 4-12 3a. Classroom activities and other content areas including reading (Scholastic News), Science, and Social Studies 3a. Navigating through Data Analysis in Grades 3-5, Chapter 1, Chapter 2 3b. Scott Foresman, Lesson 4-8 3b. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (see *Collecting and Representing Data, Jake's Survey)*
4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters.	4. Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch marks on the ruler. Students should connect their understanding of fractions to measuring to one-half and one quarter inch.	4. Scott Foresman, Lesson 9-12 to 9-14 4. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (*Measuring to the Nearest Half Inch, Measuring to the Nearest Quarter Inch*)
Geometric measurement: understand concepts of area and relate area to multiplication and to addition. 5. Recognize area as an attribute of plane figures and	**Geometric measurement: understand concepts of area and relate area to multiplication and to addition.**	

understand concepts of area measurement.		
5a. A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area.	5a. Explore the concept of covering a region with "unit squares," which could include square tiles or shading on grid or graph paper.	5a.-b. Scott Foresman, Lesson 8-12 5a.-b. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (Exploring Area, Area on the Geoboard) 5a. Navigating through Measurement in Grades 3-5, Chapter 3
5b. A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n* square units.	5b. Label the area of a figure in square units.	5b. Scott Foresman, Lesson 8-12 5b. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (*Exploring Area, Area on the Geoboard)*
6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	6. Count the square units to find the area of a figure (this could be done in metric, customary, or non-standard square units.	6. Navigating through Measurement in Grades 3-5, Chapter 1
7. Relate area to the operations of multiplication and addition.		
7a. Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths.	7a. Find the area of a rectangle by tiling rectangles and using the array model of multiplication.	7a-b. Navigating through Measurement in Grades 3-5, Chapter 3 7a. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (*Rectangles w/Color Tiles, Comparing Rectangles, Rectangular Area Cards*)
7b. Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real world and mathematical	7b. Multiply whole number side lengths of rectangles to find rectangular areas in the context of solving real world and mathematical problems.	7b. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (*Developing a Formula for the Area of a Rectangle, Area Word Problems*)

problems, and represent whole-number products as rectangular areas in mathematical reasoning.		
7c. Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths a and $b + c$ is the sum of $a \times b$ and $a \times c$. Use area models to represent the distributive property in mathematical reasoning.	7c. Extend understanding of the distributive property using area models. For example, the area of a 7 x 6 figure can be determined by finding the area of a 5 x 6 and 2 x 6 and adding the two sums.	7c. Zeroing in on Number and Operations, "Properties of Multiplication."
7d. Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.	7d. Decompose rectilinear figures (a rectilinear figure is a polygon that has all right angles) then find the sum of the decomposed areas which is the total area of the rectilinear figure.	7d. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (*Designing a Flower Bed, Area of Irregular Figures*)
Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	**Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.**	
8. Solve real world and mathematical problems involving perimeters of polygons, including	8a. Find the perimeter of a polygon given the side lengths. 8b. Find the unknown	8a-b. Scott Foresman, Lesson 8-11 8a-b. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (*Designing a Rabbit Enclosure, Perimeter Word Problems*) 8a. http://www.k-5mathteachingresources.com/3rd-

finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters. [1] Excludes compound units such as cm3 and finding the geometric volume of a container. [2] Excludes multiplicative comparison problems (problems involving notions of "times as much"; see Glossary, Table 2).	side length given the perimeter of a polygon and the lengths of the other sides. 8c. Explore the possibilities for rectangles with the same area and different perimeters, or different area and same perimeter. 9. Count money and make change to one dollar. 10. (CCSS 2.MD review) Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using $ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	grade-number-activities.html (*Measuring Perimeter*) 8a. Activity: (resource packet) "What's the Perimeter?" 8b. Teacher created examples 8c. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html *(The Perimeter Stays the Same*) 8c. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (*The Area Stays the Same*) 8.c. Navigating Through Measurement, *Ant's Picnic* 8.c. www.pbskids.org/cyberchase/videos/area-alert/ 8c. www.pbskids.org/cyberchase/math-games/airlines-builder/ 9. Scott Foresman Lessons 1-12, 1-13 9. Game: "Pocket Money" (resource packet) 10. Daily Problem Solving 10. "35 Cent Problem" (Resource Packet) 10. Game: "Try for $5.00" (resource packet) **Additional Resource:** Calendar Math

RSU 54/MSAD 54 Math Curriculum

Content Area: Math Grade: Grade 3
Unit: Geometry

Common Core State Standards Domain: Geometry

Common Core State Standards	RSU 54/MSAD 54 Objectives	Instructional Resources/Activities
Reason with shapes and their attributes.		
1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	1a. Recognize rhombuses, rectangles, and squares as examples of quadrilaterals. 1b. Draw examples of quadrilaterals that do not belong to any of these subcategories.	1a. Scott Foresman, Lesson 8-8 1a-b. Navigating Through Geometry, Chapter 1 1a-b. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (2-*D Shape Sort, Comparing Quadrilaterals*) 1b. Scott Foresman, Lesson 8-6
2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.*	2. Divide shapes into equal parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.*	2. http://www.k-5mathteachingresources.com/3rd-grade-number-activities.html (*Geoboard Fourths, Congruent Eighths*) **Additional Resource:** Calendar Math