A Correlation of

SCOTT FORESMAN ▪ ADDISON WESLEY

Mathematics

to the

Carpentersville Community Unit School District #300 Mathematics Curriculum

K – 5

PEARSON
Scott Foresman

G/M-233

Introduction

This document demonstrates the high degree of success students will achieve when using ***Scott Foresman – Addison Wesley Mathematics*** in meeting the objectives of the Community Unit School District #300 Mathematics Curriculum. Correlation page references are to the Teacher Edition, which contains facsimile Student Edition pages.

Scott Foresman – Addison Wesley Mathematics was carefully developed to reflect the specific needs of students and teachers at every grade level, while maintaining an overall primary goal: to have math make sense from every perspective. This program is based on scientific research that describes how children learn mathematics well and on classroom-based evidence that validates proven reliability.

- **Reaching All Learners**

Scott Foresman – Addison Wesley Mathematics addresses the needs of every student through structured instruction that makes concepts easier for students to grasp. Lessons provide step-by-step examples that show students how to think about and solve the problem. Built-in leveled practice in every lesson allows the teacher to customize instruction to match students' abilities. Reaching All Learners, featured in the Teacher Edition, helps teachers meet the diverse needs of the classroom with fun and stimulating activities that are easy to incorporate directly into the lesson plan.

- **Test Prep**

Scott Foresman - Addison Wesley Mathematics builds understanding through connections to prior knowledge, math strands, other subjects and the real world. It provides practice for maximum results and offers assessment in a variety of ways. Besides carefully placed reviews at the end of each Section, an important Test Prep strand runs throughout the program. Writing exercises prepare students for open-ended and short-or extended-response questions on state and national tests. Spiral review in a test format help students keep their test-taking skills sharp.

- **Priority on problem solving:**

Problem-solving instruction is systematic and explicit. Reading connections help children with problem-solving skills and strategies for math. Reading for Math Success encourages students to use the reading skills and strategies they already know to solve math problems.

- **Instructional Support**

In the Teacher Edition, the Lesson Planner provides an easy, at-a-glance planning tool. It identifies objectives, math understandings, focus questions, vocabulary, and resources for each lesson in the chapter. Professional Development at the beginning of each chapter in the Teacher Edition includes a Skills Trace as well as Math Background and Teaching Tips for each section in the chapter.

Ancillaries help to reach all learners with practice, problem solving, hands-on math, language support, assessment and teacher support. Technology resources for both the student and the teacher provide a whole new dimension to math instruction by helping to create motivating and engaging lessons.

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to the
Community Unit School District #300
Mathematics Curriculum

Kindergarten

Math (MA.K)

Focus Statement: Kindergarten students will show one-to-one correspondence; develop and create patterns; and distinguish written numbers.

Outcomes:

MA.K:1 Counting:
Students will identify, count and select numbers in a variety of ways. They will apply this to perform simple addition and subtraction problems using manipulatives. (6A.A1, 6A.A2, 6B.Al)

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MA.K.2-2 Describe uncommon attributes (things that are different) of objects or sets. (Example: color, size, shape.)
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29A-29B, 29-30, 31A-31B, 31-32, 33A-33B, 33-34, 53-54, 47, 67A-67B, 67-68

MA.K:6 Money:
Students will identify, sort and name coins (penny, nickel and dime) and state the purpose of money. (7A.A5)

MA.K.6-1 Identify penny, nickel and dime. (Ask which is the penny.)
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MA.K:6-3 Name penny, nickel and dime. (Student is shown coins and asked to name them.)
159K, 179A-179B, 179-180, 181A-181B, 181-182, 183A-183B, 183-184

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Mathematics Curriculum

Grade One

Math (MA.1)

Focus Statement: First grade students will manipulate a variety of materials, solve basic addition and subtraction facts to 18 and create graphs.

Outcomes:

MA.1:1 Patterns:
Students will identify, reproduce, extend units, and rename patterns. (8A.B3, 8A.B4, 8A.A2, 8A.A4, 8A.B7, 8B.B1, 8CA1, 8D.A1)

MA.1:1-1 Recognize, describe, extend and rename patterns in sequences of sounds, shapes, etc.
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MA.1:1-2 Identify and describe missing units in a pattern or set.
R11-R14, 27A-27B, 27-28, 29A-29B, 29-30, 31A-31B, 31-32, 33A-33V, 33-34, 37, 54, 126, 166, 194, 210, 226, 243A-243B, 243-244, 255A-255B, 255-256, 257A-257B, 257-258, 261A-261B, 261-262, 269, 273, 274, 302, 422, 462

MA.1:1-3 Rename and explain a geometric pattern that uses color, size, and shape. (Example: ●♦● ♦ rename as ABAB)
29A-29B, 29-30

MA.1:2Adding and Subtracting:
Students will add and subtract one- and two-digit whole numbers without regrouping and apply this to word problems. (6A.A4, 6B.A2, 6B.A3, 6B.A4, 6B.A5, 6C.A1, 6C.A2, 6C.B1)

MA.1:2-1 Use symbols +, -, = .
43E-43F, 43, 49A-49B, 49-50, 65A-65B, 65-66, 297A-297B, 297-298

MA.1:2-2 Add and subtract to 12 using strategies such as part vs. whole; counting on; counting back; doubles; properties of zero; fact families, etc.
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47A-47B, 47-48, 49A-49B, 49-50, 51A-51B, 51-52, 53A-53B, 53-54, 57A-57B, 57-58, 63A-63B, 63-64, 65A-65B, 65-66, 67A-67B, 67-68, 69A-69B, 69-70, 71A-71B, 71-72, 93A-93B, 93-94, 95A-95B, 95-96, 97A-97B, 97-98, 103A-103B, 103-104, 105A-105B, 105-106, 107A-107B, 107-108, 125A-125B, 125-126, 127A-127B, 127-128, 129A-129B, 129-130, 133A-133B, 133-134, 137A-137B, 137-138, 139A-139B, 139-140, 141A-141B, 141-142, 459A-459B, 459-460, 461A-461B, 461-462, 463A-463B, 463-464, 471A-471B, 471-472, 473A-473B, 473-474, 475A-475B, 475-476

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MA.1:2-6 Compute addition and subtraction sentences to solve word problems.
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MA.1:3 Geometry:
Students will compare, contrast and sort geometric shapes and relate them to everyday life. (9A.A2, 9A.A3, 9A.B2, 9A.A5, 9B.A1, 9B.A2, 9B.B1, 9B.B2)

MA.1:3-1 Identify, compare, and sort plane figures—circle, square, triangle, rectangle, oval, and diamond (rhombus).
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MA.1:4 Graphing:
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MA.1:6 Money:
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MA.1:9 Measurement and Estimation:
Students will estimate quantities, length and weight, and measure using standard and non-standard units of measurement. (7A.A1, 7A.A2, 7A.B2, 7C.B1, 7B.B2)

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Scott Foresman – Addison Wesley Mathematics
to the
Community Unit School District #300
Mathematics Curriculum

Grade Two

Math (MA.2)

Focus Statement: Second grade students will apply strategies to solve addition and subtraction number problems; use tools to measure; and interpret graphs.

Outcomes:

MA.2.Goal 1: Patterns:
Students will identify, extend and use number patterns to solve problems in a variety of ways. (6A.B1, 6A.B5, 6A.B8, 6C.A4, 6B.B3, 6C.A4.)

MA.2:1-1 Rote count by 1, 2, 5, and 10 from any number.
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MA.2:2 Number Sense:
Students will compare and contrast numbers to 999 in all forms. (6A.A7, 6A.A5, 6D.C1, 6A.B3, 6A.A6, 6A.B4.)

MA.2:2-1 Name numbers and translate words to numerals through 999.
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MA.2:2-3 Describe numeric relationships and the relationship between 2 sets using appropriate vocabulary (greater than, less than, equal to, equivalent, not equal to) and use comparison notation. (<, >, =, =)
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MA.2:2-5 Identify place value through 999; relate models up to 999 and use expanded form. (Example: 3 hundred, 2 ten, 4 ones is three hundred twenty four or 300 + 20 + 4 = 324)
79E, 81A-81B, 81-82, 83A-83B, 83-84, 393A-393B, 393-394, 395A-395B, 395-396

MA.2:3 Adding and Subtracting Basic Facts:
Students will add and subtract whole numbers to 18 with fluency; apply addition and subtraction strategies to whole number problems. (6B.B2, 6B.C7, 6B.B5, 6C.A3, 6C.B2, 6C.C1, 6C.B3, 6C.C2, 6C.B4)

MA.2:3-1 Demonstrate and use the relationship between addition and subtraction to solve mathematical equations (fact families).
27A-27B, 27-28, 36, 227A-227B, 227-228

MA.2:3-2 Select and use appropriate algorithm to add and subtract including counting up, counting back, doubles, near doubles, make 10, and count up to subtract.
61A-61B, 61-62, 63A-63B, 63-64, 65A-65B, 65-66, 43A-43B, 43-44, 45A-45B, 45-46, 47A-47B, 47-48, 51A-51B, 51-52, 53A-53B, 53-54

MA.2:3-3 Demonstrate fluency with basic math addition and subtraction facts to 18. (Fluency: 100 addition facts in 7 minutes; 100 subtraction facts in 10 minutes)
27A-27B, 27-28, 36

MA.2:3-4 Develop and use strategies (Example: rounding) to estimate the sums and differences of one and 2-digit numbers and judge and describe the reasonableness of such results.
141A-141B, 141-142, 149A-149B, 149-150, 191A-191B, 191-192, 229A-229B, 229-230, 429A-429B, 429-430, 432, 445A-445B, 445-446, 452

MA.2:3-5 Analyze situations to determine whether the exact number or estimates are appropriate.
453

MA.2:3-6 Select and use appropriate methods and tools for computing with whole numbers from mental computation, estimation, calculators, and paper/pencil according to the context and nature of the problem.
Representative pages: 9A-9B, 9-10, 26, 240, 432

MA.2:4 Time:
Students will use clocks to tell time to the 5-minute increment and estimate elapsed time. (7A.B4, 7C.C2, 7B.B1, 7C.B3)

MA.2:4-1 Tell time to the 5 minutes when shown a clock.
289E, 291A-291B, 291-292

MA.2:4-2 Select an analog clock with the given time shown to the 5 minutes.
291A-291B, 291-292

MA.2:4-3 Set an analog clock to show the given time to the 5 minutes.
291A-291B, 291-292

MA.2:4-4 Estimate the time needed for a task.
289I, 297A-297B, 297-298

MA.2:4-5 Estimate elapsed time between given events.
299A-299B, 299-300, 334

MA.2:5 Money:
Students will use combinations of pennies, nickels, dimes, and quarters to determine value of money to $1. Solve problems using money and relate money to real life experiences. (7A.B6, 7A.B7, 7A.B8, 7B.B3, 7C.B3)

MA.2:5-1 Count, compare and order sets of unlike coins to a dollar.
121A-121B, 121-122

MA.2:5-2: Show equivalent amounts of money using combinations of coins to $1.
79J, 117A-117B, 117-118, 123

MA.2:5-3 Determine amount of change from a given set of coins up to $l.
119A-119B, 119-120, 225

MA.2:5-4 Explain and demonstrate strategies for making change to a dollar including counting up to make change, and subtracting to make change.
119A-119B, 119-120, 225

MA.2:5-5 Estimate the amount of money needed to make a purchase.
114

MA.2:6 Add and Subtract numbers--2 digit and 3-digit numbers:
Students will use the concept of place value in 2-digit and 3-digit addition and subtraction with regrouping and apply these skills to life applications. (6A.B2, 8B.B1, 8B.B2)

MA.2:6-1 Use multiple models (base 10 blocks, pictorial representations) to demonstrate understanding of base 10 numbers systems.
81A-81B, 81-82, 83A-83B, 83-84, 393A-393B, 393-394, 395A-395B, 395-396

MA.2:6-2 Use models such as base 10 blocks and pictorial representations to add and subtract double digits; add and subtract with and without regrouping.
139A-139B, 139-140, 175A-175B, 175-176, 177A-177B, 177-178, 179A-179B, 179-180

MA.2:6-3 Add combinations of one- two- and three- digit numbers without regrouping.
5A-5B, 5-6, 9A-9B, 9-10, 43A-43B, 43-44, 45A-45B, 45-46, 47A-47B, 47-48, 51A-51B, 51-52, 53A-53B, 53-54, 135A-135B, 135-136, 137, 139A-139B, 139-140, 397A-397B, 397-398, 431A-431B, 431-432

MA.2:6-4 Add combinations of one-, two-, and three-digit numbers with regrouping.
175A-175B, 175-176, 177A-177B, 177-178, 179A-179B, 179-180, 431A-431B, 431-432

MA.2:6-5 Choose an operation (+ or -) to solve a story problem using 2-digit numbers.
487A-487B, 487-488

MA.2:6-6 Subtract one-, two- and three-digit numbers from two- and three-digit numbers without regrouping.
13A-13B, 13-14, 17A-17B, 17-18, 61A-61B, 61-62, 63A-63B, 63-64, 65A-65B, 65-66, 124A-124B, 124-125, 145A-1445B, 145-146, 147A-147B, 147-148, 227A-227B, 227-228, 231A-231B, 231-232, 397A-397B, 397-398, 447A-447B, 447-448, 449A-449B, 449-450, 451A-451B, 451-452

MA.2:6-7 Subtract one- and two-digit numbers from two- and three-digit numbers with regrouping.
211A-211B, 211-212, 213A-213B, 213-214, 215A-215B, 215-216, 447A-447B, 447-448, 449A-449B, 449-450, 451A-451B, 451-452

MA.2:7 Measurement:
Students will demonstrate and record measurements involving standard units and apply these skills to real life situations. (7A.B1, 7A.C1, 7A.C3, 7A.B2, 7C.B2, 7C.C3)

MA.2:7-1 Explain the need for using standard units.
341, 343, 345, 355, 369, 383

MA.2:7-2 Identify the type of measure (Examples: weight, height, volume, temperature) for each measurable attribute.
383

MA.2:7-3 Perform and explain simple unit conversions within a system of measurement. (Examples: 12 inches = 1 foot; 3 feet = 1 yard; 2 cups = 1 pint; 4 quarts = 1 gallon)
343, 345, 347, 355A-355B, 355-356

MA.2:7-4 Measure objects using standard units, including inches, feet, centimeters, cups, pints, quarts, and gallons.
343A-343B, 343-344, 345A-345B, 345-346, 347A-347B, 347-348, 355A-355B, 355-356

MA.2:7-5 Find the area of a shape using a grid.
351A-351B, 351-352

MA.2:7-6 Measure the perimeter of a polygon using inches and centimeters; use correct unit in answer.
351A-351B, 351-352, 384

MA.2:8 Geometry:
Students will compare, contrast, classify and construct two- and three-dimensional shapes. (7A.B1, 8A.B2, 9A.A4, 9A.B3. 9A.A6, 10A.CA, 9B.B1)

MA.2:8-1 Sort, classify and order objects by multiple properties (Examples: size, shape, color, pattern, etc.) and create rules for multiple sortings in a single set.
249A-249B, 249-250, 311A-311B, 311-312

MA.2:8-2 Identify, describe, and create shapes that have line symmetry.
261A-261B, 261-262

MA.2:8-3 Perform and explain the effects of translations (slides), reflections (flips) and rotations (turns) with concrete objects.
259A-259B, 259-260

MA.2:8-4 Identify and draw circles and polygons including squares, rectangles, rhombi, and trapezoids.
249A-249B, 249-250

MA.2:8-5 Identify, compare and contrast 2-dimensional shapes.
249A-249B, 249-250

MA.2:8-6 Identify, compare and contrast cones, cylinders, pyramids, spheres, rectangular prisms of various sizes in various positions and decompose into two dimensional components.
247A-247B, 247-248

MA.2:8-7 Identify objects that are congruent.
249A-249B, 249-250

MA.2:8-8 Defend congruency of two objects using appropriate vocabulary including parallel lines, similar angles, etc.
249A-249B, 249-250

MA.2:9 Data and Probability:
Students will organize, describe and make predictions from existing data; they will also gather, organize and analyze data and communicate their findings. (10B.B1, 10A.C1, 10A.C3, 10C.B2)

MA.2:9-1 Organize, describe and make predictions from existing data.
89A-89B, 89-90, 105A-105B, 105-106, 117A-117B, 117-118, 189A-189B, 189-190, 197, 319A-319B, 319-320,327A-327B, 327-328, 406, 469B

MA.2:9-2 Gather data by using interview questions. (Example: "What is your favorite color?")
311A-311B, 311-312, 319A-319B, 319-320

MA.2:9-3 Represent data using tables, bar graphs, and pictographs.
311A-311B, 311-312, 319A-319B, 319-320

MA.2:9-4 Analyze the data as it appears on the graphs or tables.
89A-89B, 89-90, 105A-105B, 105-106, 117A-117B, 117-118, 189A-189B, 189-190, 197, 319A-319B, 319-320, 327A-327B, 327-328,406, 469B

MA.2:9-5 Display and communicate results of events showing the probability of the event.
373A-373B, 373-374, 375A-375B, 375-376

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Grade Three

Math (MA.3)

Focus Statement: Third grade students will solve multiplication and division problems with factors from 0 to 12; compare fractions; apply operations to solve problems with whole numbers.

Outcomes:

MA.3:1 Whole Numbers and Number Sense:
Students will order and compare numbers, sort by odd and even, and represent using expanded notation when given a list of whole numbers.
(6A.C1, 6A.B5,6A.C2, 6B.B1, 6B.C3, 6C.D1)

MA.3:1-1 Represent, order, and compare whole numbers to 100,000.
2E, 2I, 2J, 6A-6B, 6-7, 8A-8B, 8-9, 10A-10B, 10-11, 12A-12B, 12-13, 18A-18B, 18-19, 21, 22A-22B, 22-23

MA.3:1-2 Explain the concept of odd and even numbers and apply this concept to problem solving. (odd + odd = even, even + even = even, odd + even = odd)
24, 258

MA.3:1-3 Identify equivalent representations of whole numbers and record them (by composing and decomposing numbers) using expanded notations. (Example: 123= 100 + 20 + 3) to the one thousands place.
6A-6B, 6-7, 8A-8B, 8-9, 10A-10B, 10-11, 12A-12B, 12-13

MA.3:1-4 Identify properties of addition operations and use to solve problems.
66A-66B, 66-69

MA.3:1-5 Solve two-step addition and subtraction number sentences and word problems.
284A-284B, 284-285

MA.3:1-6 Add and subtract with 3 and 4 digit numbers with middle zeros.
124F, 124I, 134, 136A-136B, 136-137, 154, 156A-156B, 156-157

MA.3:1-7 Estimate sum and differences using rounding to three digit numbers.
86A-86B, 86-89, 98A-98B, 98-101, 134, 137

MA.3:2 Multiplication and Divisions:
Students will use properties of whole number operations to solve problems and demonstrate fluency with basic multiplication and division facts (up to 12 x 12). (6B.C1, 6B.C2, 6B.C4, 6B.C5, 6B.C6).

MA.3:2-1 Skip count, draw arrays, use repeated addition and use manipulatives to multiply.
258E, 258J, 260A-260B, 260-261, 262A-262B, 262-265, 267, 281, 282, 314I, 316A-316B, 316, 340A-340B, 340-341, 368E, 368I-368J, 384A-384B, 384-385, 386B, 390A, 392B, 626A-626B, 626-629, 630A-630B, 630-631

MA.3:2-2 Demonstrate fluency with basic multiplication and division facts up to 12 x 12.
258F, 276A-276B, 276-279, 280A-280B, 280-281, 282A-282B, 282-283, 286A-286B, 286-287, 288A-288B, 288-291, 314E-314F, 314I-314J, 316A-316B, 316-317, 318A-318B, 318-319, 320A-320B, 320-323, 324A-324B, 324-327, 328A-328B, 328-329, 340A-340B, 340-341, 388A-388B, 388-389, 390A-390B, 390-391, 402A-402B, 402-403

MA.3:2-3 Apply knowledge of basic multiplication facts (factors 0-12) to related facts. (Example: 3 x 4 = 12, 30 x 4 = 120, 300 x 4 = 1200)
258F, 612A-612B, 612-615

MA.3:2-4 Show and use the inverse relationship between multiplication and division and use to solve problems (i.e. fact families).
384A-384B, 384-385, 390

MA.3:2-5 Demonstrate and describe the effects of multiplying and dividing whole numbers using appropriate mathematical notation and vocabulary.
258E, 260A-260B, 260-261, 262A-262B, 262-265, 368E, 370A-370B, 370-371, 372A-372B, 372-373

MA.3:2-6 Solve multiplication and division number sentences and word problems to 100.
260A-260B, 260-261, 278, 281, 283, 287, 290, 293, 339, 371, 373, 374A-374B, 374-377, 385, 387, 389, 391, 393, 628, 631, 637, 641

MA.3:3 Patterns and Problem Solving:
Students will identify, create, and extend patterns using whole numbers or objects and use them to solve problems. Patterns will be extended to simple algebra equations. (8A.B5, 8A.C1, 8A.C4, 8A.C5, 8B.C2, 8D.C1, 8D.C2, 6A.D5, 9C.C1)

MA.3:3-1 Extend geometric and simple numeric patterns using concrete objects or paper and pencil.
2F, 24A-24B, 24-25, 332A-332B, 332-335, 340A-340B, 340-341, 449, 528A-528B, 528-529, 695

MA.3:3-2 Extend numeric patterns involving addition and/or subtraction. (Example: 1, 3, 5 . . ., what are the next two terms?)
24A-24B, 24-27, 258F, 258I, 260A-260B, 260-261, 280-281

MA.3:3-3 Describe the use of a variable as an unknown quantity using a letter or symbol in an equation to express mathematical relationships and define as an unknown.
70A-70B, 70-71, 76A-76B, 76-77, 168A-168B, 168-169, 375-376

MA.3:3-4 Give examples of situations with constant rates of change using words, tables, and graphs. (Example: growth of a plant per day)
Can be developed using the following: Lesson on Make a Table, 270A-270B, 270-271

MA.3:3-5 Solve one-step-linear equations using concrete materials. (Example: x + 2 = 5)
70a-70b, 70-71, 76a-76b, 76-77, 168a-168b, 168-170, 384a-384b, 384-385

MA.3:3-6 Select and use an appropriate operation to solve problems involving patterns (Example: save 1 penny on day one, double amount each day for next 10 days.)
332A-332B, 332-335

MA.3:3-7 Identify numbers less than zero (negative numbers) by extending a number line and apply to familiar applications.
Grade Four: 664A-664B, 664-665

MA.3:3-8 Make and test hypotheses about mathematical properties and relationships (patterns) and justify the conclusions. (guess and check)
332A-332B, 332-335

MA.3:3-9 Determine and justify whether exact or estimated answers are appropriate.
160A-160B, 160-161, 616, 622

MA.3:3-10 Select and use appropriate operations and tools to perform calculations on whole numbers and money (up to three digits).
166A-166B, 166-167, 346A-346B, 346-347,

MA.3:3-11 Evaluate estimates to judge their reasonableness and degree of accuracy.
90A-90B, 90-91, 160A-160B, 160-161, 616A-616B, 616-617, 622A-622B, 622-623

MA3:4 Measurement:
Students will choose and apply appropriate standard units and tools to measure length, area, volume, weight, time, temperature, and money.
(7A.B4, 7A.B5, 7A.C2, 7A.C5, 7B.C1, 7C.C1, 7C.C4)

MA.3:4-1 Make change from a given amount using bills and coins to $20.
40A-40B, 40-41

MA.3:4-2 Tell time using an analog clock to the minute and identify the second hand.
192, 196A-196B, 196-197

MA.3:4-3 Describe relationships within units of time, money, length, weight and volume (Example: 12 inches = 1 foot).
538A-538B, 538-539, 582A-582B, 582-583, 584A-584B, 584-587, 680A-680B, 680-683, 690A-690B, 690-693, 694A-694B, 694-695

MA.3:4-4 Measure objects using standard units in the US customary and metric systems.
532A-532B, 532-533, 534A-534B, 534-535, 536A-536B, 536-537, 538A-538B, 538-539, 582A-582B, 582-583, 584A-584B, 584-587, 680A-680B, 680-683, 684A-684B, 684-685, 690A-690B, 690-693, 694A-694B, 694-695

MA.3:4-5 Find the perimeter and area of an object by measuring and calculating its linear units.
464A-464B, 464-466, 468A-468B, 468-471

MA.3:4-6 Develop and use common benchmarks for linear measures to make comparisons and estimates.
532, 680A-680B, 680-683, 684, 690, 694

MA.3:5 Geometry:
Students will apply geometric ideas and relationships to two-dimensional shapes, polygons, shapes with line symmetry and congruent shapes.
(7B.C2, 9A.B1, 9A.B4, 9A.C1, 9A.C2, 9A.C3, 9B.C2, 9B.C3)

MA.3:5-1 Estimate perimeter of simple polygons.
464A-464B, 464-465

MA.3:5-2 Create and complete shapes that have line symmetry.
460A-460B, 460-461

MA.3:5-3 Specify locations using x and y on a coordinate system in Quadrant I (the positive-positive quadrant).
218A-218B, 218-221

MA.3:5-4 Identify, draw and build polygons.
443, 445, 452A-452B, 452-453, 454A-454B, 454-455

MA.3:5-5 Predict the results of putting together and taking apart two-dimensional shapes (Example: two triangles to make quadrilateral).
454B

MA.3:5-6 Predict and describe the results of translations, rotations, and reflections of two-dimensional shapes.
456A-456B, 456-459

MA.3:5-7 Describe a motion or series of motions that will show that two shapes are congruent.
456A-456B, 456-459

MA.3:5-8 Describe the difference between congruence and similarity.
456A-456B, 456-459

MA.3:6 Probability:
Students will design a probability experiment; predict and describe the likelihood of results; perform the experiment; record and analyze results in tallies and fractional form. (10C.C1, 10C.C2, 10C;C3, 10C.C4, 10C.C5)

MA.3:6-1 Describe events as likely or unlikely and discuss the degree of likelihood using such words as certain, equally likely and impossible.
700A-700B, 700-701, 702A-702B, 702-703, 707

MA.3:6-2 Explain probability as a fractional part of a group.
704A-704B, 704-707

MA.3:6-3 Give examples where the measure of a likelihood of an event can be represented by a fraction from zero to one (1 being 100%).
704A-704B, 704-707

MA.3:6-4 Label 50% and 100% of a given group in context.
Grade Five: 670A-670B, 670-671

MA.3:6-5 Design and perform a probability experiment.
704A-704B, 704-707

MA.3:6-6 Predict future events based on results received from a probability experiment.
700A-700B, 700-701, 704A-704B, 704-707

MA.3.:7 Organizing Data:
Students will create and administer a survey; record, graph and analyze the results. (10B.C1, 10A.C3, 10B.C2)

MA.3:7-1 Create and administer a survey considering which questions will be asked and how the answers will be recorded.
704A-704B, 704-707

MA.3:7-2 Identify the important features of a set of data displayed by a graph.
204A-204B, 204-207, 208A-208B, 208-209

MA.3:7-3 Propose a follow-up survey to investigate questions that arise from the initial survey.
Can Be Developed From: 704A-704B, 704-707

MA.3:8 Fractions:
Students will draw a set of objects, label parts of the set (1/2, 1/3, 1/4), label 50% and 100% of the set, and write addition and subtraction number sentences and word problems using fractions with like denominators. (6A.C3, 6A.B6, 6A.B7, 6A.C4, 6A.C5, 6A.C6, 6D.D1, 6B.D2)

MA.3:8-1 Evaluate the size of fractions using models, benchmarks and equivalent forms.
510A-510B, 510-511

MA.3:8-2 Label parts of a set using 1/2, 1/3, and 1/4.
496E, 502A-502B, 502-503

MA.3:8-3 Model, order, label, and compare unit (1/4) and familiar fractions (2/3) using concrete materials and written forms.
496E, 502A-502B, 502-503

MA.3:8-4 Identify and give examples of equivalent forms of familiar fractions.
504A-504B, 504-505

MA.3:8-5 Label 50% and 100% of a given group in context.
Grade Five: 670A-670B, 670-671

MA.3:8-6 Identify and state uses of decimals to tenths and hundredths place. (Example: Money.)
562E, 562I, 564A-564B, 564-565, 566A-566B, 566-567, 571

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Grade Four

Math (MA.4)

Focus Statement: Fourth grade students will apply strategies to solve multi-digit multiplication and division equations and word problems; organize data; construct and interpret graphs in problems encountered in everyday situations.

Outcomes:

MA.4:1 Multiplication and Division:
Students will apply strategies to solve basic multiplication and division equations and word problems. (6B.D4, 6B.C3, 6C.D1, 6B.E5)

MA.4:1-1: Recall basic multiplication and related division facts and interpret remainders.
148A-148B, 148-149, 150A-150B, 150-151, 152A-152B, 152-153, 384A-384B, 384-385

MA.4:1-2. Identify relationships between and among properties of all operations and use them to solve problems. (Example: commutative property applies to addition but not to subtraction; commutative, associative, identity, zero.)
62,129A-129B, 129-131, 132, 288A-288B, 288-289

MA.4:1-3 Classify numbers according to their characteristics such as factors and multiples.
6A-6B, 6-7, 25, 124, 134, 314A-314B, 314-315

MA.4:1-4 Identify prime numbers on a hundreds chart.
134

MA.4:2 Number Sense:
Students will represent, compare and order whole numbers to millions; fractions, mixed numbers, and decimals to hundredths. (6A.C1, 6A.D1, 6A.D3, 6A.D4, 6A.E1, 6A.E4, 6B.D1, 6A.D2, 6C.C1)

MA.4:2-1 Represent, order, and compare whole numbers to the hundred-millions place.
2E, 2I, 4A-4B, 4-7, 8A-8B, 8-9, 10A-10B, 10-11, 16A-16B, 16-19,

MA.4:2-2 Describe integers using familiar applications. (Example: a thermometer, and above/below sea level.
664A-664B, 664-665

MA.4:2-3 Use strategies to estimate the results of whole-number computations and to judge the reasonableness of such results (compatible numbers, front-end estimation, rounding of 4 & 5 digit numbers).
60E, 60I, 68A-68B, 68-71, 72A-72B, 72-73, 258A-258B, 258-261, 262A-262B, 262-263, 312F, 316A-316B, 316-319, 364J, 368A-368B, 368-371, 408A-408B, 408-411

MA.4:2-4 Represent, order, and compare decimals to hundredths place.
2E-2F, 28A-28B, 28-29, 34A-34B, 34-37, 622E-622F, 622I, 624A-624B, 624-627, 628A-628B, 628-629, 630A-630B, 630-631

MA.4:2-5 Identify fractions as parts of unit wholes, parts of a set, location on a number line, and divisions of whole numbers.
498E-498F, 498I-498J, 500A-500B, 500-501, 502A-502B, 502-503, 504A-504B, 504-507

MA.4:2-6 Identify equivalent representations of simple decimals including .25 = 25/100 = 1/4 and .5 = 5/10 = 1/2.
2F, 28A-28B, 28-29, 34A-34B, 34-37, 622E, 624A-624B, 624-627, 628A-628B, 628-629

MA.4:2-7 Write decimal numbers in expanded form. (Example: 1.25 =1+ .20 + .05)
628A-628B, 628-629

MA.4:2-8 Order mixed numbers and decimals on a number line.
504A-504B, 504-507, 534A-534B, 534-535, 630A-630B, 630-631

MA.4:2-9 Analyze how the size of the whole affects the size of the fraction. (Example: 1/2 of a large pizza is not the same as 1/2 of a small pizza).
498E, 500A-500B, 500-501

MA.4:2-10 Solve addition or subtraction number sentences and word problems using fractions with like denominators.
560E-560F, 564A-564B, 564-567, 574A-574B, 574-577

MA.4: 3 Multi-digit Multiplication and Division:
Students will apply strategies to solve multi-digit multiplication and division equations and word problems. (6B.D4, 6B.C3, 6C.D1, 6B.E5)

MA.4:3-1 Select and use various algorithms to multiply and divide.
122E-122F, 122I, 124A-124B, 124-126, 128A-128B, 128-131, 132A-132B, 132-134, 146A-146B, 146-147, 254E, 254J, 262A-262B, 262-263, 264A-264B, 264-266, 320A-320B, 320-323

MA.4:3-2 Multiply one-digit by two- and three-digit numbers with and without regrouping.
254E-254F, 270A-270B, 270-273, 274A-274B, 274-275, 332A-332B, 332-335

MA.4:3-3 Multiply up to 2-digit by 2-digit numbers with and without regrouping.
320A-320B, 320-323332A-332B, 332-334, 336A-336B, 336-337

MA.4:3-4 Multiply three-digit numbers by multiples of one hundred without regrouping (Example: 100, 200, 300, 1000, 10,000, etc.).
256A-256B, 256-257, 314A-314B, 314-315

MA.4:3-5 Apply divisibility rules for 2, 3, 5, and 10 to a given number up to 100.
402A-402B, 402-403

MA.4:3-6 Divide two- and three-digit numbers by a one-digit number with and without remainders.
380A-380B, 380-383

MA.4:3-7 Divide two- and three-digit numbers by two-digit multiples of ten with and without remainders (Examples: 345/20; 72/30.)
406A-406B, 406-407

MA.4:4 Measurement:
Students will measure, calculate and estimate multiple attributes of an object such as length, area, and mass/weight. (9A.E5, 7B.E3, 7B.E2, 7B.D1, 7B.D2, 7B.E1, 7A.C4, 7C.E4)

MA.4:4-1 Describe and measure attributes of an object including length, mass/weight, and area.
432F, 432J, 468A-468B, 468-470, 588A-588B, 588-589, 590A-590B, 590-591, 594A-594B, 594-595, 652A-652B, 652-653, 656A-656B, 656-657, 658A-658B, 658-661

MA.4.4-2 Explain that all measurements are approximations and precision is affected by choice of units.
588A-588B, 588-589, 600A-600B, 600-601

MA.4:4-3 Develop and apply strategies to estimate and calculate perimeter and area of polygons.
464A-464B, 464-467, 468A-468B, 468-471, 600A-600B, 600-601

MA.4:4-4 Describe integers using familiar applications. (Example: a thermometer, and above/below sea level)
664A-664B, 664-665

MA.4:4-5 Interpret scale on a map or scale drawing.
Grade Five: 662A-662B, 662-663

MA.4:5 Graphing:
Students will collect and organize data; construct graphs; compare, interpret, analyze and make predictions using the data. (10A.C4, 10A.D1, 10A.D4, 10A.D5, 10B.D1, 10B.D2, 10A.E1, 10A.D2, 10C.D1)

MA.4:5-1 Collect and organize data using observations and experiments.
326A-326B, 326-328, 704A-704B, 704-705

MA.4:5-2 Determine the mean, median, and mode of a given set of data, up to two-digit whole numbers.
226A-226B, 226-229, 404A-404B, 404-405

MA.4:5-3 Represent data using tables and graphs such as line plots, line graphs, double line graphs, and bar graphs.
188E-188F, 188J, 206A-206B, 206-207, 208A-208B, 208-211, 216A-216B, 216-219

MA.4:5-4 Create different types of graphs to properly display data for different purposes.
188E-188F, 188J, 204A-204B, 204-205, 206A-206B, 206-207, 208A-208B, 208-211, 216A-216B, 216-219, 229, 230A-230B, 230-231

MA.4:5-5 Propose and justify conclusions and predictions that are based on data.
204A-204B, 204-205, 206A-206B, 206-207, 208A-208B, 208-211, 216A-216B, 216-219, 229, 230A-230B, 230-23

MA.4:5-6 Describe the shape and important features of a set of data and compare related data sets.
206, 226A-226B, 226-229, 404A-404B, 404-405

MA.4:5-7 Propose a further investigation to verify or refute a prediction.
Can Be Developed From: Lesson on Data from Surveys, 230a-230b, 230-231

MA.4:5-8 Determine the probability of an event, given a set of data.
686F, 686J, 700, 704A-704B, 704-705, 709, 710A-710B, 710-711

MA.4:6 Geometry:
Students will identify, describe and apply geometric ideas and relationships to problems encountered in real-life situations. (9A.E7, 9B.C4, 9B.C5, 9B.C6, 9B.D1, 9B.D2, 9A.E3, 7A.C6, 9A.D3)

MA.4:6-1 Calculate the area of an object using square units.
432F, 468A-468B, 468-471

MA.4:6-2 Identify congruent and similar shapes.
452A-452B, 452-453, 458A-458B, 458-459

MA.4:6-3 Compare polyhedra using concrete models.
434A-434B, 434-437

MA.4:6-4 Identify and build a simple three-dimensional object from two-dimensional representations of that object. (Example: build an object from a net).
434A-434B, 434-437

MA.4:6-5 Identify the two-dimensional shapes that form a three-dimensional object (Example: four triangle faces and one square base form a pyramid.)
434A-434B, 434-437

MA.4:6-6 Plot ordered pairs of numbers in Quadrant I (the positive-positive quadrant) using x and y.
212, 692A-692B, 692-695

MA.4:6-7 Identify and describe how geometric figures are used in practical settings (Example: construction, art, advertising, and architecture).
434A-434B, 434-437, 438A-438B, 438-439, 444A-444B, 444-447

MA.4:7 Patterns:
Students will describe, create, analyze and extend patterns; represent patterns & functions using words and tables. (8A.C2, 8A.C3, 8A.D1, 8A.D2, 8A.D6, 8B.D1, 8A.D4, 8A.D5, 8B.E2, 8B.D2, 8B.D3, 8B.EA)

MA.4:7-1 Create a pattern given a set of directions.
90A-90B, 90-91, 98A-98B, 98-99, 136, 256, 314, 366A-366B, 366-367, 406, 454, 641

MA.4.7-2 Identify errors in a given pattern.
90A-90B, 90-91, 98A-98B, 98-99, 136, 256, 314, 366A-366B, 366-367, 406, 454, 641

MA.4:7-3 Identify a number pattern both increasing and decreasing and extend the pattern.
90A-90B, 90-91, 98A-98B, 98-99, 128A-128B, 128-131, 136, 256, 314, 366A-366B, 366-367, 406, 454, 641

MA.4:7-4 Analyze and determine the missing number(s) in a complex repeating pattern.
90A-90B, 90-91, 98A-98B, 98-99, 128A-128B, 128-131, 136, 256, 314, 366A-366B, 366-367, 406, 454, 641

MA.4:7-5 Demonstrate in simple situations how a change in one quantity results in a change in another quantity. (Example: increase the measure of the side of a square and the perimeter increases.)
164A-164B, 164-165, 468A-468B, 468-471

MA.4:7-6 Describe a pattern with one operation verbally and symbolically given a table of input/output numbers.
98A-98B, 98-99, 164A-164B, 164-165, 692A-692B, 692-694

MA.4:8 Problem Solving:
Students will solve multi-step number sentences and word problems using whole numbers and the four basic operations. (6B.D3, 9C.D1, 10C.D1, 10C.D2, 8A.D3)

MA.4:8-1 Select the appropriate operations(s) for a given word problem.
290A-290B, 290-291

MA.4:8-2 Solve single-step problems, including those involving addition or subtraction with whole numbers and money.
63, 66, 68, 69, 78, 81, 84, 87

MA.4:8-3 Solve single-step problems using multiplication or division of whole numbers and money.
130 134, 137, 147, 149, 151, 153, 155, 167, 259, 264, 271, 283, 287, 315, 367, 370, 373

MA.4:8-4 Solve one-, two- or three-step word problems using addition, subtraction, multiplication, or division of whole numbers and money.
156A-156B, 156-157

MA.4:8-5 Apply the problem-solving strategies of "make a simple problem" and "work backwards" as well as using "make a chart, graph or table"; "guess and check"; "look for a pattern"; "draw a picture"; and “make an organized list" and those with extraneous or insufficient information.
38A-38B, 38-39, 90A-90B, 90-91, 140A-140B, 140-141, 222A-222B, 222-223, 278A-278B, 278-281, 326A-326B, 326-329, 512A-512B, 512-513, 648A-648B, 648-649, 696A-696B, 696-697, 714A-714B, 714-715

MA.4:8-6 Demonstrate fluency in adding, subtracting, multiplying and dividing basic facts.
62A-62B, 62-63, 64A-64B, 64-67, 148, 314A-314B, 314-315, 406A-406B, 406-407

Scott Foresman – Addison Wesley Mathematics
to the
Community Unit School District #300
Mathematics Curriculum

Grade Five

Math (MA.5)

Focus Statement: Fifth grade students will demonstrate knowledge of basic geometric, decimal, and fractional concepts; apply these concepts to construct and solve equations and word problems.

Outcomes:

MA.5:1 Geometry—lines, angles, and circles:
Students will examine, represent, construct, and measure plane figures and circles in order to justify basic geometric concepts; use formula to determine circumference. (7A.D1, 7A.E2, 7A.F2, 7C.D1, 7C.E1, 9A.D1, 9A.E9, 9A.E10, 9C.F3)

MA.5:1-1 Identify, represent, draw and label point, plane, line, line segment, ray, parallel lines, intersecting lines, perpendicular lines, acute angles, obtuse angles, right angles, and acute, obtuse, right, scalene, isosceles and equilateral triangles.
326E, 328A-328B, 328-331, 332A-332B, 332-335, 342A-342B, 342-344, 349

MA.5:1-2 Select and apply appropriate standard units and tools to measure, draw, and construct figures (including ruler, protractor and compass).
332A-332B, 332-335, 349, 363, 371

MA.5:1-3 Measure angles using a protractor (90°, 180°, 45°, 30°, 60°).
332A-332B, 332-335

MA.5:1-4 Construct lines, line segments, rays and angles using a straight edge and protractor. Draw these angles: 90°, 180° (straight line), 45°, 30°, 60°, 360° (circle).
328A-328B, 328-331, 336A-336B, 336-337, 363

MA.5:1-5 Find the unknown angle of a triangle, given the other two.
342A-342B, 342-345

MA.5:1-6 Identify and label radius, diameter, chord and circumference of a circle.
336A-336B, 336-337, 542A-542B, 542-545

MA.5:1-7 Construct a circle with a specified radius or diameter using a compass and ruler.
336A-336B, 336-337

MA.5:2 Geometry—two dimensional figures:
Students will determine the fundamental characteristics of two dimensional shapes; sort and classify plane figures; use formulas to determine the perimeter and area. (9A.D2, 9A.D4, 9A.D5, 9A.D7, 9A.E1, 9A.E2, 9A.E6, 9A.E8, 9B.E1, 9B.E2, 9B.E3, 9B.E4, 9B.E5, 9B.F1, 9B.F3, 9C.E2)

MA.5:2-1 Differentiate between polygons (including triangles, quadrilaterals, pentagons, hexagons, and octagons) and non-polygons.
340A-340B, 340-341

MA.5:2-2 Identify and draw regular and irregular polygons.
340A-340B, 340-341, 342A-342B, 342-345, 346A-346B, 346-348

MA.5:2-3 Determine the relationships between the number of vertices and sides in a polygon, the number of diagonals, and the sum of its angles.
352A-352B, 352-354

MA.5:2-4 Identify the attributes when given a figure, and identify the figure when given attributes of regular and irregular polygons.
340A-340B, 340-341, 342A-342B, 342-345, 346A-346B, 346-348

MA.5:2-5 Analyze, compare, and classify regular and irregular two dimensional figures.
340A-340B, 340-341, 342A-342B, 342-345, 346A-346B, 346-348

MA.5:2-6 Determine if two polygons are congruent or similar using measures of angles and sides.
360A-360B, 360-363

MA.5:2-7 Describe paths and movements of plane figures using transformations and create tessellations using pattern blocks, other manipulatives, or technology. Include translations (slides), rotations (turns) and reflections (flips).
364A-364B, 364-367

MA.5:2-8 Identify, describe and justify line symmetry of two dimensional figures.
368A-368B, 368-371

MA.5:2-9 Develop and apply formulas to determine the area of rectangles (Area = length x width).
548A-548B, 548-549

MA.5:2-10 Create an accurate representation of squares or rectangles with a perimeter or area.
540A-540B, 540-541, 550A-550B, 550-551

MA.5:2-11 Determine the volume of a cube or rectangular prism using manipulatives (Volume = length x width x height).
610A-610B, 613

MA.5:3 Geometry—three dimensional figures:
Students will determine the fundamental characteristics of three dimensional shapes; sort and classify solid figures; use formula to determine the volume of rectangular prisms. (7C.D2, 7C.D3, 7C.E2, 7C.E3, 9A.D6, 9A.D8)

MA.5:3-1 Identify the attributes when given a figure, and identify the figure when given attributes of pyramids, cones, cylinders, prisms, and spheres.
594A-594B, 594-597

MA.5:3-2 Analyze, compare, and classify three dimensional figures (including pyramids, cones, cylinders, prisms, and spheres).
594A-594B, 594-597

MA.5:3-3 Match a front, side, and top view drawing with a three- dimensional model built with cubes.
598A-598B, 598-601

MA.5:3-4 Determine if two solid figures are congruent or similar using measures of angles and sides.
Can Be Developed From: Lesson on Congruence and Similarity, 360A-360B, 360-362

MA.5:3-5 Identify, describe, and justify line symmetry of three dimensional figures.
Can Be Developed From: Lesson on Symmetry; 368A-368B, 368-371

MA.5:3-6 Determine the volume of a cube or rectangle prism using manipulatives (Volume = length x width x height).
610A-610B, 610-613

MA.5:4 Number Sense:
Students will solve problems with whole numbers through hundred billions using order of operations and number properties. They will determine the estimated and exact answers, justifying the choice and reasonability of that choice. (6A.F1, 6B.E4, 6C.E2, 6C.E4, 8C.E1, 9C.E1)

MA.5:4-1 Evaluate estimates to judge their reasonability and degree of accuracy.
68A-68B, 68-69, 86A-86B, 86-87, 138A-138B, 138-141

MA.5:4-2 Determine and justify whether exact answers or estimates are appropriate.
624A-624B, 624-625

MA.5:4-3 Solve problems with whole numbers through hundred billions using all operations (+ , - , x, ÷); following the rules for order of operations, equality properties, and appropriate field properties.
22A-22B, 22-25, 66A-66B, 66-67, 70A-70B, 70-71, 76A-76B, 76-77, 172A-172B, 172-173, 696A-696B, 696-699

MA.5:4-4 Make and test statements about mathematical properties and relationships; develop logical arguments to justify conclusions.
22A-22B, 22-25, 66A-66B, 66-67, 70A-70B, 70-71, 76A-76B, 76-77, 172A-172B, 172-173, 696A-696B, 696-699

MA.5:4-5 Compute with 10, 100, 1000, and other powers of 10.
202A-202B, 202-203, 230A-230B, 230-231

MA.5:4-6 Represent the value of any digit in a number through billions in standard, word, and expanded form.
4A-4B, 4-5, 8A-8B, 8-11, 14A-14B, 14-17

MA.5:4-7 Describe a pattern, with at least two operations, verbally and symbolically, given a table of input/output numbers.
100A-100B, 100-102, 106A-106B, 106-107

MA.5:4-8 Describe situations involving inverse relationships. (Example: the more the people, the fewer cookies per person)
135

MA.5:5 Decimals:
Students will compare and order decimals to thousandths; show equivalent representations of decimals to fractions, percentages, and ratios; solve number sentences and word problems using addition, subtraction, multiplication, and division. (6A.D3, 6A.E2, 6B.E7, 6C.D2, 6C.E1, 6C.E3, 6A.F4)

MA.5:5-1 Show equivalent representations of a number by changing from one form to another form (including decimal to fraction, decimal to percent).
426A-426B, 426-429, 668A-668B, 668-669,

MA.5:5-2 Compare and order decimals to the thousandths and find their approximate position on a number line.
8A-8B, 8-11, 12A-12B, 12-13, 237, 430A-430B, 430-431

MA.5:5-3 Recognize equivalent representations for decimals and generate them by using expanded notation. (Example: 4.153 = 4 + 0.1 + 0.05 + 0.003).
8A-8B, 8-11

MA.5:5-4 Develop and use strategies to estimate computations involving familiar decimals in situations relevant to students' experience. (Example: money)
28A-28B, 28-31, 86A-86B, 86-87, 204A-204B, 204-207

MA.5:5-5 Estimate the sum or difference for a given number sentence containing decimals.
28A-28B, 28-30

MA.5:5-6 Solve number sentences and word problems using addition, subtraction, multiplication, and division of decimals.
39, 41, 70, 85, 87, 93, 109, 233, 236

MA.5:6 Fractions--Concepts:
Students will compare and order fractions and show equivalent representations of a number. (6A.E3, 6A.D4, 6A.E2, 6A.F3, 6B.F2, 6A.F4, 6B.E1, 6B.E2, 6B.E3)

MA.5:6-1 Differentiate how fractions are used (part to whole, part of a set, location on a number line, and division of a whole number)
394A-394B, 394-397, 398A-398B, 398-399

MA.5:6-2 Demonstrate fractions as parts of wholes, as parts of a set, as locations on a number line, and as divisions of whole numbers.
394A-394B, 394-397

MA.5:6-3 Identify fractional pieces that have the same value but different shapes.
394A-394B, 394-396

MA.5:6-4 Identify and show equivalent representations of a number by changing from improper fractions to mixed numbers, from mixed numbers to improper fractions, and from fractions to decimals.
400A-400B, 400-401, 426A-426B, 426-429

MA.5:6-5 Determine whether a number is prime or composite.
164A-164B, 164-167

MA.5:6-6 Identify all the whole number factors of a composite number through 50.
164A-164B, 164-167

MA.5:6-7 Identify properties of square numbers (4, 9, 16, 25, etc.)
141

MA.5:6-8 Determine the least common multiple (LCM) and the greatest common factor (GCF) of two numbers and use GCF to express fractions in simplest form.
414A-414B, 414-415, 464A-464B, 464-465

MA.5:6-9 Compare and order fractions and find their approximate position on a number line.
404A-404B, 404-405, 418A-418B, 418-423

MA.5:7 Fractions--Computations:
Students will apply fractional concepts to solve number sentences and word problems using addition and subtraction. (6C.E6, 6C.E1, 6C.E3)

MA.5:7-1 Use strategies to estimate computations involving familiar fractions in situations relative to real life experiences (Examples: 1/3 off sale; doubling a recipe).
494A-494B, 494-495

MA.5:7-2 Solve number sentences and word problems using addition and subtraction of fractions and mixed numbers with like and unlike denominators; express answers in simplest form.
460A-460B, 460-461, 462A-462B, 462-463, 466A-466B, 466-469

MA.5:7-3 Select and use appropriate operations and tools (mental math, pencil-and-paper, estimation, calculator and computer) to perform calculations on fractions and mixed numbers according to the context and nature of the computation.
460A-460B, 460-461, 462A-462B, 462-463, 464A-464B, 464-465, 466A-466B, 466-469, 490A-490B, 490-493, 494A-494B, 494-495, 496A-496B, 496-499, 502A-502B, 502-503

MA.5:7-4 Model the concept of percent using manipulatives or drawings.
668A-668B, 668-669

MA.5:7-5 Solve number sentences and word problems using percents.
668A-668B, 668-669

MA.5:7-6 Demonstrate and explain the meaning of percents, including greater than 100 and less than 1.
Can Be Developed From: Lesson on Percents, 668A-668B, 668-669

MA.5:8 Probability:
Students will demonstrate, predict, test, represent, and report simple probabilities and use them to analyze results. (10C.E1, 10C.E2, 10C.E3, 10C.E4, 10C.F1, 10C.F2, 6D.E1)

MA.5:8-1 State and record probabilities in fraction, decimal, ratio, percent, or word form. (Examples: 1/4, .25, 1:4, 25%, 1 to 4, 1 out of 4).
302A-302B, 302-305

MA.5:8-2 List all possible outcomes of compound and independent events.
302A-302B, 302-305

MA.5:8-3 Predict the probability of outcomes of simple experiments and test the predictions. (Examples: tossing a coin, and spinning a spinner)
302A-302B, 302-305

MA.5:8-4 Demonstrate that the sum of all probabilities equals one.
302A-302B, 302-305

MA.5:8-5 Assign a value of zero to probabilities that are impossible and a value of one to the sum of probabilities that are certain; differentiate between likely and unlikely events.
302A-302B, 302-305

MA.5:9 Measurement:
Students will compute U.S. customary and linear metric measurement conversions (within its system), using conversion charts, to solve word problems that reflect real-life situations. (7A.D2, 7A.D3, 7A.D4, 7A.E1, 7C.E5)

MA.5:9-1 Explain the meaning of a measurement answer in context.
528A-528B, 528-531, 534A-534B, 534-535, 614A-614B, 614-615, 616A-616B, 616-617, 620A-620B, 620-621, 622A-622B, 622-623

MA.5:9-2 Convert U.S. customary measurements into larger or smaller units using conversion charts.
528A-528B, 528-531, 614A-614B, 614-615, 620A-620B, 620-621

MA.5:9-3 Convert linear metric measurements into larger or smaller units using conversion charts.
534A-534B, 534-535

MA.5:10 Data Analysis/Statistics:
Students will collect data for a given problem; then arrange, interpret, and justify predictions and conclusions about collected data for a variety of real-life situations. (10A.D3, 10A.E2, 10A.E3, 10A.E4, 10B.E1, 10B.E2)

MA.5:10-1 Arrange given data in order, least to greatest, greatest to least, and determine minimum value, maximum value, range, mode, median, and mean for an odd number of data points.
282A-282B, 282-285

MA.5:10-2 Propose and justify conclusions and predictions that are based on given data, and design studies to further investigate the conclusions or predictions.
262A-262B, 262-265, 266A-266B, 266-268, 270, 272, 276A-276B, 276-279,287

MA.5:10-3 Design investigations to address a question and consider how data-collection methods affect the nature of a data set.
260A-260B, 260-261

MA.5:10-4 Explain what the mean, median, mode, minimum value, maximum value and range do to help interpret a given set of data.
282A-282B, 282-285

MA.5:10-5 Interpret, infer, predict, draw conclusions, and evaluate data from any graph (including pie graph, double bar graph, double line graph, and line plot).
260A-260B, 260-261, 270A-270B, 270-273, 288A-288B, 288-291

MA.5:10-6 Select an appropriate graph format to display given data.
288A-288B, 288-291

MA.5:11 Algebra:
Students will create one-step linear equations with one missing value using variables; apply number properties to solve real-life word problems. (8A.E3, 8A.F3, 8D.D1, 8D.E1)

MA.5:11-1 Solve one-step linear equations with one missing value in isolation and in problem solving situations. (Example: 35 + n = 75)
108A-108B, 108-109, 696A-696B, 696-699, 700A-700B, 700-701

MA.5:11-2 Demonstrate equality of two expressions with variables. (Example: 28 + 35 = 35 + n).
108A-108B, 108-109, 696A-696B, 696-699, 700A-700B, 700-701

MA.5:11-3 Define all properties and express properties of numbers and operations using variables (Example: the Commutative Property is m + n = n + m).
22A-22B, 22-25, 66A-66B, 66-67, 70A-70B, 70-71, 76A-76B, 76-77, 696A-696B, 696-699

MA.5:11-4 Create and solve linear equations involving whole numbers using a variety of methods (Example: guess and check, inverse operations).
706A-706B, 706-709, 728A-728B, 728-729