

Mathematics 2–5

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Subject: Mathematics
Goal Strand: Number
RIT Score Range: Below 161

Skills and Concepts to Develop Below 161	Skills and Concepts to Introduce 161 - 170
<p>Number Sense Counts numbers 0-20*</p>	<p>Number Sense Counts 1 to 10 objects Counts numbers 0-20* Identifies missing numbers in a series through 100 Orders whole numbers less than 10* Writes whole numbers in standard and expanded form through the tens</p>
<p>Addition and Subtraction Uses models to construct whole number addition facts with addends through 10* Uses models to calculate whole number sums through 99* Adds two 1-digit numbers with sums to 10 in horizontal format</p>	<p>Addition and Subtraction Uses a number line to construct addition facts with sums through 20 (whole numbers)* Uses models to calculate whole number sums through 99* Uses models to calculate whole number sums through 999* Adds two 1-digit numbers with sums to 10 in horizontal format Adds two 1-digit numbers with sums to 10 in vertical format Adds two 1-digit numbers with sums between 10 and 19 in horizontal format Adds two 1-digit numbers with sums between 10 and 19 in vertical format* Adds multiple 1-digit numbers Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 1-digit to multiple-digit number with no regrouping* Adds 2-digit numbers with no regrouping Adds 2-digit to 3-digit number, with no regrouping, with sums under 1000* Solves real-world whole number addition problems with sums to 20 (result unknown) Uses models to construct subtraction facts with differences through 10 (whole numbers)* Uses models to calculate differences through 100 (whole numbers)* Subtracts two 1-digit numbers horizontally Subtracts a 1-digit number from a 2-digit number that is</p>

	less than 20 (whole numbers only) Subtracts two 1-digit numbers vertically Uses strategies for subtraction facts (e.g., counting back, one less, two less)* Subtracts a 2-digit number from a 2-digit number, with no regrouping Adds money vertically with no regrouping*
Multiplication and Division	Multiplication and Division
	Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12 Identifies the missing operation symbol - 1-step number sentence
<i>New Vocabulary: none</i>	<i>New Vocabulary: none</i>
<i>New Signs and Symbols: + addition, = is equal to, □ variable</i>	<i>New Signs and Symbols: ÷ division, \$ dollar sign, × multiplication, – subtraction</i>

Subject: Mathematics
Goal Strand: Number
RIT Score Range: 161 - 170

Skills and Concepts to Enhance Below 161	Skills and Concepts to Develop 161 - 170	Skills and Concepts to Introduce 171 - 180
<p>Number Sense Counts numbers 0-20*</p>	<p>Number Sense Counts 1 to 10 objects Counts numbers 0-20* Identifies missing numbers in a series through 100 Orders whole numbers less than 10* Writes whole numbers in standard and expanded form through the tens</p>	<p>Number Sense Identifies the numerical and written name for whole numbers 21 to 100 (e.g., 62 is sixty-two, and vice versa)* Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa)* Counts numbers 0-100 Counts numbers 0-1000* Identifies missing numbers in a series through 100 Counts by 2's to 100 Counts and writes by 5's* Counts backwards from a given number (given number greater than 10)* Identifies a whole number that comes between 2 given numbers (20 to 100)* Writes equivalent forms of whole number expressions (e.g., $15 + 5 = 10 + 10$) Compares whole numbers through 100* Compares whole numbers through 999 Orders sets of objects 0-10* Orders sets of objects 0-20* Counts objects that are grouped into tens and ones Identifies the place value and value of each digit in whole numbers through the tens place* Represents $\frac{1}{2}$ with a diagram or model Identifies equivalent fractions using visual representations*</p>
<p>Addition and Subtraction Uses models to construct whole number addition facts with addends through 10* Uses models to calculate whole number sums through 99* Adds two 1-digit numbers with sums to 10 in horizontal format</p>	<p>Addition and Subtraction Uses a number line to construct addition facts with sums through 20 (whole numbers)* Uses models to calculate whole number sums through 99* Uses models to calculate whole number sums through 999* Adds two 1-digit numbers with sums to 10 in horizontal format Adds two 1-digit numbers with sums to 10 in vertical format</p>	<p>Addition and Subtraction Uses a number line to construct addition facts with sums through 20 (whole numbers)* Uses models to calculate whole number sums through 999* Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens) Adds 2-digit to 3-digit number, with no regrouping, with sums under 1000*</p>

	<p>Adds two 1-digit numbers with sums between 10 and 19 in horizontal format</p> <p>Adds two 1-digit numbers with sums between 10 and 19 in vertical format*</p> <p>Adds multiple 1-digit numbers</p> <p>Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens)</p> <p>Adds 1-digit to multiple-digit number with no regrouping*</p> <p>Adds 2-digit numbers with no regrouping</p> <p>Adds 2-digit to 3-digit number, with no regrouping, with sums under 1000*</p> <p>Solves real-world whole number addition problems with sums to 20 (result unknown)</p> <p>Uses models to construct subtraction facts with differences through 10 (whole numbers)*</p> <p>Uses models to calculate differences through 100 (whole numbers)*</p> <p>Subtracts two 1-digit numbers horizontally</p> <p>Subtracts a 1-digit number from a 2-digit number that is less than 20 (whole numbers only)</p> <p>Subtracts two 1-digit numbers vertically</p> <p>Uses strategies for subtraction facts (e.g., counting back, one less, two less)*</p> <p>Subtracts a 2-digit number from a 2-digit number, with no regrouping</p> <p>Adds money vertically with no regrouping*</p>	<p>Adds two or three 2-digit number with regrouping</p> <p>Adds 1-, 2-, and/or 3-digit numbers with sums under 100*</p> <p>Adds 3-digit numbers with no regrouping</p> <p>Adds 3-digit numbers, with regrouping, with sums under 1000</p> <p>Adds multiple-digit numbers, with no regrouping, with sums over 1000*</p> <p>Solves real-world whole number addition problems with sums to 20 (result unknown)</p> <p>Solves real-world whole number addition problems with sums to 20 (start unknown)*</p> <p>Solves real-world whole number addition problems with sums to 20 (change unknown)*</p> <p>Solves real-world whole number addition problems with sums to 100 (result unknown)*</p> <p>Solves real-world whole number addition problems with sums to 1000</p> <p>Uses models to calculate differences through 100 (whole numbers)*</p> <p>Uses models to calculate differences through 1000 (whole numbers)*</p> <p>Subtracts a 1-digit number from a 2-digit number that is less than 20 (whole numbers only)</p> <p>Uses strategies for subtraction facts (e.g., counting back, one less, two less)*</p> <p>Subtracts a 1-digit number from a 2-digit number with no regrouping, vertically</p> <p>Subtracts a 1-digit number from a multiple-digit number*</p> <p>Subtracts a 2-digit number from a 2-digit number, with no regrouping</p> <p>Subtracts 2- and/or 3-digit numbers with no regrouping</p> <p>Solves real-world whole number problems involving subtraction with numbers under 20</p> <p>Adds 1-digit numbers with sums to 18 (with parentheses)</p> <p>Recognizes addition and subtraction fact families through 18</p> <p>Demonstrates an understanding that vertical and horizontal representations are equivalent</p> <p>Adds money vertically with no regrouping*</p>
Multiplication and Division	Multiplication and Division	Multiplication and Division
	<p>Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12</p> <p>Identifies the missing operation symbol - 1-step number sentence</p>	<p>Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12</p> <p>Multiplies basic facts to 10 x 10 vertically</p> <p>Identifies the missing operation symbol - 1-step number</p>

		sentence
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> between, counting order, fact family, hundred, largest, thousand
<i>New Signs and Symbols:</i> + addition, = is equal to, □ variable	<i>New Signs and Symbols:</i> ÷ division, \$ dollar sign, × multiplication, – subtraction	<i>New Signs and Symbols:</i> () order of operations, ¢ cent sign, lb pound

Subject: Mathematics
Goal Strand: Number
RIT Score Range: 171 - 180

Skills and Concepts to Enhance 161 - 170	Skills and Concepts to Develop 171 - 180	Skills and Concepts to Introduce 181 - 190
<p>Number Sense</p> <p>Counts 1 to 10 objects Counts numbers 0-20* Identifies missing numbers in a series through 100 Orders whole numbers less than 10* Writes whole numbers in standard and expanded form through the tens</p>	<p>Number Sense</p> <p>Identifies the numerical and written name for whole numbers 21 to 100 (e.g., 62 is sixty-two, and vice versa)* Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa)* Counts numbers 0-100 Counts numbers 0-1000* Identifies missing numbers in a series through 100 Counts by 2's to 100 Counts and writes by 5's* Counts backwards from a given number (given number greater than 10)* Identifies a whole number that comes between 2 given numbers (20 to 100)* Writes equivalent forms of whole number expressions (e.g., $15 + 5 = 10 + 10$) Compares whole numbers through 100* Compares whole numbers through 999 Orders sets of objects 0-10* Orders sets of objects 0-20* Counts objects that are grouped into tens and ones Identifies the place value and value of each digit in whole numbers through the tens place* Represents $\frac{1}{2}$ with a diagram or model Identifies equivalent fractions using visual representations*</p>	<p>Number Sense</p> <p>Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa)* Identifies the numeral and written name for whole numbers to 1000 to 9999 (e.g., 3456 is three thousand, four hundred fifty-six, and vice versa) Identifies the numeral and written name for whole numbers 10,000 to 100,000 Identifies the number that is "1 more than" a given number* Identifies the number that is "1 less than" a given number Counts numbers 0-1000* Counts and writes by 3's* Counts and writes by 4's* Counts and writes by 6's, 7's, 8's, or 9's* Counts and converts to dozens with models* Writes equivalent forms of whole numbers 11 to 20 using addition (e.g., $14 = 7 + 7$)* Writes equivalent forms of whole numbers using multiplication (e.g., $12 = 4 \times 3 = 2 \times 6 = 2 \times 2 \times 3$)* Converts to dozens without models Compares whole numbers through 999 Compares whole numbers through 9999 Orders sets of objects 0-20* Orders whole numbers less than 100 Orders whole numbers less than 1000* Rounds 2- and 3- digit whole numbers to the nearest ten Rounds 3-digit whole numbers to the nearest hundred Counts objects that are grouped into tens and ones Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34) Identifies the place value and value of each digit in whole numbers through the tens place* Identifies the place value and value of each digit in whole numbers through the hundreds place Identifies the place value and value of each digit in whole numbers through the thousands</p>

		<p>Identifies the place value and value of each digit in whole numbers through the hundred thousands</p> <p>Represents $\frac{1}{4}$ with a diagram or model*</p> <p>Represents $\frac{3}{4}$ with a diagram or model*</p> <p>Identifies $\frac{1}{2}$ from a region or set</p> <p>Identifies $\frac{1}{4}$ from a region or set</p> <p>Identifies $\frac{2}{3}$ or $\frac{3}{3}$ from a region or set*</p> <p>Identifies tenths from a region or set*</p> <p>Compares and orders decimals to the hundredths place (same number of digits after decimal)</p> <p>Applies base ten place value concepts to solve problems using decimals*</p> <p>Uses rounding to estimate answers to real-world problems involving addition of numbers less than 100 (whole numbers only)</p>
Addition and Subtraction	Addition and Subtraction	Addition and Subtraction
<p>Uses a number line to construct addition facts with sums through 20 (whole numbers)*</p> <p>Uses models to calculate whole number sums through 99*</p> <p>Uses models to calculate whole number sums through 999*</p> <p>Adds two 1-digit numbers with sums to 10 in horizontal format</p> <p>Adds two 1-digit numbers with sums to 10 in vertical format</p> <p>Adds two 1-digit numbers with sums between 10 and 19 in horizontal format</p> <p>Adds two 1-digit numbers with sums between 10 and 19 in vertical format*</p> <p>Adds multiple 1-digit numbers</p> <p>Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens)</p> <p>Adds 1-digit to multiple-digit number with no regrouping*</p> <p>Adds 2-digit numbers with no regrouping</p> <p>Adds 2-digit to 3-digit number, with no regrouping, with sums under 1000*</p> <p>Solves real-world whole number addition problems with sums to 20 (result unknown)</p> <p>Uses models to construct subtraction facts with differences through 10 (whole numbers)*</p> <p>Uses models to calculate differences through 100 (whole numbers)*</p> <p>Subtracts two 1-digit numbers horizontally</p> <p>Subtracts a 1-digit number from a 2-digit number that is</p>	<p>Uses a number line to construct addition facts with sums through 20 (whole numbers)*</p> <p>Uses models to calculate whole number sums through 999*</p> <p>Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens)</p> <p>Adds 2-digit to 3-digit number, with no regrouping, with sums under 1000*</p> <p>Adds two or three 2-digit number with regrouping</p> <p>Adds 1-, 2-, and/or 3-digit numbers with sums under 100*</p> <p>Adds 3-digit numbers with no regrouping</p> <p>Adds 3-digit numbers, with regrouping, with sums under 1000</p> <p>Adds multiple-digit numbers, with no regrouping, with sums over 1000*</p> <p>Solves real-world whole number addition problems with sums to 20 (result unknown)</p> <p>Solves real-world whole number addition problems with sums to 20 (start unknown)*</p> <p>Solves real-world whole number addition problems with sums to 20 (change unknown)*</p> <p>Solves real-world whole number addition problems with sums to 100 (result unknown)*</p> <p>Solves real-world whole number addition problems with sums to 1000</p> <p>Uses models to calculate differences through 100 (whole numbers)*</p> <p>Uses models to calculate differences through 1000 (whole</p>	<p>Adds 1-digit to multiple-digit number with regrouping*</p> <p>Adds two or three 2-digit number with regrouping</p> <p>Adds 2-digit to 3-digit number with regrouping</p> <p>Adds 3-digit numbers, with regrouping, with sums under 1000</p> <p>Performs mental computation with 2, 3, or 4 addends</p> <p>Adds two 3- and/or 4-digit numbers, with regrouping, with sums over 1000</p> <p>Adds multiple-digit numbers, with regrouping, with sums over 1000</p> <p>Solves real-world whole number addition problems with sums to 20 (result unknown) - with extraneous information given</p> <p>Solves real-world whole number addition problems with sums to 20 (start unknown)*</p> <p>Solves real-world whole number addition problems with sums to 100 (result unknown)*</p> <p>Solves real-world whole number addition problems with sums to 1000</p> <p>Uses a number line to construct subtraction facts with subtrahends and minuends through 20 (whole numbers)*</p> <p>Uses models to calculate differences through 1000 (whole numbers)*</p> <p>Instantly recalls basic subtraction facts with minuend less than 10*</p> <p>Subtracts a 1-digit number from a multiple-digit number*</p> <p>Subtracts 1-digit number from a 2-digit number with regrouping*</p>

<p>less than 20 (whole numbers only) Subtracts two 1-digit numbers vertically Uses strategies for subtraction facts (e.g., counting back, one less, two less)* Subtracts a 2-digit number from a 2-digit number, with no regrouping Adds money vertically with no regrouping*</p>	<p>numbers)* Subtracts a 1-digit number from a 2-digit number that is less than 20 (whole numbers only) Uses strategies for subtraction facts (e.g., counting back, one less, two less)* Subtracts a 1-digit number from a 2-digit number with no regrouping, vertically Subtracts a 1-digit number from a multiple-digit number* Subtracts a 2-digit number from a 2-digit number, with no regrouping Subtracts 2- and/or 3-digit numbers with no regrouping Solves real-world whole number problems involving subtraction with numbers under 20 Adds 1-digit numbers with sums to 18 (with parentheses) Recognizes addition and subtraction fact families through 18 Demonstrates an understanding that vertical and horizontal representations are equivalent Adds money vertically with no regrouping*</p>	<p>Subtracts a 2-digit number from a 2-digit number, with regrouping Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on) Subtracts 2- and/or 3-digit numbers with no regrouping Subtracts 3- or 4-digit numbers with regrouping Performs mental subtraction with numbers under 1000 Solves real-world whole number problems involving subtraction with numbers under 20 Solves real-world whole number problems involving subtraction with numbers 100 and under Solves real-world whole number problems involving subtraction with numbers under 1000 Solves real-world whole number problems involving addition and subtraction Recognizes addition and subtraction fact families through 18 Adds decimals to the hundredths place (same number of digits) Adds money with regrouping Subtracts decimals to the hundredths place (same number of digits) without regrouping Makes change to \$1.00 by "counting on" or subtracting Computes with dollars and cents up to and including \$5.00 and converts to decimals (addition/subtraction only) Computes 1 operation on addition or subtraction real-world problems involving money up to \$5.00</p>
<p>Multiplication and Division</p>	<p>Multiplication and Division</p>	<p>Multiplication and Division</p>
<p>Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12 Identifies the missing operation symbol - 1-step number sentence</p>	<p>Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12 Multiplies basic facts to 10 x 10 vertically Identifies the missing operation symbol - 1-step number sentence</p>	<p>Multiplies basic facts to 10 x 10 vertically Multiplies a 2-digit number by a 1-digit number with regrouping Solves word problems involving basic whole number multiplication facts to 10 x 10 Uses sharing for division Models whole number multiplication and division algorithms (e.g., shows multiplication as repeated addition and division as repeated subtraction) Models multiplication and division algorithms using arrays (whole numbers) Instantly recalls division facts with dividend and divisors less than 10 Solves word problems with whole number division facts with dividend and divisors less than 11 involving money</p>

		Identifies the missing operation symbol - 2-step number sentence* Demonstrates an understanding of the zero property of multiplication Demonstrates an understanding of the inverse relationship between multiplication and division
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> between, counting order, fact family, hundred, largest, thousand	<i>New Vocabulary:</i> closest, digit, fourths, fraction, gave, hundred thousand, left, million, nearest, number statement, one, round, row, smallest, ten, ten thousand, thirds, thousandth, unifix cubes
<i>New Signs and Symbols:</i> ÷ division, \$ dollar sign, × multiplication, – subtraction	<i>New Signs and Symbols:</i> () order of operations, ¢ cent sign, lb pound	<i>New Signs and Symbols:</i> { } set notation, < less than, long division symbol

Subject: Mathematics
Goal Strand: Number
RIT Score Range: 181 - 190

Skills and Concepts to Enhance 171 - 180	Skills and Concepts to Develop 181 - 190	Skills and Concepts to Introduce 191 - 200
<p>Number Sense</p> <p>Identifies the numerical and written name for whole numbers 21 to 100 (e.g., 62 is sixty-two, and vice versa)*</p> <p>Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa)*</p> <p>Counts numbers 0-100</p> <p>Counts numbers 0-1000*</p> <p>Identifies missing numbers in a series through 100</p> <p>Counts by 2's to 100</p> <p>Counts and writes by 5's*</p> <p>Counts backwards from a given number (given number greater than 10)*</p> <p>Identifies a whole number that comes between 2 given numbers (20 to 100)*</p> <p>Writes equivalent forms of whole number expressions (e.g., $15 + 5 = 10 + 10$)</p> <p>Compares whole numbers through 100*</p> <p>Compares whole numbers through 999</p> <p>Orders sets of objects 0-10*</p> <p>Orders sets of objects 0-20*</p> <p>Counts objects that are grouped into tens and ones</p> <p>Identifies the place value and value of each digit in whole numbers through the tens place*</p> <p>Represents $\frac{1}{2}$ with a diagram or model</p> <p>Identifies equivalent fractions using visual representations*</p>	<p>Number Sense</p> <p>Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa)*</p> <p>Identifies the numeral and written name for whole numbers to 1000 to 9999 (e.g., 3456 is three thousand, four hundred fifty-six, and vice versa)</p> <p>Identifies the numeral and written name for whole numbers 10,000 to 100,000</p> <p>Identifies the number that is "1 more than" a given number*</p> <p>Identifies the number that is "1 less than" a given number</p> <p>Counts numbers 0-1000*</p> <p>Counts and writes by 3's*</p> <p>Counts and writes by 4's*</p> <p>Counts and writes by 6's, 7's, 8's, or 9's*</p> <p>Counts and converts to dozens with models*</p> <p>Writes equivalent forms of whole numbers 11 to 20 using addition (e.g., $14 = 7 + 7$)*</p> <p>Writes equivalent forms of whole numbers using multiplication (e.g., $12 = 4 \times 3 = 2 \times 6 = 2 \times 2 \times 3$)*</p> <p>Converts to dozens without models</p> <p>Compares whole numbers through 999</p> <p>Compares whole numbers through 9999</p> <p>Orders sets of objects 0-20*</p> <p>Orders whole numbers less than 100</p> <p>Orders whole numbers less than 1000*</p> <p>Rounds 2- and 3- digit whole numbers to the nearest ten</p> <p>Rounds 3-digit whole numbers to the nearest hundred</p> <p>Counts objects that are grouped into tens and ones</p> <p>Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34)</p> <p>Identifies the place value and value of each digit in whole numbers through the tens place*</p> <p>Identifies the place value and value of each digit in whole numbers through the hundreds place</p> <p>Identifies the place value and value of each digit in whole numbers through the thousands</p>	<p>Number Sense</p> <p>Identifies whole numbers 100 - 999 using base-10 blocks*</p> <p>Identifies whole numbers over 999 using base-10 blocks*</p> <p>Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place</p> <p>Identifies the numeral and written name for whole numbers 10,000 to 100,000</p> <p>Identifies the numeral and written name for whole numbers over 100,000</p> <p>Counts and converts to dozens with models*</p> <p>Writes equivalent forms of whole numbers 11 to 20 using addition (e.g., $14 = 7 + 7$)*</p> <p>Writes equivalent forms of whole numbers using multiplication (e.g., $12 = 4 \times 3 = 2 \times 6 = 2 \times 2 \times 3$)*</p> <p>Converts to dozens without models</p> <p>Compares sets of objects and identifies which is equal to, more than, or less than the other (1 to 10 objects)*</p> <p>Compares whole numbers through 999,999</p> <p>Compares whole numbers to 100, using the symbols for 'less than', 'equal to', or 'greater than' (<, =, >)</p> <p>Compares whole numbers through the thousands using the symbols <, >, or =</p> <p>Orders whole numbers less than 1000*</p> <p>Orders whole numbers less than 10,000</p> <p>Rounds 2- and 3- digit whole numbers to the nearest ten</p> <p>Rounds 3-digit whole numbers to the nearest hundred</p> <p>Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34)</p> <p>Identifies the place value and value of each digit in whole numbers through the thousands</p> <p>Identifies the place value and value of each digit in whole numbers through the hundred thousands</p> <p>Writes whole numbers in standard and expanded form through the hundreds</p> <p>Writes whole numbers in standard and expanded form through the thousands</p> <p>Represents $\frac{1}{3}$ with a diagram or model</p>

	<p>Identifies the place value and value of each digit in whole numbers through the hundred thousands</p> <p>Represents $\frac{1}{4}$ with a diagram or model*</p> <p>Represents $\frac{3}{4}$ with a diagram or model*</p> <p>Identifies $\frac{1}{2}$ from a region or set</p> <p>Identifies $\frac{1}{4}$ from a region or set</p> <p>Identifies $\frac{2}{3}$ or $\frac{3}{3}$ from a region or set*</p> <p>Identifies tenths from a region or set*</p> <p>Compares and orders decimals to the hundredths place (same number of digits after decimal)</p> <p>Applies base ten place value concepts to solve problems using decimals*</p> <p>Uses rounding to estimate answers to real-world problems involving addition of numbers less than 100 (whole numbers only)</p>	<p>Identifies one-half from a region or set*</p> <p>Identifies $\frac{1}{4}$ from a region or set</p> <p>Identifies $\frac{1}{3}$ from a region or set</p> <p>Identifies $\frac{2}{3}$ or $\frac{3}{3}$ from a region or set*</p> <p>Identifies tenths from a region or set*</p> <p>Matches numeric and visual representation of equivalent fractions</p> <p>Identifies a decimal on a number line to the tenths place*</p> <p>Compares and orders money in decimal form</p> <p>Compares and orders decimals to the thousandths place (same number of digits after decimal)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers less than 1000 with addition and subtraction (whole numbers only)*</p> <p>Uses front end digits to estimate answers in addition and subtraction computations (whole numbers only)*</p> <p>Uses rounding to estimate answers to addition and subtraction problems (whole numbers only)</p>
Addition and Subtraction	Addition and Subtraction	Addition and Subtraction
<p>Uses a number line to construct addition facts with sums through 20 (whole numbers)*</p> <p>Uses models to calculate whole number sums through 999*</p> <p>Uses strategies for addition facts (e.g., compatible numbers, counting on, doubles, neighbors, making tens)</p> <p>Adds 2-digit to 3-digit number, with no regrouping, with sums under 1000*</p> <p>Adds two or three 2-digit number with regrouping</p> <p>Adds 1-, 2-, and/or 3-digit numbers with sums under 100*</p> <p>Adds 3-digit numbers with no regrouping</p> <p>Adds 3-digit numbers, with regrouping, with sums under 1000</p> <p>Adds multiple-digit numbers, with no regrouping, with sums over 1000*</p> <p>Solves real-world whole number addition problems with sums to 20 (result unknown)</p> <p>Solves real-world whole number addition problems with sums to 20 (start unknown)*</p> <p>Solves real-world whole number addition problems with sums to 20 (change unknown)*</p> <p>Solves real-world whole number addition problems with sums to 100 (result unknown)*</p> <p>Solves real-world whole number addition problems with sums to 1000</p>	<p>Adds 1-digit to multiple-digit number with regrouping*</p> <p>Adds two or three 2-digit number with regrouping</p> <p>Adds 2-digit to 3-digit number with regrouping</p> <p>Adds 3-digit numbers, with regrouping, with sums under 1000</p> <p>Performs mental computation with 2, 3, or 4 addends</p> <p>Adds two 3- and/or 4-digit numbers, with regrouping, with sums over 1000</p> <p>Adds multiple-digit numbers, with regrouping, with sums over 1000</p> <p>Solves real-world whole number addition problems with sums to 20 (result unknown) - with extraneous information given</p> <p>Solves real-world whole number addition problems with sums to 20 (start unknown)*</p> <p>Solves real-world whole number addition problems with sums to 100 (result unknown)*</p> <p>Solves real-world whole number addition problems with sums to 1000</p> <p>Uses a number line to construct subtraction facts with subtrahends and minuends through 20 (whole numbers)*</p> <p>Uses models to calculate differences through 1000 (whole numbers)*</p> <p>Instantly recalls basic subtraction facts with minuend less than 10*</p> <p>Subtracts a 1-digit number from a multiple-digit</p>	<p>Adds 2-digit to 3-digit number with regrouping</p> <p>Uses number sense strategies to determine the correct answer for an addition computation*</p> <p>Adds two 3- and/or 4-digit numbers, with regrouping, with sums over 1000</p> <p>Adds multiple-digit numbers, with regrouping, with sums over 1000</p> <p>Adds multiple-digit numbers with sums under 1000</p> <p>Solves real-world whole number addition problems with sums to 20 (result unknown) - with extraneous information given</p> <p>Solves real-world whole number addition problems with sums to 100 (start unknown)*</p> <p>Solves whole number addition word problems with sums over 1000</p> <p>Uses a number line to construct subtraction facts with subtrahends and minuends through 20 (whole numbers)*</p> <p>Adds and subtracts whole numbers using place value</p> <p>Subtracts 1-digit number from a 2-digit number with regrouping*</p> <p>Subtracts a 2-digit number from a 2-digit number, with regrouping</p> <p>Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on)</p> <p>Subtracts a 2-digit number from a 3-digit number with a</p>

<p>Uses models to calculate differences through 100 (whole numbers)*</p> <p>Uses models to calculate differences through 1000 (whole numbers)*</p> <p>Subtracts a 1-digit number from a 2-digit number that is less than 20 (whole numbers only)</p> <p>Uses strategies for subtraction facts (e.g., counting back, one less, two less)*</p> <p>Subtracts a 1-digit number from a 2-digit number with no regrouping, vertically</p> <p>Subtracts a 1-digit number from a multiple-digit number*</p> <p>Subtracts a 2-digit number from a 2-digit number, with no regrouping</p> <p>Subtracts 2- and/or 3-digit numbers with no regrouping</p> <p>Solves real-world whole number problems involving subtraction with numbers under 20</p> <p>Adds 1-digit numbers with sums to 18 (with parentheses)</p> <p>Recognizes addition and subtraction fact families through 18</p> <p>Demonstrates an understanding that vertical and horizontal representations are equivalent</p> <p>Adds money vertically with no regrouping*</p>	<p>number*</p> <p>Subtracts 1-digit number from a 2-digit number with regrouping*</p> <p>Subtracts a 2-digit number from a 2-digit number, with regrouping</p> <p>Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on)</p> <p>Subtracts 2- and/or 3-digit numbers with no regrouping</p> <p>Subtracts 3- or 4-digit numbers with regrouping</p> <p>Performs mental subtraction with numbers under 1000</p> <p>Solves real-world whole number problems involving subtraction with numbers under 20</p> <p>Solves real-world whole number problems involving subtraction with numbers 100 and under</p> <p>Solves real-world whole number problems involving subtraction with numbers under 1000</p> <p>Solves real-world whole number problems involving addition and subtraction</p> <p>Recognizes addition and subtraction fact families through 18</p> <p>Adds decimals to the hundredths place (same number of digits)</p> <p>Adds money with regrouping</p> <p>Subtracts decimals to the hundredths place (same number of digits) without regrouping</p> <p>Makes change to \$1.00 by "counting on" or subtracting</p> <p>Computes with dollars and cents up to and including \$5.00 and converts to decimals (addition/subtraction only)</p> <p>Computes 1 operation on addition or subtraction real-world problems involving money up to \$5.00</p>	<p>single regrouping</p> <p>Subtracts 3- or 4-digit numbers with regrouping</p> <p>Performs mental subtraction with numbers under 1000</p> <p>Solves real-world whole number problems involving subtraction with numbers 100 and under</p> <p>Solves real-world whole number problems involving subtraction with numbers under 1000</p> <p>Solves problems using the inverse relationship between addition and subtraction*</p> <p>Uses models to add and subtract fractions and connect the actions to algorithms*</p> <p>Subtracts fractions with like denominators without reducing</p> <p>Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators</p> <p>Adds decimals to the hundredths place (same number of digits)</p> <p>Adds decimals to the hundredths place in vertical format (not same number of digits)*</p> <p>Adds decimals to the thousandths place vertically with and without regrouping</p> <p>Adds money with regrouping</p> <p>Subtracts decimals to the hundredths place (same number of digits) without regrouping</p> <p>Subtracts decimals to the hundredths place (same number of digits) with regrouping</p> <p>Subtracts decimals to the thousandths place, vertically, with and without regrouping</p> <p>Makes change to \$1.00 by "counting on" or subtracting</p> <p>Solves real-world problems involving decimals (not money) using addition and subtraction</p> <p>Computes with dollars and cents up to and including \$5.00 and converts to decimals (addition/subtraction only)</p> <p>Computes 1 operation on real-world problems involving money over \$5.00 (addition/subtraction only)</p>
<p>Multiplication and Division</p>	<p>Multiplication and Division</p>	<p>Multiplication and Division</p>
<p>Instantly recalls basic multiplication facts where one factor is 0-5 and the other factor is 0-12</p> <p>Multiplies basic facts to 10 x 10 vertically</p> <p>Identifies the missing operation symbol - 1-step number sentence</p>	<p>Multiplies basic facts to 10 x 10 vertically</p> <p>Multiplies a 2-digit number by a 1-digit number with regrouping</p> <p>Solves word problems involving basic whole number multiplication facts to 10 x 10</p> <p>Uses sharing for division</p> <p>Models whole number multiplication and division algorithms (e.g., shows multiplication as repeated addition and division as repeated subtraction)</p>	<p>Instantly recalls basic multiplication facts where one factor is 6-12 and the other factor is 0-12*</p> <p>Multiplies a 2- or 3-digit number by a 1-digit number with no regrouping</p> <p>Multiplies a 2-digit number by a 1-digit number with regrouping</p> <p>Multiplies a 3- or 4-digit number by a 1-digit number</p> <p>Multiplies a 2-digit number by a 2-digit number with no regrouping*</p>

	<p>Models multiplication and division algorithms using arrays (whole numbers)</p> <p>Instantly recalls division facts with dividend and divisors less than 10</p> <p>Solves word problems with whole number division facts with dividend and divisors less than 11 involving money</p> <p>Identifies the missing operation symbol - 2-step number sentence*</p> <p>Demonstrates an understanding of the zero property of multiplication</p> <p>Demonstrates an understanding of the inverse relationship between multiplication and division</p>	<p>Multiplies a 3-digit number by a 2-digit number with no regrouping</p> <p>Performs mental computation with multiplication</p> <p>Solves word problems involving basic whole number multiplication facts to 10×10</p> <p>Solves word problems involving whole number multiplication with numbers greater than 10×10</p> <p>Uses repeated subtraction for division*</p> <p>Models whole number multiplication and division algorithms (e.g., shows multiplication as repeated addition and division as repeated subtraction)</p> <p>Instantly recalls division facts with dividend and divisors less than 10</p> <p>Instantly recalls division facts with dividend and divisors less than 13</p> <p>Divides a 2-digit number by a 1-digit number with no remainder</p> <p>Uses strategies to determine 1 missing digit (multiplication/division only)</p> <p>Solves word problems with whole number division facts with dividend and divisors less than 11</p> <p>Solves simple word problems involving whole number division with remainder (e.g., 1-step, 1-digit divisor)*</p> <p>Evaluates numerical expressions using grouping symbols (whole numbers only)</p> <p>Identifies the missing operation symbol - 2-step number sentence*</p> <p>Demonstrates an understanding of the commutative property of multiplication with simple problems*</p> <p>Demonstrates an understanding of the zero property of multiplication</p> <p>Demonstrates an understanding of the multiplicative property of 1 (identity)</p> <p>Multiplies a decimal by whole number</p>
<p><i>New Vocabulary:</i> between, counting order, fact family, hundred, largest, thousand</p>	<p><i>New Vocabulary:</i> closest, digit, fourths, fraction, gave, hundred thousand, left, million, nearest, number statement, one, round, row, smallest, ten, ten thousand, thirds, thousandth, unifix cubes</p>	<p><i>New Vocabulary:</i> billion, capacity, deposit, each, hundred million, longer, quintillion, standard numeral, symbol, thousands, trillion, zero</p>
<p><i>New Signs and Symbols:</i> () order of operations, ¢ cent sign, lb pound</p>	<p><i>New Signs and Symbols:</i> { } set notation, < less than, long division symbol</p>	<p><i>New Signs and Symbols:</i> °F degrees Fahrenheit, > greater than, ≥ greater than or equal to, ≤ less than or equal to, R remainder</p>

Subject: Mathematics
Goal Strand: Number
RIT Score Range: 191 - 200

Skills and Concepts to Enhance 181 - 190	Skills and Concepts to Develop 191 - 200	Skills and Concepts to Introduce 201 - 210
<p>Number Sense</p> <p>Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa)*</p> <p>Identifies the numeral and written name for whole numbers to 1000 to 9999 (e.g., 3456 is three thousand, four hundred fifty-six, and vice versa)</p> <p>Identifies the numeral and written name for whole numbers 10,000 to 100,000</p> <p>Identifies the number that is "1 more than" a given number*</p> <p>Identifies the number that is "1 less than" a given number</p> <p>Counts numbers 0-1000*</p> <p>Counts and writes by 3's*</p> <p>Counts and writes by 4's*</p> <p>Counts and writes by 6's, 7's, 8's, or 9's*</p> <p>Counts and converts to dozens with models*</p> <p>Writes equivalent forms of whole numbers 11 to 20 using addition (e.g., $14 = 7 + 7$)*</p> <p>Writes equivalent forms of whole numbers using multiplication (e.g., $12 = 4 \times 3 = 2 \times 6 = 2 \times 2 \times 3$)*</p> <p>Converts to dozens without models</p> <p>Compares whole numbers through 999</p> <p>Compares whole numbers through 9999</p> <p>Orders sets of objects 0-20*</p> <p>Orders whole numbers less than 100</p> <p>Orders whole numbers less than 1000*</p> <p>Rounds 2- and 3- digit whole numbers to the nearest ten</p> <p>Rounds 3-digit whole numbers to the nearest hundred</p> <p>Counts objects that are grouped into tens and ones</p> <p>Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34)</p> <p>Identifies the place value and value of each digit in whole numbers through the tens place*</p> <p>Identifies the place value and value of each digit in whole numbers through the hundreds place</p> <p>Identifies the place value and value of each digit in whole numbers through the thousands</p>	<p>Number Sense</p> <p>Identifies whole numbers 100 - 999 using base-10 blocks*</p> <p>Identifies whole numbers over 999 using base-10 blocks*</p> <p>Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place</p> <p>Identifies the numeral and written name for whole numbers 10,000 to 100,000</p> <p>Identifies the numeral and written name for whole numbers over 100,000</p> <p>Counts and converts to dozens with models*</p> <p>Writes equivalent forms of whole numbers 11 to 20 using addition (e.g., $14 = 7 + 7$)*</p> <p>Writes equivalent forms of whole numbers using multiplication (e.g., $12 = 4 \times 3 = 2 \times 6 = 2 \times 2 \times 3$)*</p> <p>Converts to dozens without models</p> <p>Compares sets of objects and identifies which is equal to, more than, or less than the other (1 to 10 objects)*</p> <p>Compares whole numbers through 999,999</p> <p>Compares whole numbers to 100, using the symbols for 'less than', 'equal to', or 'greater than' (<, =, >)</p> <p>Compares whole numbers through the thousands using the symbols <, >, or =</p> <p>Orders whole numbers less than 1000*</p> <p>Orders whole numbers less than 10,000</p> <p>Rounds 2- and 3- digit whole numbers to the nearest ten</p> <p>Rounds 3-digit whole numbers to the nearest hundred</p> <p>Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34)</p> <p>Identifies the place value and value of each digit in whole numbers through the thousands</p> <p>Identifies the place value and value of each digit in whole numbers through the hundred thousands</p> <p>Writes whole numbers in standard and expanded form through the hundreds</p> <p>Writes whole numbers in standard and expanded form through the thousands</p> <p>Represents $\frac{1}{3}$ with a diagram or model</p>	<p>Number Sense</p> <p>Identifies whole numbers over 999 using base-10 blocks*</p> <p>Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place</p> <p>Identifies the numeral and written name for whole numbers over 100,000</p> <p>Identifies a whole number that comes before and/or after a given number (over 100)*</p> <p>Compares whole numbers through 999,999</p> <p>Compares whole numbers through the billions using the symbols <, >, or =*</p> <p>Orders whole numbers less than 10,000</p> <p>Orders whole numbers a million or greater</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand</p> <p>Rounds whole numbers to the nearest hundred thousand</p> <p>Explains the rules for rounding*</p> <p>Writes equivalent forms of whole numbers using place value (e.g., $54 = 4$ tens and 14 ones)</p> <p>Writes whole numbers in standard and expanded form through the hundred thousands</p> <p>Applies base ten place value concepts with whole numbers to solve problems</p> <p>Writes whole numbers using place value terms and vice versa</p> <p>Uses number sense strategies to solve problems (addition/subtraction only)</p> <p>Identifies halves of a region using nonadjacent parts</p> <p>Converts a basic fractional numeral to lowest terms (e.g., halves, thirds, quarters)*</p> <p>Compares fractions (e.g., common denominator, 1 in the numerator, denominator is 2, 3, 4, 6, 8, 10)</p> <p>Rounds decimals to the nearest whole number*</p>

<p>Identifies the place value and value of each digit in whole numbers through the hundred thousands Represents $\frac{1}{4}$ with a diagram or model* Represents $\frac{3}{4}$ with a diagram or model* Identifies $\frac{1}{2}$ from a region or set Identifies $\frac{1}{4}$ from a region or set Identifies $\frac{2}{3}$ or $\frac{3}{3}$ from a region or set* Identifies tenths from a region or set* Compares and orders decimals to the hundredths place (same number of digits after decimal) Applies base ten place value concepts to solve problems using decimals* Uses rounding to estimate answers to real-world problems involving addition of numbers less than 100 (whole numbers only)</p>	<p>Identifies one-half from a region or set* Identifies $\frac{1}{4}$ from a region or set Identifies $\frac{1}{3}$ from a region or set Identifies $\frac{2}{3}$ or $\frac{3}{3}$ from a region or set* Identifies tenths from a region or set* Matches numeric and visual representation of equivalent fractions Identifies a decimal on a number line to the tenths place* Compares and orders money in decimal form Compares and orders decimals to the thousandths place (same number of digits after decimal)* Uses rounding to estimate answers to real-world problems involving numbers less than 1000 with addition and subtraction (whole numbers only)* Uses front end digits to estimate answers in addition and subtraction computations (whole numbers only)* Uses rounding to estimate answers to addition and subtraction problems (whole numbers only)</p>	<p>Identifies the place value and value of each digit to the tenths* Compares integers on a number line* Orders integers on a number line* Writes a terminating decimal as a fraction or mixed number Determines multiples of a whole number* Uses rounding to estimate answers to real-world problems involving numbers 1000 or greater with addition and subtraction (whole numbers only)* Uses front end digits to estimate answers in addition and subtraction computations (whole numbers only)* Uses front end estimation for multiplication and division computations (whole numbers only)* Uses rounding to estimate answers to addition and subtraction problems (whole numbers only) Uses rounding to estimate answers to simple multiplication and division problems (whole numbers only)</p>
<p>Addition and Subtraction</p>	<p>Addition and Subtraction</p>	<p>Addition and Subtraction</p>
<p>Adds 1-digit to multiple-digit number with regrouping* Adds two or three 2-digit number with regrouping Adds 2-digit to 3-digit number with regrouping Adds 3-digit numbers, with regrouping, with sums under 1000 Performs mental computation with 2, 3, or 4 addends Adds two 3- and/or 4-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers, with regrouping, with sums over 1000 Solves real-world whole number addition problems with sums to 20 (result unknown) - with extraneous information given Solves real-world whole number addition problems with sums to 20 (start unknown)* Solves real-world whole number addition problems with sums to 100 (result unknown)* Solves real-world whole number addition problems with sums to 1000 Uses a number line to construct subtraction facts with subtrahends and minuends through 20 (whole numbers)* Uses models to calculate differences through 1000 (whole numbers)* Instantly recalls basic subtraction facts with minuend less than 10*</p>	<p>Adds 2-digit to 3-digit number with regrouping Uses number sense strategies to determine the correct answer for an addition computation* Adds two 3- and/or 4-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers with sums under 1000 Solves real-world whole number addition problems with sums to 20 (result unknown) - with extraneous information given Solves real-world whole number addition problems with sums to 100 (start unknown)* Solves whole number addition word problems with sums over 1000 Uses a number line to construct subtraction facts with subtrahends and minuends through 20 (whole numbers)* Adds and subtracts whole numbers using place value Subtracts 1-digit number from a 2-digit number with regrouping* Subtracts a 2-digit number from a 2-digit number, with regrouping Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on)</p>	<p>Instantly recalls basic addition facts with sums to 18 in a table* Uses reasoning strategies to solve magic squares and related puzzles (addition, whole numbers only) Adds multiple-digit numbers, with regrouping, with sums over 1000 Adds multiple-digit numbers with sums under 1000 Solves real-world whole number addition problems with sums to 100 (start unknown)* Adds and subtracts whole numbers using place value Subtracts 3- or 4-digit numbers with regrouping Uses strategies to determine 2 or more missing digits (addition/subtraction only) Solves real-world whole number problems involving subtraction with numbers 100 and under (analysis) Identifies the missing symbol to compare 2 expressions (e.g., < or >) Demonstrates an understanding of the associative property of addition* Demonstrates an understanding of the commutative property of addition Demonstrates an understanding of the zero property of addition (identity) Demonstrates an understanding of symmetric property applied to basic addition and subtraction facts (e.g., $10 = 2 + 8$ is the same as $2 + 8 = 10$ or $7 = 10 - 3$ is the</p>

<p>Subtracts a 1-digit number from a multiple-digit number*</p> <p>Subtracts 1-digit number from a 2-digit number with regrouping*</p> <p>Subtracts a 2-digit number from a 2-digit number, with regrouping</p> <p>Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on)</p> <p>Subtracts 2- and/or 3-digit numbers with no regrouping</p> <p>Subtracts 3- or 4-digit numbers with regrouping</p> <p>Performs mental subtraction with numbers under 1000</p> <p>Solves real-world whole number problems involving subtraction with numbers under 20</p> <p>Solves real-world whole number problems involving subtraction with numbers 100 and under</p> <p>Solves real-world whole number problems involving subtraction with numbers under 1000</p> <p>Solves real-world whole number problems involving addition and subtraction</p> <p>Recognizes addition and subtraction fact families through 18</p> <p>Adds decimals to the hundredths place (same number of digits)</p> <p>Adds money with regrouping</p> <p>Subtracts decimals to the hundredths place (same number of digits) without regrouping</p> <p>Makes change to \$1.00 by "counting on" or subtracting</p> <p>Computes with dollars and cents up to and including \$5.00 and converts to decimals (addition/subtraction only)</p> <p>Computes 1 operation on addition or subtraction real-world problems involving money up to \$5.00</p>	<p>Subtracts a 2-digit number from a 3-digit number with a single regrouping</p> <p>Subtracts 3- or 4-digit numbers with regrouping</p> <p>Performs mental subtraction with numbers under 1000</p> <p>Solves real-world whole number problems involving subtraction with numbers 100 and under</p> <p>Solves real-world whole number problems involving subtraction with numbers under 1000</p> <p>Solves problems using the inverse relationship between addition and subtraction*</p> <p>Uses models to add and subtract fractions and connect the actions to algorithms*</p> <p>Subtracts fractions with like denominators without reducing</p> <p>Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators</p> <p>Adds decimals to the hundredths place (same number of digits)</p> <p>Adds decimals to the hundredths place in vertical format (not same number of digits)*</p> <p>Adds decimals to the thousandths place vertically with and without regrouping</p> <p>Adds money with regrouping</p> <p>Subtracts decimals to the hundredths place (same number of digits) without regrouping</p> <p>Subtracts decimals to the hundredths place (same number of digits) with regrouping</p> <p>Subtracts decimals to the thousandths place, vertically, with and without regrouping</p> <p>Makes change to \$1.00 by "counting on" or subtracting</p> <p>Solves real-world problems involving decimals (not money) using addition and subtraction</p> <p>Computes with dollars and cents up to and including \$5.00 and converts to decimals (addition/subtraction only)</p> <p>Computes 1 operation on real-world problems involving money over \$5.00 (addition/subtraction only)</p>	<p>same as $10 - 3 = 7$)*</p> <p>Adds fractions with like denominators without reducing</p> <p>Uses models to add and subtract fractions and connect the actions to algorithms*</p> <p>Subtracts fractions with like denominators without reducing</p> <p>Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators</p> <p>Adds decimals to the hundredths place in vertical format (not same number of digits)*</p> <p>Adds decimals to the thousandths place horizontally with and without regrouping</p> <p>Subtracts decimals to the hundredths place (same number of digits) with regrouping</p> <p>Subtracts decimals to the thousandths place, vertically, with and without regrouping</p> <p>Computes the value of multiple bills and coins (addition/subtraction only)*</p> <p>Computes addition and subtraction on multiple-step real-world problems involving money</p> <p>Computes money problems with multiple operations (addition/subtraction only)</p>
<p>Multiplication and Division</p>	<p>Multiplication and Division</p>	<p>Multiplication and Division</p>
<p>Multiplies basic facts to 10 x 10 vertically</p> <p>Multiplies a 2-digit number by a 1-digit number with regrouping</p> <p>Solves word problems involving basic whole number multiplication facts to 10 x 10</p> <p>Uses sharing for division</p> <p>Models whole number multiplication and division algorithms (e.g., shows multiplication as repeated</p>	<p>Instantly recalls basic multiplication facts where one factor is 6-12 and the other factor is 0-12*</p> <p>Multiplies a 2- or 3-digit number by a 1-digit number with no regrouping</p> <p>Multiplies a 2-digit number by a 1-digit number with regrouping</p> <p>Multiplies a 3- or 4-digit number by a 1-digit number</p> <p>Multiplies a 2-digit number by a 2-digit number with no</p>	<p>Instantly recalls basic multiplication facts where one factor is 6-12 and the other factor is 0-12*</p> <p>Instantly recalls basic multiplication and division facts in a table</p> <p>Multiplies a 2-digit number by a 1-digit number with regrouping</p> <p>Multiplies a 3- or 4-digit number by a 1-digit number</p> <p>Multiplies multiple 1-digit numbers</p>

<p>addition and division as repeated subtraction) Models multiplication and division algorithms using arrays (whole numbers) Instantly recalls division facts with dividend and divisors less than 10 Solves word problems with whole number division facts with dividend and divisors less than 11 involving money Identifies the missing operation symbol - 2-step number sentence* Demonstrates an understanding of the zero property of multiplication Demonstrates an understanding of the inverse relationship between multiplication and division</p>	<p>regrouping* Multiplies a 3-digit number by a 2-digit number with no regrouping Performs mental computation with multiplication Solves word problems involving basic whole number multiplication facts to 10×10 Solves word problems involving whole number multiplication with numbers greater than 10×10 Uses repeated subtraction for division* Models whole number multiplication and division algorithms (e.g., shows multiplication as repeated addition and division as repeated subtraction) Instantly recalls division facts with dividend and divisors less than 10 Instantly recalls division facts with dividend and divisors less than 13 Divides a 2-digit number by a 1-digit number with no remainder Uses strategies to determine 1 missing digit (multiplication/division only) Solves word problems with whole number division facts with dividend and divisors less than 11 Solves simple word problems involving whole number division with remainder (e.g., 1-step, 1-digit divisor)* Evaluates numerical expressions using grouping symbols (whole numbers only) Identifies the missing operation symbol - 2-step number sentence* Demonstrates an understanding of the commutative property of multiplication with simple problems* Demonstrates an understanding of the zero property of multiplication Demonstrates an understanding of the multiplicative property of 1 (identity) Multiplies a decimal by whole number</p>	<p>Multiplies a 2-digit number by a 2-digit number with no regrouping* Multiplies a 2-digit number by a 2-digit number with regrouping Multiplies a 3-digit number by a 2-digit number with regrouping Performs mental computation with multiplication Multiplies a 2- or 3-digit number by multiples of 10 or 100 Multiplies a 3-digit number by a 3-digit number Solves word problems involving whole number multiplication with numbers greater than 10×10 Models whole number multiplication and division algorithms (e.g., uses physical materials to show 4 groups of 3 objects)* Instantly recalls division facts with dividend and divisors less than 13 Divides a 1-digit number by a 1-digit number with a remainder* Divides a 2-digit number by a 1-digit number with no remainder Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder Performs mental computation with division Divides a 3-digit number by a 1-digit number with no remainder Divides a 4-digit number by a 1-digit number with no remainder Divides a 4-digit number by a 1-digit number with a remainder* Divides a 2-digit number by a 2-digit number with a remainder Divides a 3-digit number by a multiple of 10 Divides a 4-digit number by a 2-digit number Solves word problems with whole number division facts with dividend and divisors less than 11 Solves simple word problems involving whole number division with remainder (e.g., 1-step, 1-digit divisor)* Solves whole number word problems with division over 10×10 Evaluates numerical expressions using grouping symbols (whole numbers only) Evaluates a numerical expression involving more than one operation* Solves real-world problems involving 2-step multiple operations, whole numbers only</p>
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		<p>Identifies the missing operation symbol - 2-step number sentence*</p> <p>Demonstrates an understanding of the commutative property of multiplication with simple problems*</p> <p>Demonstrates an understanding of symmetric property applied to multiplication (e.g., $8 \times 4 = 32$ is the same as $32 = 8 \times 4$)*</p> <p>Recognizes multiplication and division fact families*</p> <p>Multiplies a decimal by whole number</p> <p>Divides decimal by a whole number</p> <p>Computes addition, subtraction, multiplication, and division on multiple-step, real-world problems involving money</p>
<p><i>New Vocabulary:</i> closest, digit, fourths, fraction, gave, hundred thousand, left, million, nearest, number statement, one, round, row, smallest, ten, ten thousand, thirds, thousandth, unifix cubes</p>	<p><i>New Vocabulary:</i> billion, capacity, deposit, each, hundred million, longer, quintillion, standard numeral, symbol, thousands, trillion, zero</p>	<p><i>New Vocabulary:</i> annual, biggest, column, compatible numbers, dollar bill, expanded numeral, hundred thousands, hundredth, integer, inverse operation, larger, magic square, multiple, place value, plus, remainder, ten thousands, twice</p>
<p><i>New Signs and Symbols:</i> { } set notation, < less than, long division symbol</p>	<p><i>New Signs and Symbols:</i> °F degrees Fahrenheit, > greater than, ≥ greater than or equal to, ≤ less than or equal to, R remainder</p>	<p><i>New Signs and Symbols:</i> ? a variable, \$ dollar sign, □ missing operation, - negative number, ∅ null or empty set</p>

Subject: Mathematics
Goal Strand: Number
RIT Score Range: 201 - 210

Skills and Concepts to Enhance 191 - 200	Skills and Concepts to Develop 201 - 210	Skills and Concepts to Introduce 211 - 220
<p>Number Sense Identifies whole numbers 100 - 999 using base-10 blocks* Identifies whole numbers over 999 using base-10 blocks* Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place Identifies the numeral and written name for whole numbers 10,000 to 100,000 Identifies the numeral and written name for whole numbers over 100,000 Counts and converts to dozens with models* Writes equivalent forms of whole numbers 11 to 20 using addition (e.g., $14 = 7 + 7$)* Writes equivalent forms of whole numbers using multiplication (e.g., $12 = 4 \times 3 = 2 \times 6 = 2 \times 2 \times 3$)* Converts to dozens without models Compares sets of objects and identifies which is equal to, more than, or less than the other (1 to 10 objects)* Compares whole numbers through 999,999 Compares whole numbers to 100, using the symbols for 'less than', 'equal to', or 'greater than' (<, =, >) Compares whole numbers through the thousands using the symbols <, >, or = Orders whole numbers less than 1000* Orders whole numbers less than 10,000 Rounds 2- and 3- digit whole numbers to the nearest ten Rounds 3-digit whole numbers to the nearest hundred Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34) Identifies the place value and value of each digit in whole numbers through the thousands Identifies the place value and value of each digit in whole numbers through the hundred thousands Writes whole numbers in standard and expanded form through the hundreds Writes whole numbers in standard and expanded form through the thousands Represents $\frac{1}{3}$ with a diagram or model</p>	<p>Number Sense Identifies whole numbers over 999 using base-10 blocks* Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place Identifies the numeral and written name for whole numbers over 100,000 Identifies a whole number that comes before and/or after a given number (over 100)* Compares whole numbers through 999,999 Compares whole numbers through the billions using the symbols <, >, or =* Orders whole numbers less than 10,000 Orders whole numbers a million or greater Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand Rounds whole numbers to the nearest hundred thousand Explains the rules for rounding* Writes equivalent forms of whole numbers using place value (e.g., $54 = 4$ tens and 14 ones) Writes whole numbers in standard and expanded form through the hundred thousands Applies base ten place value concepts with whole numbers to solve problems Writes whole numbers using place value terms and vice versa Uses number sense strategies to solve problems (addition/subtraction only) Identifies halves of a region using nonadjacent parts Converts a basic fractional numeral to lowest terms (e.g., halves, thirds, quarters)* Compares fractions (e.g., common denominator, 1 in the numerator, denominator is 2, 3, 4, 6, 8, 10) Rounds decimals to the nearest whole number*</p>	<p>Number Sense Identifies whole numbers 100 - 999 using 2-D and 3-D models* Identifies whole numbers over 999 using 2- and 3-D models* Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten thousand Writes whole numbers in standard and expanded form through the hundred thousands Uses number sense strategies to solve problems (multiplication/division)* Evaluates number sense strategies used to solve problems* Expresses "1" in many different ways (e.g., $\frac{3}{3}$, $\frac{4}{4}$)* Compares fractions on a number line Compares fractions greater than or less than a given fraction using visual representations Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers)* Represents a decimal to the hundredths place (e.g., three hundredths = 0.03) Writes a decimal for a shaded region to the tenths place* Rounds decimals to the nearest whole number* Rounds decimals to the nearest tenth Identifies the place value and value of each digit to the tenths* Identifies an integer from a number line Compares two integers Orders integers on a number line* Uses correct terminology for integers* Expresses a simple fraction as a decimal Determines factors of whole numbers Determines multiples of a whole number* Uses rounding to estimate answers to real-world</p>

<p>Identifies one-half from a region or set*</p> <p>Identifies 1/4 from a region or set</p> <p>Identifies 1/3 from a region or set</p> <p>Identifies 2/3 or 3/3 from a region or set*</p> <p>Identifies tenths from a region or set*</p> <p>Matches numeric and visual representation of equivalent fractions</p> <p>Identifies a decimal on a number line to the tenths place*</p> <p>Compares and orders money in decimal form</p> <p>Compares and orders decimals to the thousandths place (same number of digits after decimal)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers less than 1000 with addition and subtraction (whole numbers only)*</p> <p>Uses front end digits to estimate answers in addition and subtraction computations (whole numbers only)*</p> <p>Uses rounding to estimate answers to addition and subtraction problems (whole numbers only)</p>	<p>Identifies the place value and value of each digit to the tenths*</p> <p>Compares integers on a number line*</p> <p>Orders integers on a number line*</p> <p>Writes a terminating decimal as a fraction or mixed number</p> <p>Determines multiples of a whole number*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers 1000 or greater with addition and subtraction (whole numbers only)*</p> <p>Uses front end digits to estimate answers in addition and subtraction computations (whole numbers only)*</p> <p>Uses front end estimation for multiplication and division computations (whole numbers only)*</p> <p>Uses rounding to estimate answers to addition and subtraction problems (whole numbers only)</p> <p>Uses rounding to estimate answers to simple multiplication and division problems (whole numbers only)</p>	<p>problems involving multiplication and division of numbers less than 100 (whole numbers only)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers less than 1000 with multiplication and division (whole numbers only)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers 1000 or greater using multiplication and division (whole numbers only)*</p> <p>Uses rounding to estimate answers to difficult multiplication and division problems (whole numbers only)</p>
<p>Addition and Subtraction</p> <p>Adds 2-digit to 3-digit number with regrouping</p> <p>Uses number sense strategies to determine the correct answer for an addition computation*</p> <p>Adds two 3- and/or 4-digit numbers, with regrouping, with sums over 1000</p> <p>Adds multiple-digit numbers, with regrouping, with sums over 1000</p> <p>Adds multiple-digit numbers with sums under 1000</p> <p>Solves real-world whole number addition problems with sums to 20 (result unknown) - with extraneous information given</p> <p>Solves real-world whole number addition problems with sums to 100 (start unknown)*</p> <p>Solves whole number addition word problems with sums over 1000</p> <p>Uses a number line to construct subtraction facts with subtrahends and minuends through 20 (whole numbers)*</p> <p>Adds and subtracts whole numbers using place value</p> <p>Subtracts 1-digit number from a 2-digit number with regrouping*</p> <p>Subtracts a 2-digit number from a 2-digit number, with regrouping</p> <p>Uses strategies for sums and differences with 2-digit numbers (e.g., decomposing, compatible, compensation, partial sums, counting on)</p>	<p>Addition and Subtraction</p> <p>Instantly recalls basic addition facts with sums to 18 in a table*</p> <p>Uses reasoning strategies to solve magic squares and related puzzles (addition, whole numbers only)</p> <p>Adds multiple-digit numbers, with regrouping, with sums over 1000</p> <p>Adds multiple-digit numbers with sums under 1000</p> <p>Solves real-world whole number addition problems with sums to 100 (start unknown)*</p> <p>Adds and subtracts whole numbers using place value</p> <p>Subtracts 3- or 4-digit numbers with regrouping</p> <p>Uses strategies to determine 2 or more missing digits (addition/subtraction only)</p> <p>Solves real-world whole number problems involving subtraction with numbers 100 and under (analysis)</p> <p>Identifies the missing symbol to compare 2 expressions (e.g., < or >)</p> <p>Demonstrates an understanding of the associative property of addition*</p> <p>Demonstrates an understanding of the commutative property of addition</p> <p>Demonstrates an understanding of the zero property of addition (identity)</p> <p>Demonstrates an understanding of symmetric property applied to basic addition and subtraction facts (e.g., $10 = 2 + 8$ is the same as $2 + 8 = 10$ or $7 = 10 - 3$ is the</p>	<p>Addition and Subtraction</p> <p>Uses reasoning strategies to solve magic squares and related puzzles (addition, whole numbers only)</p> <p>Uses strategies to determine 2 or more missing digits (addition/subtraction only)</p> <p>Predicts the relative size of the answer when adding whole numbers*</p> <p>Predicts the relative size of the answer when subtracting whole numbers*</p> <p>Demonstrates an understanding of the inverse relationship between addition and subtraction</p> <p>Adds fractions with like denominators without reducing</p> <p>Adds fractions with unlike denominators without reducing</p> <p>Subtracts simple fractions with unlike denominators without reducing (e.g., halves, quarters, thirds, eighths)*</p> <p>Subtracts fractions with unlike denominators without reducing</p> <p>Solves real-world problems involving addition and subtraction of fractions where converting one denominator is necessary</p> <p>Adds decimals to the hundredths place in horizontal format (not same number of digits)</p> <p>Adds decimals to the thousandths place horizontally with and without regrouping</p> <p>Subtracts decimals to the thousandths place, vertically,</p>

<p>Subtracts a 2-digit number from a 3-digit number with a single regrouping</p> <p>Subtracts 3- or 4-digit numbers with regrouping</p> <p>Performs mental subtraction with numbers under 1000</p> <p>Solves real-world whole number problems involving subtraction with numbers 100 and under</p> <p>Solves real-world whole number problems involving subtraction with numbers under 1000</p> <p>Solves problems using the inverse relationship between addition and subtraction*</p> <p>Uses models to add and subtract fractions and connect the actions to algorithms*</p> <p>Subtracts fractions with like denominators without reducing</p> <p>Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators</p> <p>Adds decimals to the hundredths place (same number of digits)</p> <p>Adds decimals to the hundredths place in vertical format (not same number of digits)*</p> <p>Adds decimals to the thousandths place vertically with and without regrouping</p> <p>Adds money with regrouping</p> <p>Subtracts decimals to the hundredths place (same number of digits) without regrouping</p> <p>Subtracts decimals to the hundredths place (same number of digits) with regrouping</p> <p>Subtracts decimals to the thousandths place, vertically, with and without regrouping</p> <p>Makes change to \$1.00 by "counting on" or subtracting</p> <p>Solves real-world problems involving decimals (not money) using addition and subtraction</p> <p>Computes with dollars and cents up to and including \$5.00 and converts to decimals (addition/subtraction only)</p> <p>Computes 1 operation on real-world problems involving money over \$5.00 (addition/subtraction only)</p>	<p>same as $10 - 3 = 7$)*</p> <p>Adds fractions with like denominators without reducing</p> <p>Uses models to add and subtract fractions and connect the actions to algorithms*</p> <p>Subtracts fractions with like denominators without reducing</p> <p>Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators</p> <p>Adds decimals to the hundredths place in vertical format (not same number of digits)*</p> <p>Adds decimals to the thousandths place horizontally with and without regrouping</p> <p>Subtracts decimals to the hundredths place (same number of digits) with regrouping</p> <p>Subtracts decimals to the thousandths place, vertically, with and without regrouping</p> <p>Computes the value of multiple bills and coins (addition/subtraction only)*</p> <p>Computes addition and subtraction on multiple-step real-world problems involving money</p> <p>Computes money problems with multiple operations (addition/subtraction only)</p>	<p>with the zero missing in the ones place*</p> <p>Subtracts decimals to the thousandths place, horizontally, with and without regrouping</p> <p>Computes the value of multiple bills and coins (addition/subtraction only)*</p> <p>Analyzes and computes 1 operation on real-world problems involving money over \$5.00 (addition/subtraction only)*</p> <p>Computes addition and subtraction on multiple-step real-world problems involving money</p>
<p>Multiplication and Division</p>	<p>Multiplication and Division</p>	<p>Multiplication and Division</p>
<p>Instantly recalls basic multiplication facts where one factor is 6-12 and the other factor is 0-12*</p> <p>Multiplies a 2- or 3-digit number by a 1-digit number with no regrouping</p> <p>Multiplies a 2-digit number by a 1-digit number with regrouping</p> <p>Multiplies a 3- or 4-digit number by a 1-digit number</p> <p>Multiplies a 2-digit number by a 2-digit number with no</p>	<p>Instantly recalls basic multiplication facts where one factor is 6-12 and the other factor is 0-12*</p> <p>Instantly recalls basic multiplication and division facts in a table</p> <p>Multiplies a 2-digit number by a 1-digit number with regrouping</p> <p>Multiplies a 3- or 4-digit number by a 1-digit number</p> <p>Multiplies multiple 1-digit numbers</p>	<p>Instantly recalls basic multiplication and division facts in a table</p> <p>Multiplies a 2-digit number by a 2-digit number with regrouping</p> <p>Multiplies a 3-digit number by a 2-digit number with regrouping</p> <p>Performs mental computation with multiplication</p> <p>Multiplies a 3-digit number by a 3-digit number</p>

<p>regrouping*</p> <p>Multiplies a 3-digit number by a 2-digit number with no regrouping</p> <p>Performs mental computation with multiplication</p> <p>Solves word problems involving basic whole number multiplication facts to 10 x 10</p> <p>Solves word problems involving whole number multiplication with numbers greater than 10 x 10</p> <p>Uses repeated subtraction for division*</p> <p>Models whole number multiplication and division algorithms (e.g., shows multiplication as repeated addition and division as repeated subtraction)</p> <p>Instantly recalls division facts with dividend and divisors less than 10</p> <p>Instantly recalls division facts with dividend and divisors less than 13</p> <p>Divides a 2-digit number by a 1-digit number with no remainder</p> <p>Uses strategies to determine 1 missing digit (multiplication/division only)</p> <p>Solves word problems with whole number division facts with dividend and divisors less than 11</p> <p>Solves simple word problems involving whole number division with remainder (e.g., 1-step, 1-digit divisor)*</p> <p>Evaluates numerical expressions using grouping symbols (whole numbers only)</p> <p>Identifies the missing operation symbol - 2-step number sentence*</p> <p>Demonstrates an understanding of the commutative property of multiplication with simple problems*</p> <p>Demonstrates an understanding of the zero property of multiplication</p> <p>Demonstrates an understanding of the multiplicative property of 1 (identity)</p> <p>Multiplies a decimal by whole number</p>	<p>Multiplies a 2-digit number by a 2-digit number with no regrouping*</p> <p>Multiplies a 2-digit number by a 2-digit number with regrouping</p> <p>Multiplies a 3-digit number by a 2-digit number with regrouping</p> <p>Performs mental computation with multiplication</p> <p>Multiplies a 2- or 3-digit number by multiples of 10 or 100</p> <p>Multiplies a 3-digit number by a 3-digit number</p> <p>Solves word problems involving whole number multiplication with numbers greater than 10 x 10</p> <p>Models whole number multiplication and division algorithms (e.g., uses physical materials to show 4 groups of 3 objects)*</p> <p>Instantly recalls division facts with dividend and divisors less than 13</p> <p>Divides a 1-digit number by a 1-digit number with a remainder*</p> <p>Divides a 2-digit number by a 1-digit number with no remainder</p> <p>Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder</p> <p>Performs mental computation with division</p> <p>Divides a 3-digit number by a 1-digit number with no remainder</p> <p>Divides a 4-digit number by a 1-digit number with no remainder</p> <p>Divides a 4-digit number by a 1-digit number with a remainder*</p> <p>Divides a 2-digit number by a 2-digit number with a remainder</p> <p>Divides a 3-digit number by a multiple of 10</p> <p>Divides a 4-digit number by a 2-digit number</p> <p>Solves word problems with whole number division facts with dividend and divisors less than 11</p> <p>Solves simple word problems involving whole number division with remainder (e.g., 1-step, 1-digit divisor)*</p> <p>Solves whole number word problems with division over 10 x 10</p> <p>Evaluates numerical expressions using grouping symbols (whole numbers only)</p> <p>Evaluates a numerical expression involving more than one operation*</p> <p>Solves real-world problems involving 2-step multiple operations, whole numbers only</p>	<p>Multiplies a 4- or more digit number by multiples of 100 or 1000</p> <p>Models whole number multiplication and division algorithms (e.g., uses physical materials to show 4 groups of 3 objects)*</p> <p>Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder</p> <p>Performs mental computation with division</p> <p>Divides a 4-digit number by a 1-digit number with no remainder</p> <p>Divides a 4-digit number by a 1-digit number with a remainder*</p> <p>Divides a 3-digit number by a 2-digit number</p> <p>Divides a 4-digit number by a 2-digit number</p> <p>Solves problems using the inverse relationship between multiplication and division</p> <p>Divides a whole number by a whole number and expresses the remainder as a decimal*</p> <p>Divides multiple-digit numbers</p> <p>Uses strategies to determine 2 or more missing digits (multiplication/division only)*</p> <p>Solves whole number word problems with division over 10 x 10</p> <p>Solves complex word problems involving whole number division with remainder (e.g., 2-step, 2-digit divisor)</p> <p>Evaluates a numerical expression involving more than one operation*</p> <p>Solves real-world problems involving 2-step multiple operations, whole numbers only</p> <p>Predicts the relative size of the answer when computing with 10's, 100's, 1000's</p> <p>Predicts the relative size of the answer when multiplying whole numbers</p> <p>Demonstrates an understanding of the commutative property of multiplication with simple problems*</p> <p>Demonstrates an understanding of the associative property of multiplication</p> <p>Demonstrates an understanding of the distributive property of multiplication by decomposing a term*</p> <p>Recognizes multiplication and division fact families*</p> <p>Multiplies a fraction by a whole number</p> <p>Divides decimal by a whole number</p> <p>Computes addition, subtraction, multiplication, and division on multiple-step, real-world problems involving money</p>
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	<p>Identifies the missing operation symbol - 2-step number sentence*</p> <p>Demonstrates an understanding of the commutative property of multiplication with simple problems*</p> <p>Demonstrates an understanding of symmetric property applied to multiplication (e.g., $8 \times 4 = 32$ is the same as $32 = 8 \times 4$)*</p> <p>Recognizes multiplication and division fact families*</p> <p>Multiplies a decimal by whole number</p> <p>Divides decimal by a whole number</p> <p>Computes addition, subtraction, multiplication, and division on multiple-step, real-world problems involving money</p>	
<i>New Vocabulary:</i> billion, capacity, deposit, each, hundred million, longer, quintillion, standard numeral, symbol, thousands, trillion, zero	<i>New Vocabulary:</i> annual, biggest, column, compatible numbers, dollar bill, expanded numeral, hundred thousands, hundredth, integer, inverse operation, larger, magic square, multiple, place value, plus, remainder, ten thousands, twice	<i>New Vocabulary:</i> coin, negative, positive, proof, smaller
<i>New Signs and Symbols:</i> °F degrees Fahrenheit, > greater than, ≥ greater than or equal to, ≤ less than or equal to, R remainder	<i>New Signs and Symbols:</i> ? a variable, \$ dollar sign, □ missing operation, - negative number, ∅ null or empty set	<i>New Signs and Symbols:</i> () parenthesis around an integer, in. inch, - negative sign, % percent, + positive number

Subject: Mathematics
Goal Strand: Number
RIT Score Range: 211 - 220

Skills and Concepts to Enhance 201 - 210	Skills and Concepts to Develop 211 - 220	Skills and Concepts to Introduce 221 - 230
<p>Number Sense</p> <p>Identifies whole numbers over 999 using base-10 blocks*</p> <p>Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place</p> <p>Identifies the numeral and written name for whole numbers over 100,000</p> <p>Identifies a whole number that comes before and/or after a given number (over 100)*</p> <p>Compares whole numbers through 999,999</p> <p>Compares whole numbers through the billions using the symbols <, >, or =*</p> <p>Orders whole numbers less than 10,000</p> <p>Orders whole numbers a million or greater</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand</p> <p>Rounds whole numbers to the nearest hundred thousand</p> <p>Explains the rules for rounding*</p> <p>Writes equivalent forms of whole numbers using place value (e.g., 54 = 4 tens and 14 ones)</p> <p>Writes whole numbers in standard and expanded form through the hundred thousands</p> <p>Applies base ten place value concepts with whole numbers to solve problems</p> <p>Writes whole numbers using place value terms and vice versa</p> <p>Uses number sense strategies to solve problems (addition/subtraction only)</p> <p>Identifies halves of a region using nonadjacent parts</p> <p>Converts a basic fractional numeral to lowest terms (e.g., halves, thirds, quarters)*</p> <p>Compares fractions (e.g., common denominator, 1 in the numerator, denominator is 2, 3, 4, 6, 8, 10)</p> <p>Rounds decimals to the nearest whole number*</p>	<p>Number Sense</p> <p>Identifies whole numbers 100 - 999 using 2-D and 3-D models*</p> <p>Identifies whole numbers over 999 using 2- and 3-D models*</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten thousand</p> <p>Writes whole numbers in standard and expanded form through the hundred thousands</p> <p>Uses number sense strategies to solve problems (multiplication/division)*</p> <p>Evaluates number sense strategies used to solve problems*</p> <p>Expresses "1" in many different ways (e.g., 3/3, 4/4)*</p> <p>Compares fractions on a number line</p> <p>Compares fractions greater than or less than a given fraction using visual representations</p> <p>Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers)*</p> <p>Represents a decimal to the hundredths place (e.g., three hundredths = 0.03)</p> <p>Writes a decimal for a shaded region to the tenths place*</p> <p>Rounds decimals to the nearest whole number*</p> <p>Rounds decimals to the nearest tenth</p> <p>Identifies the place value and value of each digit to the tenths*</p> <p>Identifies an integer from a number line</p> <p>Compares two integers</p> <p>Orders integers on a number line*</p> <p>Uses correct terminology for integers*</p> <p>Expresses a simple fraction as a decimal</p> <p>Determines factors of whole numbers</p> <p>Determines multiples of a whole number*</p> <p>Uses rounding to estimate answers to real-world</p>	<p>Number Sense</p> <p>Determines the relative magnitude of whole numbers*</p> <p>Orders whole numbers a million or greater using < or > symbols*</p> <p>Rounds whole numbers to the nearest million*</p> <p>Rounds whole numbers to the nearest billion*</p> <p>Writes equivalent forms of whole numbers using place value (numbers 100 or greater) (e.g., 253 = 2 hundreds, 5 tens, and 3 ones)</p> <p>Uses number sense strategies to judge the reasonableness of given answers (multiplication/division only)</p> <p>Represents a decimal to thousandths place (e.g., three thousandths = 0.003)</p> <p>Writes a decimal for a shaded region to the hundredths place</p> <p>Compares and orders decimals to the hundredths place (not same number of digits after decimal)*</p> <p>Compares and orders decimals to the thousandths place (not same number of digits after decimal)</p> <p>Rounds decimals to the nearest hundredth</p> <p>Identifies the place value and value of each digit to the hundredths and thousandths</p> <p>Compares two integers</p> <p>Orders integers</p> <p>Orders fractions and decimals to the hundred thousandths</p> <p>Determines factors of whole numbers</p> <p>Uses rounding to estimate answers to real-world problems involving multiplication and division of numbers less than 100 (whole numbers only)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers less than 1000 with multiplication and division (whole numbers only)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers 1000 or greater using multiplication and division (whole numbers only)*</p>

<p>Identifies the place value and value of each digit to the tenths*</p> <p>Compares integers on a number line*</p> <p>Orders integers on a number line*</p> <p>Writes a terminating decimal as a fraction or mixed number</p> <p>Determines multiples of a whole number*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers 1000 or greater with addition and subtraction (whole numbers only)*</p> <p>Uses front end digits to estimate answers in addition and subtraction computations (whole numbers only)*</p> <p>Uses front end estimation for multiplication and division computations (whole numbers only)*</p> <p>Uses rounding to estimate answers to addition and subtraction problems (whole numbers only)</p> <p>Uses rounding to estimate answers to simple multiplication and division problems (whole numbers only)</p>	<p>problems involving multiplication and division of numbers less than 100 (whole numbers only)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers less than 1000 with multiplication and division (whole numbers only)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers 1000 or greater using multiplication and division (whole numbers only)*</p> <p>Uses rounding to estimate answers to difficult multiplication and division problems (whole numbers only)</p>	
Addition and Subtraction	Addition and Subtraction	Addition and Subtraction
<p>Instantly recalls basic addition facts with sums to 18 in a table*</p> <p>Uses reasoning strategies to solve magic squares and related puzzles (addition, whole numbers only)</p> <p>Adds multiple-digit numbers, with regrouping, with sums over 1000</p> <p>Adds multiple-digit numbers with sums under 1000</p> <p>Solves real-world whole number addition problems with sums to 100 (start unknown)*</p> <p>Adds and subtracts whole numbers using place value</p> <p>Subtracts 3- or 4-digit numbers with regrouping</p> <p>Uses strategies to determine 2 or more missing digits (addition/subtraction only)</p> <p>Solves real-world whole number problems involving subtraction with numbers 100 and under (analysis)</p> <p>Identifies the missing symbol to compare 2 expressions (e.g., < or >)</p> <p>Demonstrates an understanding of the associative property of addition*</p> <p>Demonstrates an understanding of the commutative property of addition</p> <p>Demonstrates an understanding of the zero property of addition (identity)</p> <p>Demonstrates an understanding of symmetric property applied to basic addition and subtraction facts (e.g., $10 = 2 + 8$ is the same as $2 + 8 = 10$ or $7 = 10 - 3$ is the</p>	<p>Uses reasoning strategies to solve magic squares and related puzzles (addition, whole numbers only)</p> <p>Uses strategies to determine 2 or more missing digits (addition/subtraction only)</p> <p>Predicts the relative size of the answer when adding whole numbers*</p> <p>Predicts the relative size of the answer when subtracting whole numbers*</p> <p>Demonstrates an understanding of the inverse relationship between addition and subtraction</p> <p>Adds fractions with like denominators without reducing</p> <p>Adds fractions with unlike denominators without reducing</p> <p>Subtracts simple fractions with unlike denominators without reducing (e.g., halves, quarters, thirds, eighths)*</p> <p>Subtracts fractions with unlike denominators without reducing</p> <p>Solves real-world problems involving addition and subtraction of fractions where converting one denominator is necessary</p> <p>Adds decimals to the hundredths place in horizontal format (not same number of digits)</p> <p>Adds decimals to the thousandths place horizontally with and without regrouping</p> <p>Subtracts decimals to the thousandths place, vertically,</p>	<p>Models algorithms using place value concepts (addition and subtraction with whole numbers)*</p> <p>Predicts the relative size of the answer when adding whole numbers*</p> <p>Predicts the relative size of the answer when subtracting whole numbers*</p> <p>Adds fractions with unlike denominators without reducing</p> <p>Subtracts fractions with like denominators with reducing</p> <p>Subtracts fractions with unlike denominators without reducing</p> <p>Subtracts fractions with unlike denominators with reducing*</p> <p>Solves real-world problems involving addition and subtraction of fractions where converting one denominator is necessary</p> <p>Adds decimals to the hundredths place in horizontal format (not same number of digits)</p> <p>Subtracts decimals to the hundredths place (not same number of digits)</p> <p>Subtracts decimals to the thousandths place, horizontally, with and without regrouping</p>

<p>same as $10 - 3 = 7$)* Adds fractions with like denominators without reducing Uses models to add and subtract fractions and connect the actions to algorithms* Subtracts fractions with like denominators without reducing Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators Adds decimals to the hundredths place in vertical format (not same number of digits)* Adds decimals to the thousandths place horizontally with and without regrouping Subtracts decimals to the hundredths place (same number of digits) with regrouping Subtracts decimals to the thousandths place, vertically, with and without regrouping Computes the value of multiple bills and coins (addition/subtraction only)* Computes addition and subtraction on multiple-step real-world problems involving money Computes money problems with multiple operations (addition/subtraction only)</p>	<p>with the zero missing in the ones place* Subtracts decimals to the thousandths place, horizontally, with and without regrouping Computes the value of multiple bills and coins (addition/subtraction only)* Analyzes and computes 1 operation on real-world problems involving money over \$5.00 (addition/subtraction only)* Computes addition and subtraction on multiple-step real-world problems involving money</p>	
Multiplication and Division	Multiplication and Division	Multiplication and Division
<p>Instantly recalls basic multiplication facts where one factor is 6-12 and the other factor is 0-12* Instantly recalls basic multiplication and division facts in a table Multiplies a 2-digit number by a 1-digit number with regrouping Multiplies a 3- or 4-digit number by a 1-digit number Multiplies multiple 1-digit numbers Multiplies a 2-digit number by a 2-digit number with no regrouping* Multiplies a 2-digit number by a 2-digit number with regrouping Multiplies a 3-digit number by a 2-digit number with regrouping Performs mental computation with multiplication Multiplies a 2- or 3-digit number by multiples of 10 or 100 Multiplies a 3-digit number by a 3-digit number Solves word problems involving whole number multiplication with numbers greater than 10×10 Models whole number multiplication and division algorithms (e.g., uses physical materials to show 4 groups of 3 objects)*</p>	<p>Instantly recalls basic multiplication and division facts in a table Multiplies a 2-digit number by a 2-digit number with regrouping Multiplies a 3-digit number by a 2-digit number with regrouping Performs mental computation with multiplication Multiplies a 3-digit number by a 3-digit number Multiplies a 4- or more digit number by multiples of 100 or 1000 Models whole number multiplication and division algorithms (e.g., uses physical materials to show 4 groups of 3 objects)* Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder Performs mental computation with division Divides a 4-digit number by a 1-digit number with no remainder Divides a 4-digit number by a 1-digit number with a remainder* Divides a 3-digit number by a 2-digit number Divides a 4-digit number by a 2-digit number Solves problems using the inverse relationship between</p>	<p>Uses multiplication strategies to explain computation (e.g., doubles, 9-patterns, decomposing, partial products)* Models algorithms using place value concepts (multiplication and division with whole numbers)* Divides a 4-digit number by a 2-digit number Divides multiple-digit numbers Solves complex word problems involving whole number division with remainder (e.g., 2-step, 2-digit divisor) Predicts the relative size of the answer when dividing whole numbers Demonstrates an understanding of the commutative property of multiplication with complex problems (e.g., parenthesis, 3 factors) Demonstrates an understanding of multiple properties Multiplies a fraction by a whole number</p>

<p>Instantly recalls division facts with dividend and divisors less than 13</p> <p>Divides a 1-digit number by a 1-digit number with a remainder*</p> <p>Divides a 2-digit number by a 1-digit number with no remainder</p> <p>Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder</p> <p>Performs mental computation with division</p> <p>Divides a 3-digit number by a 1-digit number with no remainder</p> <p>Divides a 4-digit number by a 1-digit number with no remainder</p> <p>Divides a 4-digit number by a 1-digit number with a remainder*</p> <p>Divides a 2-digit number by a 2-digit number with a remainder</p> <p>Divides a 3-digit number by a multiple of 10</p> <p>Divides a 4-digit number by a 2-digit number</p> <p>Solves word problems with whole number division facts with dividend and divisors less than 11</p> <p>Solves simple word problems involving whole number division with remainder (e.g., 1-step, 1-digit divisor)*</p> <p>Solves whole number word problems with division over 10 x 10</p> <p>Evaluates numerical expressions using grouping symbols (whole numbers only)</p> <p>Evaluates a numerical expression involving more than one operation*</p> <p>Solves real-world problems involving 2-step multiple operations, whole numbers only</p> <p>Identifies the missing operation symbol - 2-step number sentence*</p> <p>Demonstrates an understanding of the commutative property of multiplication with simple problems*</p> <p>Demonstrates an understanding of symmetric property applied to multiplication (e.g., $8 \times 4 = 32$ is the same as $32 = 8 \times 4$)*</p> <p>Recognizes multiplication and division fact families*</p> <p>Multiplies a decimal by whole number</p> <p>Divides decimal by a whole number</p> <p>Computes addition, subtraction, multiplication, and division on multiple-step, real-world problems involving money</p>	<p>multiplication and division</p> <p>Divides a whole number by a whole number and expresses the remainder as a decimal*</p> <p>Divides multiple-digit numbers</p> <p>Uses strategies to determine 2 or more missing digits (multiplication/division only)*</p> <p>Solves whole number word problems with division over 10 x 10</p> <p>Solves complex word problems involving whole number division with remainder (e.g., 2-step, 2-digit divisor)</p> <p>Evaluates a numerical expression involving more than one operation*</p> <p>Solves real-world problems involving 2-step multiple operations, whole numbers only</p> <p>Predicts the relative size of the answer when computing with 10's, 100's, 1000's</p> <p>Predicts the relative size of the answer when multiplying whole numbers</p> <p>Demonstrates an understanding of the commutative property of multiplication with simple problems*</p> <p>Demonstrates an understanding of the associative property of multiplication</p> <p>Demonstrates an understanding of the distributive property of multiplication by decomposing a term*</p> <p>Recognizes multiplication and division fact families*</p> <p>Multiplies a fraction by a whole number</p> <p>Divides decimal by a whole number</p> <p>Computes addition, subtraction, multiplication, and division on multiple-step, real-world problems involving money</p>	
<p><i>New Vocabulary:</i> annual, biggest, column, compatible numbers, dollar bill, expanded numeral, hundred</p>	<p><i>New Vocabulary:</i> coin, negative, positive, proof, smaller</p>	<p><i>New Vocabulary:</i> borrow, range, ten million, tenths, thousandths</p>

thousands, hundredth, integer, inverse operation, larger, magic square, multiple, place value, plus, remainder, ten thousands, twice		
<i>New Signs and Symbols:</i> ? a variable, \$ dollar sign, □ missing operation, – negative number, ∅ null or empty set	<i>New Signs and Symbols:</i> () parenthesis around an integer, in. inch, – negative sign, % percent, + positive number	<i>New Signs and Symbols:</i> °C degrees Celsius, # number

Subject: Mathematics
Goal Strand: Number
RIT Score Range: 221 - 230

Skills and Concepts to Enhance 211 - 220	Skills and Concepts to Develop 221 - 230	Skills and Concepts to Introduce Above 230
<p>Number Sense</p> <p>Identifies whole numbers 100 - 999 using 2-D and 3-D models*</p> <p>Identifies whole numbers over 999 using 2- and 3-D models*</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest hundred</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest thousand</p> <p>Rounds 4-, 5-, and 6-digit whole numbers to the nearest ten thousand</p> <p>Writes whole numbers in standard and expanded form through the hundred thousands</p> <p>Uses number sense strategies to solve problems (multiplication/division)*</p> <p>Evaluates number sense strategies used to solve problems*</p> <p>Expresses "1" in many different ways (e.g., 3/3, 4/4)*</p> <p>Compares fractions on a number line</p> <p>Compares fractions greater than or less than a given fraction using visual representations</p> <p>Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers)*</p> <p>Represents a decimal to the hundredths place (e.g., three hundredths = 0.03)</p> <p>Writes a decimal for a shaded region to the tenths place*</p> <p>Rounds decimals to the nearest whole number*</p> <p>Rounds decimals to the nearest tenth</p> <p>Identifies the place value and value of each digit to the tenths*</p> <p>Identifies an integer from a number line</p> <p>Compares two integers</p> <p>Orders integers on a number line*</p> <p>Uses correct terminology for integers*</p> <p>Expresses a simple fraction as a decimal</p> <p>Determines factors of whole numbers</p> <p>Determines multiples of a whole number*</p> <p>Uses rounding to estimate answers to real-world</p>	<p>Number Sense</p> <p>Determines the relative magnitude of whole numbers*</p> <p>Orders whole numbers a million or greater using < or > symbols*</p> <p>Rounds whole numbers to the nearest million*</p> <p>Rounds wholes numbers to the nearest billion*</p> <p>Writes equivalent forms of whole numbers using place value (numbers 100 or greater) (e.g., 253 = 2 hundreds, 5 tens, and 3 ones)</p> <p>Uses number sense strategies to judge the reasonableness of given answers (multiplication/division only)</p> <p>Represents a decimal to thousandths place (e.g., three thousandths = 0.003)</p> <p>Writes a decimal for a shaded region to the hundredths place</p> <p>Compares and orders decimals to the hundredths place (not same number of digits after decimal)*</p> <p>Compares and orders decimals to the thousandths place (not same number of digits after decimal)</p> <p>Rounds decimals to the nearest hundredth</p> <p>Identifies the place value and value of each digit to the hundredths and thousandths</p> <p>Compares two integers</p> <p>Orders integers</p> <p>Orders fractions and decimals to the hundred thousandths</p> <p>Determines factors of whole numbers</p> <p>Uses rounding to estimate answers to real-world problems involving multiplication and division of numbers less than 100 (whole numbers only)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers less than 1000 with multiplication and division (whole numbers only)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers 1000 or greater using multiplication and division (whole numbers only)*</p>	<p>Number Sense</p> <p>Rounds decimals to the nearest hundredth</p> <p>Rounds decimals to nearest thousandth*</p> <p>Compares and orders decimal and fractional coordinates on a number line*</p>

<p>problems involving multiplication and division of numbers less than 100 (whole numbers only)* Uses rounding to estimate answers to real-world problems involving numbers less than 1000 with multiplication and division (whole numbers only)* Uses rounding to estimate answers to real-world problems involving numbers 1000 or greater using multiplication and division (whole numbers only)* Uses rounding to estimate answers to difficult multiplication and division problems (whole numbers only)</p>		
<p>Addition and Subtraction</p>	<p>Addition and Subtraction</p>	<p>Addition and Subtraction</p>
<p>Uses reasoning strategies to solve magic squares and related puzzles (addition, whole numbers only) Uses strategies to determine 2 or more missing digits (addition/subtraction only) Predicts the relative size of the answer when adding whole numbers* Predicts the relative size of the answer when subtracting whole numbers* Demonstrates an understanding of the inverse relationship between addition and subtraction Adds fractions with like denominators without reducing Adds fractions with unlike denominators without reducing Subtracts simple fractions with unlike denominators without reducing (e.g., halves, quarters, thirds, eighths)* Subtracts fractions with unlike denominators without reducing Solves real-world problems involving addition and subtraction of fractions where converting one denominator is necessary Adds decimals to the hundredths place in horizontal format (not same number of digits) Adds decimals to the thousandths place horizontally with and without regrouping Subtracts decimals to the thousandths place, vertically, with the zero missing in the ones place* Subtracts decimals to the thousandths place, horizontally, with and without regrouping Computes the value of multiple bills and coins (addition/subtraction only)* Analyzes and computes 1 operation on real-world problems involving money over \$5.00 (addition/subtraction only)*</p>	<p>Models algorithms using place value concepts (addition and subtraction with whole numbers)* Predicts the relative size of the answer when adding whole numbers* Predicts the relative size of the answer when subtracting whole numbers* Adds fractions with unlike denominators without reducing Subtracts fractions with like denominators with reducing Subtracts fractions with unlike denominators without reducing Subtracts fractions with unlike denominators with reducing* Solves real-world problems involving addition and subtraction of fractions where converting one denominator is necessary Adds decimals to the hundredths place in horizontal format (not same number of digits) Subtracts decimals to the hundredths place (not same number of digits) Subtracts decimals to the thousandths place, horizontally, with and without regrouping</p>	<p>Models algorithms using place value concepts (addition and subtraction with whole numbers)* Solves real-world problems involving addition and subtraction of fractions where converting both denominators is necessary</p>

Computes addition and subtraction on multiple-step real-world problems involving money		
Multiplication and Division	Multiplication and Division	Multiplication and Division
<p>Instantly recalls basic multiplication and division facts in a table</p> <p>Multiplies a 2-digit number by a 2-digit number with regrouping</p> <p>Multiplies a 3-digit number by a 2-digit number with regrouping</p> <p>Performs mental computation with multiplication</p> <p>Multiplies a 3-digit number by a 3-digit number</p> <p>Multiplies a 4- or more digit number by multiples of 100 or 1000</p> <p>Models whole number multiplication and division algorithms (e.g., uses physical materials to show 4 groups of 3 objects)*</p> <p>Divides a 2-digit number or a 3-digit number by a 1-digit number with a remainder</p> <p>Performs mental computation with division</p> <p>Divides a 4-digit number by a 1-digit number with no remainder</p> <p>Divides a 4-digit number by a 1-digit number with a remainder*</p> <p>Divides a 3-digit number by a 2-digit number</p> <p>Divides a 4-digit number by a 2-digit number</p> <p>Solves problems using the inverse relationship between multiplication and division</p> <p>Divides a whole number by a whole number and expresses the remainder as a decimal*</p> <p>Divides multiple-digit numbers</p> <p>Uses strategies to determine 2 or more missing digits (multiplication/division only)*</p> <p>Solves whole number word problems with division over 10 x 10</p> <p>Solves complex word problems involving whole number division with remainder (e.g., 2-step, 2-digit divisor)</p> <p>Evaluates a numerical expression involving more than one operation*</p> <p>Solves real-world problems involving 2-step multiple operations, whole numbers only</p> <p>Predicts the relative size of the answer when computing with 10's, 100's, 1000's</p> <p>Predicts the relative size of the answer when multiplying whole numbers</p> <p>Demonstrates an understanding of the commutative property of multiplication with simple problems*</p>	<p>Uses multiplication strategies to explain computation (e.g., doubles, 9-patterns, decomposing, partial products)*</p> <p>Models algorithms using place value concepts (multiplication and division with whole numbers)*</p> <p>Divides a 4-digit number by a 2-digit number</p> <p>Divides multiple-digit numbers</p> <p>Solves complex word problems involving whole number division with remainder (e.g., 2-step, 2-digit divisor)</p> <p>Predicts the relative size of the answer when dividing whole numbers</p> <p>Demonstrates an understanding of the commutative property of multiplication with complex problems (e.g., parenthesis, 3 factors)</p> <p>Demonstrates an understanding of multiple properties</p> <p>Multiplies a fraction by a whole number</p>	<p>Models algorithms using place value concepts (multiplication and division with whole numbers)*</p> <p>Divides multiple-digit numbers</p> <p>Evaluates numerical expressions using the order of operations (whole numbers only)</p> <p>Predicts the relative size of the answer when dividing a smaller whole number by a larger whole number</p> <p>Describes the effects of multiplying a number by a number between 0 and 1*</p>

Demonstrates an understanding of the associative property of multiplication Demonstrates an understanding of the distributive property of multiplication by decomposing a term* Recognizes multiplication and division fact families* Multiplies a fraction by a whole number Divides decimal by a whole number Computes addition, subtraction, multiplication, and division on multiple-step, real-world problems involving money		
<i>New Vocabulary:</i> coin, negative, positive, proof, smaller	<i>New Vocabulary:</i> borrow, range, ten million, tenths, thousandths	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> () parenthesis around an integer, in. inch, – negative sign, % percent, + positive number	<i>New Signs and Symbols:</i> °C degrees Celsius, # number	<i>New Signs and Symbols:</i> • multiplication symbol (dot)

Subject: Mathematics
Goal Strand: Number
RIT Score Range: Above 230

Skills and Concepts to Enhance 221 - 230	Skills and Concepts to Develop Above 230
<p>Number Sense</p> <p>Determines the relative magnitude of whole numbers*</p> <p>Orders whole numbers a million or greater using < or > symbols*</p> <p>Rounds whole numbers to the nearest million*</p> <p>Rounds wholes numbers to the nearest billion*</p> <p>Writes equivalent forms of whole numbers using place value (numbers 100 or greater) (e.g., 253 = 2 hundreds, 5 tens, and 3 ones)</p> <p>Uses number sense strategies to judge the reasonableness of given answers (multiplication/division only)</p> <p>Represents a decimal to thousandths place (e.g., three thousandths = 0.003)</p> <p>Writes a decimal for a shaded region to the hundredths place</p> <p>Compares and orders decimals to the hundredths place (not same number of digits after decimal)*</p> <p>Compares and orders decimals to the thousandths place (not same number of digits after decimal)</p> <p>Rounds decimals to the nearest hundredth</p> <p>Identifies the place value and value of each digit to the hundredths and thousandths</p> <p>Compares two integers</p> <p>Orders integers</p> <p>Orders fractions and decimals to the hundred thousandths</p> <p>Determines factors of whole numbers</p> <p>Uses rounding to estimate answers to real-world problems involving multiplication and division of numbers less than 100 (whole numbers only)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers less than 1000 with multiplication and division (whole numbers only)*</p> <p>Uses rounding to estimate answers to real-world problems involving numbers 1000 or greater using multiplication and division (whole numbers only)*</p>	<p>Number Sense</p> <p>Rounds decimals to the nearest hundredth</p> <p>Rounds decimals to nearest thousandth*</p> <p>Compares and orders decimal and fractional coordinates on a number line*</p>
<p>Addition and Subtraction</p> <p>Models algorithms using place value concepts (addition</p>	<p>Addition and Subtraction</p> <p>Models algorithms using place value concepts (addition</p>

<p>and subtraction with whole numbers)* Predicts the relative size of the answer when adding whole numbers* Predicts the relative size of the answer when subtracting whole numbers* Adds fractions with unlike denominators without reducing Subtracts fractions with like denominators with reducing Subtracts fractions with unlike denominators without reducing Subtracts fractions with unlike denominators with reducing* Solves real-world problems involving addition and subtraction of fractions where converting one denominator is necessary Adds decimals to the hundredths place in horizontal format (not same number of digits) Subtracts decimals to the hundredths place (not same number of digits) Subtracts decimals to the thousandths place, horizontally, with and without regrouping</p>	<p>and subtraction with whole numbers)* Solves real-world problems involving addition and subtraction of fractions where converting both denominators is necessary</p>
Multiplication and Division	Multiplication and Division
<p>Uses multiplication strategies to explain computation (e.g., doubles, 9-patterns, decomposing, partial products)* Models algorithms using place value concepts (multiplication and division with whole numbers)* Divides a 4-digit number by a 2-digit number Divides multiple-digit numbers Solves complex word problems involving whole number division with remainder (e.g., 2-step, 2-digit divisor) Predicts the relative size of the answer when dividing whole numbers Demonstrates an understanding of the commutative property of multiplication with complex problems (e.g., parenthesis, 3 factors) Demonstrates an understanding of multiple properties Multiplies a fraction by a whole number</p>	<p>Models algorithms using place value concepts (multiplication and division with whole numbers)* Divides multiple-digit numbers Evaluates numerical expressions using the order of operations (whole numbers only) Predicts the relative size of the answer when dividing a smaller whole number by a larger whole number Describes the effects of multiplying a number by a number between 0 and 1*</p>
<i>New Vocabulary:</i> borrow, range, ten million, tenths, thousandths	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> °C degrees Celsius, # number	<i>New Signs and Symbols:</i> • multiplication symbol (dot)

Subject: Mathematics
 Goal Strand: Data
 RIT Score Range: Below 161

Skills and Concepts to Develop Below 161	Skills and Concepts to Introduce 161 - 170
Measurement and Approximation	Measurement and Approximation
Identifies time of day (e.g., morning, afternoon)*	Orders periods of time (days of the week)* Tells time to the nearest hour* Tells time to the nearest half hour Reads a calendar - no computation required
Data Analysis	Data Analysis
	Solves simple problems based on data from tables* Compares data from simple graphs (e.g., largest, smallest, most often, least often)
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> dollar, shortest, table
<i>New Signs and Symbols:</i> : used with time	<i>New Signs and Symbols:</i> \$ dollar sign, = is equal to

Subject: Mathematics
Goal Strand: Data
RIT Score Range: 161 - 170

Skills and Concepts to Enhance Below 161	Skills and Concepts to Develop 161 - 170	Skills and Concepts to Introduce 171 - 180
Measurement and Approximation Identifies time of day (e.g., morning, afternoon)*	Measurement and Approximation Orders periods of time (days of the week)* Tells time to the nearest hour* Tells time to the nearest half hour Reads a calendar - no computation required	Measurement and Approximation Identifies the value of a collection of coins to \$1.00 (with pictures of coins) Identifies the value of a collection of coins and bills to \$10.00 by "counting on" (with picture of money) Knows the approximate weight of familiar objects Orders periods of time (months of the year, seasons)* Tells time to the nearest hour* Tells time to the nearest half hour Tells time to the nearest 5 minutes Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour) Reads Fahrenheit thermometers to the nearest degree*
Data Analysis	Data Analysis Solves simple problems based on data from tables* Compares data from simple graphs (e.g., largest, smallest, most often, least often)	Data Analysis Interprets simple graphs or tables Interprets data using tally charts Reads and interprets data from a pictograph* Solves simple problems based on data from pictographs Displays data appropriately - bar graph - scale is 1 to 1* Solves simple problems based on data from bar graphs Compares data from simple graphs (e.g., largest, smallest, most often, least often)
<i>New Vocabulary: none</i>	<i>New Vocabulary: dollar, shortest, table</i>	<i>New Vocabulary: fewer, less, morning, quart, taller</i>
<i>New Signs and Symbols: : used with time</i>	<i>New Signs and Symbols: \$ dollar sign, = is equal to</i>	<i>New Signs and Symbols: a.m., ¢ cent sign, cm centimeter/centimetre, °F degrees Fahrenheit, g gram, in. inch, p.m.</i>

Subject: Mathematics
Goal Strand: Data
RIT Score Range: 171 - 180

Skills and Concepts to Enhance 161 - 170	Skills and Concepts to Develop 171 - 180	Skills and Concepts to Introduce 181 - 190
<p>Measurement and Approximation</p> <p>Orders periods of time (days of the week)* Tells time to the nearest hour* Tells time to the nearest half hour Reads a calendar - no computation required</p>	<p>Measurement and Approximation</p> <p>Identifies the value of a collection of coins to \$1.00 (with pictures of coins) Identifies the value of a collection of coins and bills to \$10.00 by "counting on" (with picture of money) Knows the approximate weight of familiar objects Orders periods of time (months of the year, seasons)* Tells time to the nearest hour* Tells time to the nearest half hour Tells time to the nearest 5 minutes Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour) Reads Fahrenheit thermometers to the nearest degree*</p>	<p>Measurement and Approximation</p> <p>Identifies the value of a collection of coins to \$1.00 (without picture of coins) Identifies the value of a collection of coins and bills to \$10.00 by "counting on" (with picture of money) Finds equivalent combinations of coins with the same value* Combines a collection of coins and identifies the correct notation Selects and uses the appropriate type and size of unit in customary system (weight)* Determines more capacity or less capacity Selects and uses the appropriate type and size of unit in customary system (capacity)* Identifies the correct time, given the words, and vice versa Selects and uses the appropriate type and size of unit in customary system (time)* Determines elapsed clock time Determines elapsed time under 1 hour or to the hour Determines elapsed time involving whole hours, whole days, whole years Tells time to the nearest 5 minutes Interprets a calendar - some computation required Computes simple conversions among units of time (days, weeks)* Reads Fahrenheit thermometers to the nearest degree*</p>
<p>Data Analysis</p> <p>Solves simple problems based on data from tables* Compares data from simple graphs (e.g., largest, smallest, most often, least often)</p>	<p>Data Analysis</p> <p>Interprets simple graphs or tables Interprets data using tally charts Reads and interprets data from a pictograph* Solves simple problems based on data from pictographs Displays data appropriately - bar graph - scale is 1 to 1* Solves simple problems based on data from bar graphs Compares data from simple graphs (e.g., largest, smallest, most often, least often)</p>	<p>Data Analysis</p> <p>Interprets simple graphs or tables Solves simple problems based on data from tally charts* Solves simple problems based on data from pictographs Reads and interprets data from a bar graph Solves simple problems based on data from bar graphs</p>
<p><i>New Vocabulary:</i> dollar, shortest, table</p>	<p><i>New Vocabulary:</i> fewer, less, morning, quart, taller</p>	<p><i>New Vocabulary:</i> changed, clock, consecutive, cup, fourth, half past, how much time, lowest, millimeter, noon, o'clock, pennies, pint, quarter past, quarter to, smallest,</p>

		tablespoon, teaspoon, ton, what time
<i>New Signs and Symbols:</i> \$ dollar sign, = is equal to	<i>New Signs and Symbols:</i> a.m., ¢ cent sign, cm centimeter/centimetre, °F degrees Fahrenheit, g gram, in. inch, p.m.	<i>New Signs and Symbols:</i> : ratio, c cup, gal gallon, pt pint, qt quart, : used with time, tsp teaspoon, □ variable

Subject: Mathematics
Goal Strand: Data
RIT Score Range: 181 - 190

Skills and Concepts to Enhance 171 - 180	Skills and Concepts to Develop 181 - 190	Skills and Concepts to Introduce 191 - 200
<p>Measurement and Approximation</p> <p>Identifies the value of a collection of coins to \$1.00 (with pictures of coins) Identifies the value of a collection of coins and bills to \$10.00 by "counting on" (with picture of money) Knows the approximate weight of familiar objects Orders periods of time (months of the year, seasons)* Tells time to the nearest hour* Tells time to the nearest half hour Tells time to the nearest 5 minutes Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour) Reads Fahrenheit thermometers to the nearest degree*</p>	<p>Measurement and Approximation</p> <p>Identifies the value of a collection of coins to \$1.00 (without picture of coins) Identifies the value of a collection of coins and bills to \$10.00 by "counting on" (with picture of money) Finds equivalent combinations of coins with the same value* Combines a collection of coins and identifies the correct notation Selects and uses the appropriate type and size of unit in customary system (weight)* Determines more capacity or less capacity Selects and uses the appropriate type and size of unit in customary system (capacity)* Identifies the correct time, given the words, and vice versa Selects and uses the appropriate type and size of unit in customary system (time)* Determines elapsed clock time Determines elapsed time under 1 hour or to the hour Determines elapsed time involving whole hours, whole days, whole years Tells time to the nearest 5 minutes Interprets a calendar - some computation required Computes simple conversions among units of time (days, weeks)* Reads Fahrenheit thermometers to the nearest degree*</p>	<p>Measurement and Approximation</p> <p>Uses rounding to estimate answers to 1-step problems involving answers less than \$1 (whole numbers only, e.g., 10 cents + 10 cents)* Uses rounding to estimate answers to 1-step problems involving answers less than \$20 (decimals only, e.g., \$1.20 + \$2.75) Identifies the value of a collection of coins to \$1.00 (without picture of coins) Identifies the value of a collection of coins and bills to \$10.00 by "counting on" (without picture of money) Finds equivalent combinations of coins with the same value* Finds equivalent combinations of dollars and cents with the same value* Selects and uses the appropriate type and size of unit in customary system (weight)* Knows the approximate size of an ounce* Uses balance scale to measure weight of an unknown object* Selects and uses the appropriate type and size of unit in customary system (capacity)* Knows the approximate size of a pint* Converts between cups and pints* Converts between cups, pints, and quarts* Identifies the correct time, given the words, and vice versa Orders years* Selects and uses the appropriate type and size of unit in customary system (time)* Determines elapsed clock time Tells time to the nearest quarter hour Determines elapsed time involving whole hours, whole days, whole years Tells time to the nearest 1 minute Computes simple conversions among units of time (minutes, hours) Computes simple conversions among units of time (hours, days)*</p>

		Solves simple problems involving elapsed time, with the conversion of hours Reads Celsius thermometers to the nearest degree Solves problems involving measurement of temperature
Data Analysis	Data Analysis	Data Analysis
Interprets simple graphs or tables Interprets data using tally charts Reads and interprets data from a pictograph* Solves simple problems based on data from pictographs Displays data appropriately - bar graph - scale is 1 to 1* Solves simple problems based on data from bar graphs Compares data from simple graphs (e.g., largest, smallest, most often, least often)	Interprets simple graphs or tables Solves simple problems based on data from tally charts* Solves simple problems based on data from pictographs Reads and interprets data from a bar graph Solves simple problems based on data from bar graphs	Solves problems using tables Solves problems using tally charts* Reads and interprets data from a bar graph Reads and interprets dual bar graphs* Reads and interprets simple line graphs Draws conclusions from data - tally charts or frequency tables*
<i>New Vocabulary:</i> fewer, less, morning, quart, taller	<i>New Vocabulary:</i> changed, clock, consecutive, cup, fourth, half past, how much time, lowest, millimeter, noon, o'clock, pennies, pint, quarter past, quarter to, smallest, tablespoon, teaspoon, ton, what time	<i>New Vocabulary:</i> approximate, decade, latest, line graph, rise
<i>New Signs and Symbols:</i> a.m., ¢ cent sign, cm centimeter/centimetre, °F degrees Fahrenheit, g gram, in. inch, p.m.	<i>New Signs and Symbols:</i> : ratio, c cup, gal gallon, pt pint, qt quart, : used with time, tsp teaspoon, □ variable	<i>New Signs and Symbols:</i> + addition, °C degrees Celsius, lb pound, min minute, tally mark

Subject: Mathematics
Goal Strand: Data
RIT Score Range: 191 - 200

Skills and Concepts to Enhance 181 - 190	Skills and Concepts to Develop 191 - 200	Skills and Concepts to Introduce 201 - 210
<p>Measurement and Approximation</p> <p>Identifies the value of a collection of coins to \$1.00 (without picture of coins)</p> <p>Identifies the value of a collection of coins and bills to \$10.00 by "counting on" (with picture of money)</p> <p>Finds equivalent combinations of coins with the same value*</p> <p>Combines a collection of coins and identifies the correct notation</p> <p>Selects and uses the appropriate type and size of unit in customary system (weight)*</p> <p>Determines more capacity or less capacity</p> <p>Selects and uses the appropriate type and size of unit in customary system (capacity)*</p> <p>Identifies the correct time, given the words, and vice versa</p> <p>Selects and uses the appropriate type and size of unit in customary system (time)*</p> <p>Determines elapsed clock time</p> <p>Determines elapsed time under 1 hour or to the hour</p> <p>Determines elapsed time involving whole hours, whole days, whole years</p> <p>Tells time to the nearest 5 minutes</p> <p>Interprets a calendar - some computation required</p> <p>Computes simple conversions among units of time (days, weeks)*</p> <p>Reads Fahrenheit thermometers to the nearest degree*</p>	<p>Measurement and Approximation</p> <p>Uses rounding to estimate answers to 1-step problems involving answers less than \$1 (whole numbers only, e.g., 10 cents + 10 cents)*</p> <p>Uses rounding to estimate answers to 1-step problems involving answers less than \$20 (decimals only, e.g., \$1.20 + \$2.75)</p> <p>Identifies the value of a collection of coins to \$1.00 (without picture of coins)</p> <p>Identifies the value of a collection of coins and bills to \$10.00 by "counting on" (without picture of money)</p> <p>Finds equivalent combinations of coins with the same value*</p> <p>Finds equivalent combinations of dollars and cents with the same value*</p> <p>Selects and uses the appropriate type and size of unit in customary system (weight)*</p> <p>Knows the approximate size of an ounce*</p> <p>Uses balance scale to measure weight of an unknown object*</p> <p>Selects and uses the appropriate type and size of unit in customary system (capacity)*</p> <p>Knows the approximate size of a pint*</p> <p>Converts between cups and pints*</p> <p>Converts between cups, pints, and quarts*</p> <p>Identifies the correct time, given the words, and vice versa</p> <p>Orders years*</p> <p>Selects and uses the appropriate type and size of unit in customary system (time)*</p> <p>Determines elapsed clock time</p> <p>Tells time to the nearest quarter hour</p> <p>Determines elapsed time involving whole hours, whole days, whole years</p> <p>Tells time to the nearest 1 minute</p> <p>Computes simple conversions among units of time (minutes, hours)</p> <p>Computes simple conversions among units of time (hours, days)*</p>	<p>Measurement and Approximation</p> <p>Uses rounding to estimate answers to 1-step problems involving answers \$20 or greater (using decimals)*</p> <p>Uses rounding to estimate answers to 2-step problems involving money (whole numbers only)*</p> <p>Uses rounding to estimate answers to 2-step problems involving money (using decimals)</p> <p>Finds equivalent combinations of dollars and cents with the same value*</p> <p>Selects and uses balances for measuring weight or mass*</p> <p>Knows the approximate size of a pound</p> <p>Knows the approximate size of a gram</p> <p>Converts between milligrams and grams*</p> <p>Converts between cups and pints*</p> <p>Converts between cups, pints, and quarts*</p> <p>Computes simple conversions among units of time (hours, days)*</p> <p>Computes more difficult conversions among units of time</p> <p>Solves problems involving measurement of time</p> <p>Applies dimensional analysis to simple real-world problems (time)*</p> <p>Solves problems using a calendar*</p> <p>Solves simple problems involving elapsed time, with the conversion of hours</p> <p>Knows common referents (boiling or freezing point, room temperature)*</p>

	Solves simple problems involving elapsed time, with the conversion of hours Reads Celsius thermometers to the nearest degree Solves problems involving measurement of temperature	
Data Analysis	Data Analysis	Data Analysis
Interprets simple graphs or tables Solves simple problems based on data from tally charts* Solves simple problems based on data from pictographs Reads and interprets data from a bar graph Solves simple problems based on data from bar graphs	Solves problems using tables Solves problems using tally charts* Reads and interprets data from a bar graph Reads and interprets dual bar graphs* Reads and interprets simple line graphs Draws conclusions from data - tally charts or frequency tables*	Reads and interprets tables* Solves problems using tables Understands how the omission or duplication of data affects the interpretation of results from a pictograph* Organizes data to create simple bar graphs Solves problems using bar graphs Solves problems using dual bar graphs* Solves problems using line graphs* Draws conclusions from data - bar graphs Predicts from pictographs and bar graphs* Predicts from simple charts and tables
<i>New Vocabulary:</i> changed, clock, consecutive, cup, fourth, half past, how much time, lowest, millimeter, noon, o'clock, pennies, pint, quarter past, quarter to, smallest, tablespoon, teaspoon, ton, what time	<i>New Vocabulary:</i> approximate, decade, latest, line graph, rise	<i>New Vocabulary:</i> bar graph, below, kilowatt, milligram
<i>New Signs and Symbols:</i> : ratio, c cup, gal gallon, pt pint, qt quart, : used with time, tsp teaspoon, □ variable	<i>New Signs and Symbols:</i> + addition, °C degrees Celsius, lb pound, min minute, tally mark	<i>New Signs and Symbols:</i> ft feet, kg kilogram, m meter/metre, – subtraction

Subject: Mathematics
Goal Strand: Data
RIT Score Range: 201 - 210

Skills and Concepts to Enhance 191 - 200	Skills and Concepts to Develop 201 - 210	Skills and Concepts to Introduce 211 - 220
<p>Measurement and Approximation</p> <p>Uses rounding to estimate answers to 1-step problems involving answers less than \$1 (whole numbers only, e.g., 10 cents + 10 cents)*</p> <p>Uses rounding to estimate answers to 1-step problems involving answers less than \$20 (decimals only, e.g., \$1.20 + \$2.75)</p> <p>Identifies the value of a collection of coins to \$1.00 (without picture of coins)</p> <p>Identifies the value of a collection of coins and bills to \$10.00 by "counting on" (without picture of money)</p> <p>Finds equivalent combinations of coins with the same value*</p> <p>Finds equivalent combinations of dollars and cents with the same value*</p> <p>Selects and uses the appropriate type and size of unit in customary system (weight)*</p> <p>Knows the approximate size of an ounce*</p> <p>Uses balance scale to measure weight of an unknown object*</p> <p>Selects and uses the appropriate type and size of unit in customary system (capacity)*</p> <p>Knows the approximate size of a pint*</p> <p>Converts between cups and pints*</p> <p>Converts between cups, pints, and quarts*</p> <p>Identifies the correct time, given the words, and vice versa</p> <p>Orders years*</p> <p>Selects and uses the appropriate type and size of unit in customary system (time)*</p> <p>Determines elapsed clock time</p> <p>Tells time to the nearest quarter hour</p> <p>Determines elapsed time involving whole hours, whole days, whole years</p> <p>Tells time to the nearest 1 minute</p> <p>Computes simple conversions among units of time (minutes, hours)</p> <p>Computes simple conversions among units of time (hours, days)*</p>	<p>Measurement and Approximation</p> <p>Uses rounding to estimate answers to 1-step problems involving answers \$20 or greater (using decimals)*</p> <p>Uses rounding to estimate answers to 2-step problems involving money (whole numbers only)*</p> <p>Uses rounding to estimate answers to 2-step problems involving money (using decimals)</p> <p>Finds equivalent combinations of dollars and cents with the same value*</p> <p>Selects and uses balances for measuring weight or mass*</p> <p>Knows the approximate size of a pound</p> <p>Knows the approximate size of a gram</p> <p>Converts between milligrams and grams*</p> <p>Converts between cups and pints*</p> <p>Converts between cups, pints, and quarts*</p> <p>Computes simple conversions among units of time (hours, days)*</p> <p>Computes more difficult conversions among units of time</p> <p>Solves problems involving measurement of time</p> <p>Applies dimensional analysis to simple real-world problems (time)*</p> <p>Solves problems using a calendar*</p> <p>Solves simple problems involving elapsed time, with the conversion of hours</p> <p>Knows common referents (boiling or freezing point, room temperature)*</p>	<p>Measurement and Approximation</p> <p>Uses rounding to estimate answers to 1-step problems involving answers \$20 or greater (using decimals)*</p> <p>Uses rounding to estimate answers to 2-step problems involving money (using decimals)</p> <p>Selects and uses the appropriate type and size of unit in metric system (mass)*</p> <p>Solves simple problems involving measurement of weight*</p> <p>Apply dimensional analysis to simple real-world problems (weight/mass)*</p> <p>Knows the approximate size of an ounce*</p> <p>Knows the approximate size of a gallon*</p> <p>Converts between cups, pints, quarts, and gallons</p> <p>Apply dimensional analysis to simple real-world problems (capacity)*</p> <p>Solves simple problems involving capacity*</p> <p>Computes basic operations with units of time</p> <p>Applies dimensional analysis to simple real-world problems (time)*</p> <p>Solves difficult problems involving elapsed time, with the conversion of hours</p> <p>Reads Celsius thermometers to 0.1 degrees*</p>

Solves simple problems involving elapsed time, with the conversion of hours Reads Celsius thermometers to the nearest degree Solves problems involving measurement of temperature		
Data Analysis	Data Analysis	Data Analysis
Solves problems using tables Solves problems using tally charts* Reads and interprets data from a bar graph Reads and interprets dual bar graphs* Reads and interprets simple line graphs Draws conclusions from data - tally charts or frequency tables*	Reads and interprets tables* Solves problems using tables Understands how the omission or duplication of data affects the interpretation of results from a pictograph* Organizes data to create simple bar graphs Solves problems using bar graphs Solves problems using dual bar graphs* Solves problems using line graphs* Draws conclusions from data - bar graphs Predicts from pictographs and bar graphs* Predicts from simple charts and tables	Solves problems using pictographs* Solves problems using bar graphs Solves problems using line graphs* Reads and interprets data in line plots* Determines the average (mean) of a simple set of data Solves simple problems involving mean Draws conclusions from data - charts* Predicts from pictographs and bar graphs*
<i>New Vocabulary:</i> approximate, decade, latest, line graph, rise	<i>New Vocabulary:</i> bar graph, below, kilowatt, milligram	<i>New Vocabulary:</i> how long, line plot, mean
<i>New Signs and Symbols:</i> + addition, °C degrees Celsius, lb pound, min minute, tally mark	<i>New Signs and Symbols:</i> ft feet, kg kilogram, m meter/metre, – subtraction	<i>New Signs and Symbols:</i> { } set notation, fl oz fluid ounce, hr hour, oz ounce, sec second

Subject: Mathematics
Goal Strand: Data
RIT Score Range: 211 - 220

Skills and Concepts to Enhance 201 - 210	Skills and Concepts to Develop 211 - 220	Skills and Concepts to Introduce 221 - 230
<p>Measurement and Approximation</p> <p>Uses rounding to estimate answers to 1-step problems involving answers \$20 or greater (using decimals)* Uses rounding to estimate answers to 2-step problems involving money (whole numbers only)* Uses rounding to estimate answers to 2-step problems involving money (using decimals) Finds equivalent combinations of dollars and cents with the same value* Selects and uses balances for measuring weight or mass* Knows the approximate size of a pound Knows the approximate size of a gram Converts between milligrams and grams* Converts between cups and pints* Converts between cups, pints, and quarts* Computes simple conversions among units of time (hours, days)* Computes more difficult conversions among units of time Solves problems involving measurement of time Applies dimensional analysis to simple real-world problems (time)* Solves problems using a calendar* Solves simple problems involving elapsed time, with the conversion of hours Knows common referents (boiling or freezing point, room temperature)*</p>	<p>Measurement and Approximation</p> <p>Uses rounding to estimate answers to 1-step problems involving answers \$20 or greater (using decimals)* Uses rounding to estimate answers to 2-step problems involving money (using decimals) Selects and uses the appropriate type and size of unit in metric system (mass)* Solves simple problems involving measurement of weight* Apply dimensional analysis to simple real-world problems (weight/mass)* Knows the approximate size of an ounce* Knows the approximate size of a gallon* Converts between cups, pints, quarts, and gallons Apply dimensional analysis to simple real-world problems (capacity)* Solves simple problems involving capacity* Computes basic operations with units of time Applies dimensional analysis to simple real-world problems (time)* Solves difficult problems involving elapsed time, with the conversion of hours Reads Celsius thermometers to 0.1 degrees*</p>	<p>Measurement and Approximation</p> <p>Converts between ounces and pounds Converts between ounces, pounds, and tons* Computes basic operations with units of weight/mass* Converts between cups, pints, quarts, and gallons Converts within the metric system Computes basic operations with units of time Applies dimensional analysis to simple real-world problems (time)* Solves difficult problems involving elapsed time, with the conversion of hours</p>
<p>Data Analysis</p> <p>Reads and interprets tables* Solves problems using tables Understands how the omission or duplication of data affects the interpretation of results from a pictograph* Organizes data to create simple bar graphs Solves problems using bar graphs Solves problems using dual bar graphs* Solves problems using line graphs* Draws conclusions from data - bar graphs Predicts from pictographs and bar graphs* Predicts from simple charts and tables</p>	<p>Data Analysis</p> <p>Solves problems using pictographs* Solves problems using bar graphs Solves problems using line graphs* Reads and interprets data in line plots* Determines the average (mean) of a simple set of data Solves simple problems involving mean Draws conclusions from data - charts* Predicts from pictographs and bar graphs*</p>	<p>Data Analysis</p> <p>Interprets data given in tables to solve problems Determines the average (mean) of a simple set of data Solves simple problems involving mean Determines the middle value (median) from a simple set of data* Determines the mode of a set of data Draws conclusions from data - charts*</p>

<i>New Vocabulary:</i> bar graph, below, kilowatt, milligram	<i>New Vocabulary:</i> how long, line plot, mean	<i>New Vocabulary:</i> frequency table, median, mode
<i>New Signs and Symbols:</i> ft feet, kg kilogram, m meter/metre, – subtraction	<i>New Signs and Symbols:</i> { } set notation, fl oz fluid ounce, hr hour, oz ounce, sec second	<i>New Signs and Symbols:</i> mL milliliter/millilitre

Subject: Mathematics
Goal Strand: Data
RIT Score Range: 221 - 230

Skills and Concepts to Enhance 211 - 220	Skills and Concepts to Develop 221 - 230	Skills and Concepts to Introduce 231 - 240
Measurement and Approximation Uses rounding to estimate answers to 1-step problems involving answers \$20 or greater (using decimals)* Uses rounding to estimate answers to 2-step problems involving money (using decimals) Selects and uses the appropriate type and size of unit in metric system (mass)* Solves simple problems involving measurement of weight* Apply dimensional analysis to simple real-world problems (weight/mass)* Knows the approximate size of an ounce* Knows the approximate size of a gallon* Converts between cups, pints, quarts, and gallons Apply dimensional analysis to simple real-world problems (capacity)* Solves simple problems involving capacity* Computes basic operations with units of time Applies dimensional analysis to simple real-world problems (time)* Solves difficult problems involving elapsed time, with the conversion of hours Reads Celsius thermometers to 0.1 degrees*	Measurement and Approximation Converts between ounces and pounds Converts between ounces, pounds, and tons* Computes basic operations with units of weight/mass* Converts between cups, pints, quarts, and gallons Converts within the metric system Computes basic operations with units of time Applies dimensional analysis to simple real-world problems (time)* Solves difficult problems involving elapsed time, with the conversion of hours	Measurement and Approximation Converts between grams and kilograms* Converts within the metric system
Data Analysis Solves problems using pictographs* Solves problems using bar graphs Solves problems using line graphs* Reads and interprets data in line plots* Determines the average (mean) of a simple set of data Solves simple problems involving mean Draws conclusions from data - charts* Predicts from pictographs and bar graphs*	Data Analysis Interprets data given in tables to solve problems Determines the average (mean) of a simple set of data Solves simple problems involving mean Determines the middle value (median) from a simple set of data* Determines the mode of a set of data Draws conclusions from data - charts*	Data Analysis Organizes data using tables* Interprets data given in tables to solve problems
<i>New Vocabulary:</i> how long, line plot, mean	<i>New Vocabulary:</i> frequency table, median, mode	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> { } set notation, fl oz fluid ounce, hr hour, oz ounce, sec second	<i>New Signs and Symbols:</i> mL milliliter/millilitre	<i>New Signs and Symbols:</i> none

Subject: Mathematics
Goal Strand: Data
RIT Score Range: 231 - 240

Skills and Concepts to Enhance 221 - 230	Skills and Concepts to Develop 231 - 240	Skills and Concepts to Introduce Above 240
Measurement and Approximation Converts between ounces and pounds Converts between ounces, pounds, and tons* Computes basic operations with units of weight/mass* Converts between cups, pints, quarts, and gallons Converts within the metric system Computes basic operations with units of time Applies dimensional analysis to simple real-world problems (time)* Solves difficult problems involving elapsed time, with the conversion of hours	Measurement and Approximation Converts between grams and kilograms* Converts within the metric system	Measurement and Approximation
Data Analysis Interprets data given in tables to solve problems Determines the average (mean) of a simple set of data Solves simple problems involving mean Determines the middle value (median) from a simple set of data* Determines the mode of a set of data Draws conclusions from data - charts*	Data Analysis Organizes data using tables* Interprets data given in tables to solve problems	Data Analysis Reads and interprets data in tables
<i>New Vocabulary:</i> frequency table, median, mode	<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> mileage table
<i>New Signs and Symbols:</i> mL milliliter/millilitre	<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> ° degrees, E east, NE northeast, NNE north northeast, N north, NW northwest, % percent, S south, W west

Subject: Mathematics
Goal Strand: Data
RIT Score Range: Above 240

Skills and Concepts to Enhance 231 - 240	Skills and Concepts to Develop Above 240
Measurement and Approximation	Measurement and Approximation
Converts between grams and kilograms* Converts within the metric system	
Data Analysis	Data Analysis
Organizes data using tables* Interprets data given in tables to solve problems	Reads and interprets data in tables
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> mileage table
<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> ° degrees, E east, NE northeast, NNE north northeast, N north, NW northwest, % percent, S south, W west

Subject: Mathematics
 Goal Strand: Geometry
 RIT Score Range: Below 161

Skills and Concepts to Develop Below 161	Skills and Concepts to Introduce 161 - 170
Geometric Figures	Geometric Figures
	Identifies and names a triangle Identifies and names a square Identifies and names a rectangle* Identifies and names a circle* Identifies sides and vertices of polygons Compares open and closed figures* Sorts solid figures and objects according to attributes*
Geometric Measurement	Geometric Measurement
Compares objects (wider, narrower)* Compares objects (taller, shorter)*	Compares objects (shorter, longer) Estimates and measures length of an object to the nearest inch using a picture of a ruler* Measures length with customary measures to the inch mark* Measures length with metric measures to the centimeter mark
Transformations and Coordinate Geometry	Transformations and Coordinate Geometry
Identifies figures that are the same size and shape Predicts the shape after unfolding a figure*	Identifies figures that are the same size and shape
<i>New Vocabulary: size</i>	<i>New Vocabulary: corner, flat, shortest</i>
<i>New Signs and Symbols: none</i>	<i>New Signs and Symbols: cm centimeter/centimetre, ft feet, • point</i>

Subject: Mathematics
Goal Strand: Geometry
RIT Score Range: 161 - 170

Skills and Concepts to Enhance Below 161	Skills and Concepts to Develop 161 - 170	Skills and Concepts to Introduce 171 - 180
Geometric Figures	Geometric Figures	Geometric Figures
	Identifies and names a triangle Identifies and names a square Identifies and names a rectangle* Identifies and names a circle* Identifies sides and vertices of polygons Compares open and closed figures* Sorts solid figures and objects according to attributes*	Identifies and names a triangle Identifies and names a square Identifies and names a rectangle* Identifies and names a circle* Identifies and names a cube Recognizes geometric shapes in real-world objects
Geometric Measurement	Geometric Measurement	Geometric Measurement
Compares objects (wider, narrower)* Compares objects (taller, shorter)*	Compares objects (shorter, longer) Estimates and measures length of an object to the nearest inch using a picture of a ruler* Measures length with customary measures to the inch mark* Measures length with metric measures to the centimeter mark	Estimates and measures length of an object to the nearest centimeter using a picture of a ruler* Measures length with customary measures to the inch mark* Determines the area of irregular shapes by counting square units*
Transformations and Coordinate Geometry	Transformations and Coordinate Geometry	Transformations and Coordinate Geometry
Identifies figures that are the same size and shape Predicts the shape after unfolding a figure*	Identifies figures that are the same size and shape	Identifies spatial sense concepts (e.g., outside, inside, between, over, under, above, below, behind, in front, middle)* Identifies figures that are similar
<i>New Vocabulary: size</i>	<i>New Vocabulary: corner, flat, shortest</i>	<i>New Vocabulary: geometric figure, metric, ray, similar</i>
<i>New Signs and Symbols: none</i>	<i>New Signs and Symbols: cm centimeter/centimetre, ft feet, • point</i>	<i>New Signs and Symbols: ? next in sequence</i>

Subject: Mathematics
Goal Strand: Geometry
RIT Score Range: 171 - 180

Skills and Concepts to Enhance 161 - 170	Skills and Concepts to Develop 171 - 180	Skills and Concepts to Introduce 181 - 190
Geometric Figures Identifies and names a triangle Identifies and names a square Identifies and names a rectangle* Identifies and names a circle* Identifies sides and vertices of polygons Compares open and closed figures* Sorts solid figures and objects according to attributes*	Geometric Figures Identifies and names a triangle Identifies and names a square Identifies and names a rectangle* Identifies and names a circle* Identifies and names a cube Recognizes geometric shapes in real-world objects	Geometric Figures Identifies points on a line* Identifies and names multiple shapes (e.g., square, rectangle, triangle, circle)* Classifies polygons by sides and vertices Identifies and names a cube
Geometric Measurement Compares objects (shorter, longer) Estimates and measures length of an object to the nearest inch using a picture of a ruler* Measures length with customary measures to the inch mark* Measures length with metric measures to the centimeter mark	Geometric Measurement Estimates and measures length of an object to the nearest centimeter using a picture of a ruler* Measures length with customary measures to the inch mark* Determines the area of irregular shapes by counting square units*	Geometric Measurement Identifies the appropriate instrument used to measure length* Selects and uses the appropriate type and size of unit in customary system (length) Selects and uses the appropriate type and size of unit in customary system (height)* Knows the approximate size of an inch Knows the approximate length of familiar objects* Measures length with non-standard units Measures length with customary measures to the half-inch mark Determines the perimeter of a figure where all sides are labeled Compares squares (larger, smaller) Determines the area of irregular shapes by counting square units*
Transformations and Coordinate Geometry Identifies figures that are the same size and shape	Transformations and Coordinate Geometry Identifies spatial sense concepts (e.g., outside, inside, between, over, under, above, below, behind, in front, middle)* Identifies figures that are similar	Transformations and Coordinate Geometry Identifies congruent line segments* Identifies congruent figures Identifies figures that are similar Identifies plane figures with line symmetry Identifies transformations of plane figures (rotations/turns) Identifies transformations of plane figures (translations/slides)* Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*
<i>New Vocabulary:</i> corner, flat, shortest	<i>New Vocabulary:</i> geometric figure, metric, ray, similar	<i>New Vocabulary:</i> clockwise, cup, estimation, flip, grid, line of symmetry, measurement, rod, rotation, smallest,

		symmetry, turn
<i>New Signs and Symbols:</i> cm centimeter/centimetre, ft feet, • point	<i>New Signs and Symbols:</i> ? next in sequence	<i>New Signs and Symbols:</i> () ordered pair, in. inch

Subject: Mathematics
Goal Strand: Geometry
RIT Score Range: 181 - 190

Skills and Concepts to Enhance 171 - 180	Skills and Concepts to Develop 181 - 190	Skills and Concepts to Introduce 191 - 200
<p>Geometric Figures</p> <p>Identifies and names a triangle Identifies and names a square Identifies and names a rectangle* Identifies and names a circle* Identifies and names a cube Recognizes geometric shapes in real-world objects</p>	<p>Geometric Figures</p> <p>Identifies points on a line* Identifies and names multiple shapes (e.g., square, rectangle, triangle, circle)* Classifies polygons by sides and vertices Identifies and names a cube</p>	<p>Geometric Figures</p> <p>Identifies lines* Identifies parallel lines Identifies angles* Identifies diagonals of a polygon Identifies and names a polygon* Identifies and names a pentagon* Identifies the number of faces on rectangular prisms Sorts 2-D shapes and objects according to their attributes Creates a new shape by combining different shapes, or identifies the different shapes that were used to make the original shape*</p>
<p>Geometric Measurement</p> <p>Estimates and measures length of an object to the nearest centimeter using a picture of a ruler* Measures length with customary measures to the inch mark* Determines the area of irregular shapes by counting square units*</p>	<p>Geometric Measurement</p> <p>Identifies the appropriate instrument used to measure length* Selects and uses the appropriate type and size of unit in customary system (length) Selects and uses the appropriate type and size of unit in customary system (height)* Knows the approximate size of an inch Knows the approximate length of familiar objects* Measures length with non-standard units Measures length with customary measures to the half-inch mark Determines the perimeter of a figure where all sides are labeled Compares squares (larger, smaller) Determines the area of irregular shapes by counting square units*</p>	<p>Geometric Measurement</p> <p>Selects and uses the appropriate type and size of unit in customary system (length) Selects and uses the appropriate type and size of unit in customary system (height)* Knows the approximate size of a foot Knows the approximate size of a mile* Measures length with non-standard units Determines the perimeter of a figure where all sides are labeled Determines the perimeter of a figure where some sides are labeled Solves simple problems involving the perimeter of squares, rectangles, or triangles Estimates the area of rectangles using square units</p>
<p>Transformations and Coordinate Geometry</p> <p>Identifies spatial sense concepts (e.g., outside, inside, between, over, under, above, below, behind, in front, middle)* Identifies figures that are similar</p>	<p>Transformations and Coordinate Geometry</p> <p>Identifies congruent line segments* Identifies congruent figures Identifies figures that are similar Identifies plane figures with line symmetry Identifies transformations of plane figures (rotations/turns) Identifies transformations of plane figures (translations/slides)*</p>	<p>Transformations and Coordinate Geometry</p> <p>Identifies position of shapes (e.g., inside, outside, between)* Identifies figures that are the same size and shape (analysis)* Identifies congruent figures Explores maps and relates them to measurements of real distances, using the scale* Identifies plane figures with line symmetry</p>

	Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*	Identifies the number of lines of symmetry in plane figures Identifies transformations of plane figures (reflections/flips) Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*
<i>New Vocabulary:</i> geometric figure, metric, ray, similar	<i>New Vocabulary:</i> clockwise, cup, estimation, flip, grid, line of symmetry, measurement, rod, rotation, smallest, symmetry, turn	<i>New Vocabulary:</i> diagonal, face, intersect, large, oval, parallel, plane, rhombus, same shape, scale, straight, twist, vertical line
<i>New Signs and Symbols:</i> ? next in sequence	<i>New Signs and Symbols:</i> () ordered pair, in. inch	<i>New Signs and Symbols:</i> \$ dollar sign, " inches, = is equal to, m meter/metre, yd yard

Subject: Mathematics
Goal Strand: Geometry
RIT Score Range: 191 - 200

Skills and Concepts to Enhance 181 - 190	Skills and Concepts to Develop 191 - 200	Skills and Concepts to Introduce 201 - 210
<p>Geometric Figures</p> <p>Identifies points on a line* Identifies and names multiple shapes (e.g., square, rectangle, triangle, circle)* Classifies polygons by sides and vertices Identifies and names a cube</p>	<p>Geometric Figures</p> <p>Identifies lines* Identifies parallel lines Identifies angles* Identifies diagonals of a polygon Identifies and names a polygon* Identifies and names a pentagon* Identifies the number of faces on rectangular prisms Sorts 2-D shapes and objects according to their attributes Creates a new shape by combining different shapes, or identifies the different shapes that were used to make the original shape*</p>	<p>Geometric Figures</p> <p>Identifies the intersection point of two lines* Identifies intersecting lines Identifies parallel lines Identifies angles* Identifies right angles* Identifies and names a parallelogram* Identifies and names a polygon* Identifies and names a hexagon* Identifies and names an octagon* Classifies polygons by sides and angles Classifies cubes by their properties (e.g., edges with equal lengths, faces with equal areas and congruent shapes, right angle corners)</p>
<p>Geometric Measurement</p> <p>Identifies the appropriate instrument used to measure length* Selects and uses the appropriate type and size of unit in customary system (length) Selects and uses the appropriate type and size of unit in customary system (height)* Knows the approximate size of an inch Knows the approximate length of familiar objects* Measures length with non-standard units Measures length with customary measures to the half-inch mark Determines the perimeter of a figure where all sides are labeled Compares squares (larger, smaller) Determines the area of irregular shapes by counting square units*</p>	<p>Geometric Measurement</p> <p>Selects and uses the appropriate type and size of unit in customary system (length) Selects and uses the appropriate type and size of unit in customary system (height)* Knows the approximate size of a foot Knows the approximate size of a mile* Measures length with non-standard units Determines the perimeter of a figure where all sides are labeled Determines the perimeter of a figure where some sides are labeled Solves simple problems involving the perimeter of squares, rectangles, or triangles Estimates the area of rectangles using square units</p>	<p>Geometric Measurement</p> <p>Selects and uses the appropriate type and size of unit in metric system (length) Selects and uses the appropriate type and size of unit in metric system (height)* Knows the approximate size of a yard Knows the approximate size of a centimeter Measures length to the nearest centimeter* Converts between inches and feet Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents Determines the perimeter of a figure where some sides are labeled Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* Estimates the area of rectangles using square units Determines the area of irregular shapes with partial square units Solves simple problems comparing area and perimeter (customary units)* Identifies situations where it is appropriate to calculate area Estimates and finds volume of a figure using cubic units</p>

Transformations and Coordinate Geometry	Transformations and Coordinate Geometry	Transformations and Coordinate Geometry
Identifies congruent line segments* Identifies congruent figures Identifies figures that are similar Identifies plane figures with line symmetry Identifies transformations of plane figures (rotations/turns) Identifies transformations of plane figures (translations/slides)* Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*	Identifies position of shapes (e.g., inside, outside, between)* Identifies figures that are the same size and shape (analysis)* Identifies congruent figures Explores maps and relates them to measurements of real distances, using the scale* Identifies plane figures with line symmetry Identifies the number of lines of symmetry in plane figures Identifies transformations of plane figures (reflections/flips) Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*	Classifies plane figures by the number of lines of symmetry* Defines transformations* Graphs ordered pairs in the first quadrant Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)* Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system* Locates the origin on a coordinate grid*
<i>New Vocabulary:</i> clockwise, cup, estimation, flip, grid, line of symmetry, measurement, rod, rotation, smallest, symmetry, turn	<i>New Vocabulary:</i> diagonal, face, intersect, large, oval, parallel, plane, rhombus, same shape, scale, straight, twist, vertical line	<i>New Vocabulary:</i> coordinate, coordinate point, cubic centimeter, cubic unit, decameter, decimeter, edge, hectometer, larger, milliliter, mirror image, octagon, origin, parallel line, regular polygon, trapezoid
<i>New Signs and Symbols:</i> () ordered pair, in. inch	<i>New Signs and Symbols:</i> \$ dollar sign, " inches, = is equal to, m meter/metre, yd yard	<i>New Signs and Symbols:</i> \angle angle, $^{\circ}$ degrees, ' feet, \leftrightarrow line symbol, m measure of angle, mm millimeter/millimetre, right angle marker, \square variable

Subject: Mathematics
Goal Strand: Geometry
RIT Score Range: 201 - 210

Skills and Concepts to Enhance 191 - 200	Skills and Concepts to Develop 201 - 210	Skills and Concepts to Introduce 211 - 220
<p>Geometric Figures</p> <ul style="list-style-type: none"> Identifies lines* Identifies parallel lines Identifies angles* Identifies diagonals of a polygon Identifies and names a polygon* Identifies and names a pentagon* Identifies the number of faces on rectangular prisms Sorts 2-D shapes and objects according to their attributes Creates a new shape by combining different shapes, or identifies the different shapes that were used to make the original shape* 	<p>Geometric Figures</p> <ul style="list-style-type: none"> Identifies the intersection point of two lines* Identifies intersecting lines Identifies parallel lines Identifies angles* Identifies right angles* Identifies and names a parallelogram* Identifies and names a polygon* Identifies and names a hexagon* Identifies and names a octagon* Classifies polygons by sides and angles Classifies cubes by their properties (e.g., edges with equal lengths, faces with equal areas and congruent shapes, right angle corners) 	<p>Geometric Figures</p> <ul style="list-style-type: none"> Identifies rays* Identifies perpendicular lines* Describes relationships among points, lines, and planes, and identifies models in the environment* Identifies properties of angles Identifies acute angles Identifies obtuse angles Identifies and names a quadrilateral* Classifies polygons by type of angle* Classifies polygons by number of sides* Identifies corners (vertices) of cubes* Identifies and names a rectangular prism* Predicts and verifies the effects of combining or subdividing basic shapes Compares simple plane figures to solid figures (e.g., circle/sphere, square/cube, rectangle/rectangular solid)*
<p>Geometric Measurement</p> <ul style="list-style-type: none"> Selects and uses the appropriate type and size of unit in customary system (length) Selects and uses the appropriate type and size of unit in customary system (height)* Knows the approximate size of a foot Knows the approximate size of a mile* Measures length with non-standard units Determines the perimeter of a figure where all sides are labeled Determines the perimeter of a figure where some sides are labeled Solves simple problems involving the perimeter of squares, rectangles, or triangles Estimates the area of rectangles using square units 	<p>Geometric Measurement</p> <ul style="list-style-type: none"> Selects and uses the appropriate type and size of unit in metric system (length) Selects and uses the appropriate type and size of unit in metric system (height)* Knows the approximate size of a yard Knows the approximate size of a centimeter Measures length to the nearest centimeter* Converts between inches and feet Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents Determines the perimeter of a figure where some sides are labeled Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* Estimates the area of rectangles using square units Determines the area of irregular shapes with partial square units Solves simple problems comparing area and perimeter (customary units)* 	<p>Geometric Measurement</p> <ul style="list-style-type: none"> Selects and uses the appropriate type and size of unit in metric system (length) Selects and uses the appropriate type and size of unit in metric system (height)* Knows the approximate size of a millimeter* Knows the approximate size of a kilometer* Measures length to the nearest half inch* Measures length to the nearest quarter of an inch Measures length to the nearest eighth of an inch Converts between inches and feet Converts between inches, feet, and yards Converts between feet, yards, and miles* Apply dimensional analysis to simple real-world problems (length)* Selects and uses protractors for measuring angles* Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents Determines the perimeter of a figure using non-standard units*

	<p>Identifies situations where it is appropriate to calculate area</p> <p>Estimates and finds volume of a figure using cubic units</p>	<p>Solves problems involving the perimeter of squares, rectangles, or triangles</p> <p>Finds the perimeter of a polygon using a formula</p> <p>Determines the process for calculating perimeter</p> <p>Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)*</p> <p>Determines the area of irregular shapes with partial square units</p> <p>Solves simple problems comparing area and perimeter (customary units)*</p> <p>Counts squares to determine surface area of a cube*</p> <p>Estimates and finds volume of a figure using cubic units</p>
Transformations and Coordinate Geometry	Transformations and Coordinate Geometry	Transformations and Coordinate Geometry
<p>Identifies position of shapes (e.g., inside, outside, between)*</p> <p>Identifies figures that are the same size and shape (analysis)*</p> <p>Identifies congruent figures</p> <p>Explores maps and relates them to measurements of real distances, using the scale*</p> <p>Identifies plane figures with line symmetry</p> <p>Identifies the number of lines of symmetry in plane figures</p> <p>Identifies transformations of plane figures (reflections/flips)</p> <p>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*</p>	<p>Classifies plane figures by the number of lines of symmetry*</p> <p>Defines transformations*</p> <p>Graphs ordered pairs in the first quadrant</p> <p>Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)*</p> <p>Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system*</p> <p>Locates the origin on a coordinate grid*</p>	<p>Identifies similar and congruent triangles*</p> <p>Identifies congruent polygons and their corresponding sides and angles*</p> <p>Defines "similarity"*</p> <p>Recognizes similar figures in the real world*</p> <p>Determines an appropriate scale for representing a distance on a map*</p> <p>Classifies plane figures by the number of lines of symmetry*</p> <p>Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system*</p> <p>Locates the origin on a coordinate grid*</p>
<i>New Vocabulary:</i> diagonal, face, intersect, large, oval, parallel, plane, rhombus, same shape, scale, straight, twist, vertical line	<i>New Vocabulary:</i> coordinate, coordinate point, cubic centimeter, cubic unit, decameter, decimeter, edge, hectometer, larger, milliliter, mirror image, octagon, origin, parallel line, regular polygon, trapezoid	<i>New Vocabulary:</i> acute angle, congruent angle, enlargement, geometric solid, micrometer, obtuse angle, protractor, straight angle, union
<i>New Signs and Symbols:</i> \$ dollar sign, " inches, = is equal to, m meter/metre, yd yard	<i>New Signs and Symbols:</i> \angle angle, $^{\circ}$ degrees, ' feet, \leftrightarrow line symbol, m measure of angle, mm millimeter/millimetre, right angle marker, \square variable	<i>New Signs and Symbols:</i> + addition, angle marker (arc), \div division, \downarrow measurement span down, \leftarrow measurement span left, \rightarrow measurement span right, \uparrow measurement span up, \times multiplication, P perimeter, s side, - subtraction

Subject: Mathematics
Goal Strand: Geometry
RIT Score Range: 211 - 220

Skills and Concepts to Enhance 201 - 210	Skills and Concepts to Develop 211 - 220	Skills and Concepts to Introduce 221 - 230
<p>Geometric Figures</p> <ul style="list-style-type: none"> Identifies the intersection point of two lines* Identifies intersecting lines Identifies parallel lines Identifies angles* Identifies right angles* Identifies and names a parallelogram* Identifies and names a polygon* Identifies and names a hexagon* Identifies and names an octagon* Classifies polygons by sides and angles Classifies cubes by their properties (e.g., edges with equal lengths, faces with equal areas and congruent shapes, right angle corners) 	<p>Geometric Figures</p> <ul style="list-style-type: none"> Identifies rays* Identifies perpendicular lines* Describes relationships among points, lines, and planes, and identifies models in the environment* Identifies properties of angles Identifies acute angles Identifies obtuse angles Identifies and names a quadrilateral* Classifies polygons by type of angle* Classifies polygons by number of sides* Identifies corners (vertices) of cubes* Identifies and names a rectangular prism* Predicts and verifies the effects of combining or subdividing basic shapes Compares simple plane figures to solid figures (e.g., circle/sphere, square/cube, rectangle/rectangular solid)* 	<p>Geometric Figures</p> <ul style="list-style-type: none"> Identifies rays* Determines which lines are perpendicular (analysis)* Identifies acute angles Classifies equilateral triangles* Identifies and names a trapezoid* Identifies and names a quadrilateral* Classifies polygons by type of angle* Identifies the number of edges on rectangular prisms*
<p>Geometric Measurement</p> <ul style="list-style-type: none"> Selects and uses the appropriate type and size of unit in metric system (length) Selects and uses the appropriate type and size of unit in metric system (height)* Knows the approximate size of a yard Knows the approximate size of a centimeter Measures length to the nearest centimeter* Converts between inches and feet Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents Determines the perimeter of a figure where some sides are labeled Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* Estimates the area of rectangles using square units Determines the area of irregular shapes with partial square units Solves simple problems comparing area and perimeter (customary units)* 	<p>Geometric Measurement</p> <ul style="list-style-type: none"> Selects and uses the appropriate type and size of unit in metric system (length) Selects and uses the appropriate type and size of unit in metric system (height)* Knows the approximate size of a millimeter* Knows the approximate size of a kilometer* Measures length to the nearest half inch* Measures length to the nearest quarter of an inch Measures length to the nearest eighth of an inch Converts between inches and feet Converts between inches, feet, and yards Converts between feet, yards, and miles* Apply dimensional analysis to simple real-world problems (length)* Selects and uses protractors for measuring angles* Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents Determines the perimeter of a figure using non-standard units* 	<p>Geometric Measurement</p> <ul style="list-style-type: none"> Knows the approximate size of a meter Converts between inches, feet, and yards Converts between feet, yards, and miles* Converts between millimeters, centimeters, meters, and kilometers Apply dimensional analysis to simple real-world problems (length)* Solves problems involving the perimeter of squares, rectangles, or triangles Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* Calculates the area of a rectangle, given labeled sides (customary units) Determines the length or width of a rectangle, given the area (metric units)* Uses models to develop the relationship between the total number of square units contained in a rectangle and the length and width of the figure* Solves simple problems involving the area of a square or

Identifies situations where it is appropriate to calculate area Estimates and finds volume of a figure using cubic units	Solves problems involving the perimeter of squares, rectangles, or triangles Finds the perimeter of a polygon using a formula Determines the process for calculating perimeter Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* Determines the area of irregular shapes with partial square units Solves simple problems comparing area and perimeter (customary units)* Counts squares to determine surface area of a cube* Estimates and finds volume of a figure using cubic units	rectangle Uses the appropriate unit of measure for area* Calculates the volume of rectangular solids
Transformations and Coordinate Geometry	Transformations and Coordinate Geometry	Transformations and Coordinate Geometry
Classifies plane figures by the number of lines of symmetry* Defines transformations* Graphs ordered pairs in the first quadrant Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)* Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system* Locates the origin on a coordinate grid*	Identifies similar and congruent triangles* Identifies congruent polygons and their corresponding sides and angles* Defines "similarity"* Recognizes similar figures in the real world* Determines an appropriate scale for representing a distance on a map* Classifies plane figures by the number of lines of symmetry* Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system* Locates the origin on a coordinate grid*	Uses similarity to solve problems using scale drawings Predicts changes necessary to create symmetry in basic plane shapes* Determines coordinates of geometric figures in the first quadrant Determines the distance between points, following grid lines, in the first quadrant on a coordinate graph (as in city blocks)* Graphs ordered pairs in all quadrants
<i>New Vocabulary:</i> coordinate, coordinate point, cubic centimeter, cubic unit, decameter, decimeter, edge, hectometer, larger, milliliter, mirror image, octagon, origin, parallel line, regular polygon, trapezoid	<i>New Vocabulary:</i> acute angle, congruent angle, enlargement, geometric solid, micrometer, obtuse angle, protractor, straight angle, union	<i>New Vocabulary:</i> cubic meter, cubic millimeter, equilateral triangle, isosceles triangle, long, obtuse triangle, scalene triangle
Symbols: \angle angle, $^{\circ}$ degrees, ' feet, \leftrightarrow line symbol, m measure of angle, mm millimeter/millimetre, right angle marker, \square variable	<i>New Signs and Symbols:</i> + addition, angle marker (arc), \div division, \downarrow measurement span down, \leftarrow measurement span left, \rightarrow measurement span right, \uparrow measurement span up, \times multiplication, P perimeter, s side, $-$ subtraction	<i>New Signs and Symbols:</i> () order of operations, dm decimeter/decimetre, h height, km kilometer/kilometre, l length, $-$ negative number, $:$ ratio, segment overbar, \times multiplication, $=$ is equal to, V volume, w width

Subject: Mathematics
Goal Strand: Geometry
RIT Score Range: 221 - 230

Skills and Concepts to Enhance 211 - 220	Skills and Concepts to Develop 221 - 230	Skills and Concepts to Introduce 231 - 240
<p>Geometric Figures</p> <p>Identifies rays*</p> <p>Identifies perpendicular lines*</p> <p>Describes relationships among points, lines, and planes, and identifies models in the environment*</p> <p>Identifies properties of angles</p> <p>Identifies acute angles</p> <p>Identifies obtuse angles</p> <p>Identifies and names a quadrilateral*</p> <p>Classifies polygons by type of angle*</p> <p>Classifies polygons by number of sides*</p> <p>Identifies corners (vertices) of cubes*</p> <p>Identifies and names a rectangular prism*</p> <p>Predicts and verifies the effects of combining or subdividing basic shapes</p> <p>Compares simple plane figures to solid figures (e.g., circle/sphere, square/cube, rectangle/rectangular solid)*</p>	<p>Geometric Figures</p> <p>Identifies rays*</p> <p>Determines which lines are perpendicular (analysis)*</p> <p>Identifies acute angles</p> <p>Classifies equilateral triangles*</p> <p>Identifies and names a trapezoid*</p> <p>Identifies and names a quadrilateral*</p> <p>Classifies polygons by type of angle*</p> <p>Identifies the number of edges on rectangular prisms*</p>	<p>Geometric Figures</p> <p>Determines which lines are perpendicular (analysis)*</p>
<p>Geometric Measurement</p> <p>Selects and uses the appropriate type and size of unit in metric system (length)</p> <p>Selects and uses the appropriate type and size of unit in metric system (height)*</p> <p>Knows the approximate size of a millimeter*</p> <p>Knows the approximate size of a kilometer*</p> <p>Measures length to the nearest half inch*</p> <p>Measures length to the nearest quarter of an inch</p> <p>Measures length to the nearest eighth of an inch</p> <p>Converts between inches and feet</p> <p>Converts between inches, feet, and yards</p> <p>Converts between feet, yards, and miles*</p> <p>Apply dimensional analysis to simple real-world problems (length)*</p> <p>Selects and uses protractors for measuring angles*</p> <p>Estimates the measure of acute, right, and obtuse angles using 45 and 90 degrees as referents</p> <p>Determines the perimeter of a figure using non-standard units*</p>	<p>Geometric Measurement</p> <p>Knows the approximate size of a meter</p> <p>Converts between inches, feet, and yards</p> <p>Converts between feet, yards, and miles*</p> <p>Converts between millimeters, centimeters, meters, and kilometers</p> <p>Apply dimensional analysis to simple real-world problems (length)*</p> <p>Solves problems involving the perimeter of squares, rectangles, or triangles</p> <p>Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)*</p> <p>Calculates the area of a rectangle, given labeled sides (customary units)</p> <p>Determines the length or width of a rectangle, given the area (metric units)*</p> <p>Uses models to develop the relationship between the total number of square units contained in a rectangle and the length and width of the figure*</p> <p>Solves simple problems involving the area of a square or</p>	<p>Geometric Measurement</p> <p>Converts between feet, yards, and miles*</p> <p>Converts between millimeters, centimeters, meters, and kilometers</p> <p>Determines the area of a triangle drawn on a grid*</p> <p>Calculates the area of a rectangle, given labeled sides (customary units)</p> <p>Determines the length or width of a rectangle, given the area (metric units)*</p> <p>Solves simple problems involving the area of a square or rectangle</p> <p>Calculates the volume of rectangular solids</p>

<p>Solves problems involving the perimeter of squares, rectangles, or triangles</p> <p>Finds the perimeter of a polygon using a formula</p> <p>Determines the process for calculating perimeter</p> <p>Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)*</p> <p>Determines the area of irregular shapes with partial square units</p> <p>Solves simple problems comparing area and perimeter (customary units)*</p> <p>Counts squares to determine surface area of a cube*</p> <p>Estimates and finds volume of a figure using cubic units</p>	<p>rectangle</p> <p>Uses the appropriate unit of measure for area*</p> <p>Calculates the volume of rectangular solids</p>	
Transformations and Coordinate Geometry	Transformations and Coordinate Geometry	Transformations and Coordinate Geometry
<p>Identifies similar and congruent triangles*</p> <p>Identifies congruent polygons and their corresponding sides and angles*</p> <p>Defines "similarity"*</p> <p>Recognizes similar figures in the real world*</p> <p>Determines an appropriate scale for representing a distance on a map*</p> <p>Classifies plane figures by the number of lines of symmetry*</p> <p>Determines the distance between horizontal and vertical lines in the first quadrant of a rectangular coordinate system*</p> <p>Locates the origin on a coordinate grid*</p>	<p>Uses similarity to solve problems using scale drawings</p> <p>Predicts changes necessary to create symmetry in basic plane shapes*</p> <p>Determines coordinates of geometric figures in the first quadrant</p> <p>Determines the distance between points, following grid lines, in the first quadrant on a coordinate graph (as in city blocks)*</p> <p>Graphs ordered pairs in all quadrants</p>	<p>Uses similarity to solve problems using scale drawings</p> <p>Graphs ordered pairs in all quadrants</p>
<p><i>New Vocabulary:</i> acute angle, congruent angle, enlargement, geometric solid, micrometer, obtuse angle, protractor, straight angle, union</p>	<p><i>New Vocabulary:</i> cubic meter, cubic millimeter, equilateral triangle, isosceles triangle, long, obtuse triangle, scalene triangle</p>	<p><i>New Vocabulary:</i> none</p>
<p><i>New Signs and Symbols:</i> + addition, angle marker (arc), ÷ division, ↓ measurement span down, ← measurement span left, → measurement span right, ↑ measurement span up, × multiplication, P perimeter, s side, – subtraction</p>	<p><i>New Signs and Symbols:</i> () order of operations, dm decimeter/decimetre, h height, km kilometer/kilometre, l length, – negative number, : ratio, segment overbar, × multiplication, = is equal to, V volume, w width</p>	<p><i>New Signs and Symbols:</i> none</p>

Subject: Mathematics
Goal Strand: Geometry
RIT Score Range: 231 - 240

Skills and Concepts to Enhance 221 - 230	Skills and Concepts to Develop 231 - 240	Skills and Concepts to Introduce 241 - 250
Geometric Figures Identifies rays* Determines which lines are perpendicular (analysis)* Identifies acute angles Classifies equilateral triangles* Identifies and names a trapezoid* Identifies and names a quadrilateral* Classifies polygons by type of angle* Identifies the number of edges on rectangular prisms*	Geometric Figures Determines which lines are perpendicular (analysis)*	Geometric Figures Identifies and names a rhombus*
Geometric Measurement Knows the approximate size of a meter Converts between inches, feet, and yards Converts between feet, yards, and miles* Converts between millimeters, centimeters, meters, and kilometers Apply dimensional analysis to simple real-world problems (length)* Solves problems involving the perimeter of squares, rectangles, or triangles Describes the change in area of a triangle when 1 dimension of an object is altered (metric units)* Calculates the area of a rectangle, given labeled sides (customary units) Determines the length or width of a rectangle, given the area (metric units)* Uses models to develop the relationship between the total number of square units contained in a rectangle and the length and width of the figure* Solves simple problems involving the area of a square or rectangle Uses the appropriate unit of measure for area* Calculates the volume of rectangular solids	Geometric Measurement Converts between feet, yards, and miles* Converts between millimeters, centimeters, meters, and kilometers Determines the area of a triangle drawn on a grid* Calculates the area of a rectangle, given labeled sides (customary units) Determines the length or width of a rectangle, given the area (metric units)* Solves simple problems involving the area of a square or rectangle Calculates the volume of rectangular solids	Geometric Measurement Determines the surface area of rectangular solids
Transformations and Coordinate Geometry Uses similarity to solve problems using scale drawings Predicts changes necessary to create symmetry in basic plane shapes* Determines coordinates of geometric figures in the first quadrant	Transformations and Coordinate Geometry Uses similarity to solve problems using scale drawings Graphs ordered pairs in all quadrants	Transformations and Coordinate Geometry

Determines the distance between points, following grid lines, in the first quadrant on a coordinate graph (as in city blocks)* Graphs ordered pairs in all quadrants		
<i>New Vocabulary:</i> cubic meter, cubic millimeter, equilateral triangle, isosceles triangle, long, obtuse triangle, scalene triangle	<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> () order of operations, dm decimeter/decimetre, h height, km kilometer/kilometre, l length, - negative number, : ratio, segment overbar, × multiplication, = is equal to, V volume, w width	<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> sq square

Subject: Mathematics
Goal Strand: Geometry
RIT Score Range: 241 - 250

Skills and Concepts to Enhance 231 - 240	Skills and Concepts to Develop 241 - 250	Skills and Concepts to Introduce Above 250
Geometric Figures	Geometric Figures	Geometric Figures
Determines which lines are perpendicular (analysis)*	Identifies and names a rhombus*	Identifies and names a rhombus*
Geometric Measurement	Geometric Measurement	Geometric Measurement
Converts between feet, yards, and miles* Converts between millimeters, centimeters, meters, and kilometers Determines the area of a triangle drawn on a grid* Calculates the area of a rectangle, given labeled sides (customary units) Determines the length or width of a rectangle, given the area (metric units)* Solves simple problems involving the area of a square or rectangle Calculates the volume of rectangular solids	Determines the surface area of rectangular solids	
Transformations and Coordinate Geometry	Transformations and Coordinate Geometry	Transformations and Coordinate Geometry
Uses similarity to solve problems using scale drawings Graphs ordered pairs in all quadrants		
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> sq square	<i>New Signs and Symbols:</i> none

Subject: Mathematics
Goal Strand: Geometry
RIT Score Range: Above 250

Skills and Concepts to Enhance 241 - 250	Skills and Concepts to Develop Above 250
Geometric Figures	Geometric Figures
Identifies and names a rhombus*	Identifies and names a rhombus*
Geometric Measurement	Geometric Measurement
Determines the surface area of rectangular solids	
Transformations and Coordinate Geometry	Transformations and Coordinate Geometry
<i>New Vocabulary: none</i>	<i>New Vocabulary: none</i>
<i>New Signs and Symbols: sq square</i>	<i>New Signs and Symbols: none</i>

Subject: Mathematics
 Goal Strand: Algebra
 RIT Score Range: Below 171

Skills and Concepts to Develop Below 171	Skills and Concepts to Introduce 171 - 180
Expressions, Equations, and Inequalities	Expressions, Equations, and Inequalities
Solves basic-facts open sentences - addition and subtraction	Solves basic-facts open sentences - addition and subtraction Solves linear equations with basic facts - 1-step addition using a letter for the variable*
Patterns, Relations, and Functions	Patterns, Relations, and Functions
Extends repeating patterns - geometric shapes Completes a growing arithmetic pattern by naming missing members	Extends repeating patterns - geometric shapes Extends a growing arithmetic pattern, defined by numbers Completes a growing arithmetic pattern by naming missing members
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> + addition, = is equal to, - subtraction, □ variable	<i>New Signs and Symbols:</i> none

Subject: Mathematics
Goal Strand: Algebra
RIT Score Range: 171 - 180

Skills and Concepts to Enhance Below 171	Skills and Concepts to Develop 171 - 180	Skills and Concepts to Introduce 181 - 190
Expressions, Equations, and Inequalities Solves basic-facts open sentences - addition and subtraction	Expressions, Equations, and Inequalities Solves basic-facts open sentences - addition and subtraction Solves linear equations with basic facts - 1-step addition using a letter for the variable*	Expressions, Equations, and Inequalities Solves basic facts addition and subtraction open sentences using diagrams and models (e.g., using balances)* Solves linear equations with basic facts - 1-step addition using a letter for the variable* Solves 1-step open sentences with missing addends (numbers 100 and under)
Patterns, Relations, and Functions Extends repeating patterns - geometric shapes Completes a growing arithmetic pattern by naming missing members	Patterns, Relations, and Functions Extends repeating patterns - geometric shapes Extends a growing arithmetic pattern, defined by numbers Completes a growing arithmetic pattern by naming missing members	Patterns, Relations, and Functions Extends a growing arithmetic pattern, defined by numbers Completes a growing arithmetic pattern using models by identifying the missing members* Completes arithmetic growth patterns in number tables by identifying the missing elements Extends a decreasing arithmetic patterns* Applies the rule to determine which set of letters is not like the other sets - other patterns*
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> + addition, = is equal to, – subtraction, □ variable	<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> none

Subject: Mathematics
Goal Strand: Algebra
RIT Score Range: 181 - 190

Skills and Concepts to Enhance 171 - 180	Skills and Concepts to Develop 181 - 190	Skills and Concepts to Introduce 191 - 200
<p>Expressions, Equations, and Inequalities</p> <p>Solves basic-facts open sentences - addition and subtraction Solves linear equations with basic facts - 1-step addition using a letter for the variable*</p>	<p>Expressions, Equations, and Inequalities</p> <p>Solves basic facts addition and subtraction open sentences using diagrams and models (e.g., using balances)* Solves linear equations with basic facts - 1-step addition using a letter for the variable* Solves 1-step open sentences with missing addends (numbers 100 and under)</p>	<p>Expressions, Equations, and Inequalities</p> <p>Uses algebraic reasoning to solve problems involving equality relationships* Solves basic facts addition and subtraction open sentences using diagrams and models (e.g., using balances)* Solves complex open linear sentences using diagrams and models (e.g., using balances)* Solves 1-step open sentences with missing addends (numbers 100 and under) Solves 1-step open sentences with missing addends (numbers over 100) Solves simple open sentences with missing factors (numbers 100 and under)* Solves 2-step open sentences with missing addends*</p>
<p>Patterns, Relations, and Functions</p> <p>Extends repeating patterns - geometric shapes Extends a growing arithmetic pattern, defined by numbers Completes a growing arithmetic pattern by naming missing members</p>	<p>Patterns, Relations, and Functions</p> <p>Extends a growing arithmetic pattern, defined by numbers Completes a growing arithmetic pattern using models by identifying the missing members* Completes arithmetic growth patterns in number tables by identifying the missing elements Extends a decreasing arithmetic patterns* Applies the rule to determine which set of letters is not like the other sets - other patterns*</p>	<p>Patterns, Relations, and Functions</p> <p>Extends a growing arithmetic pattern, defined by objects or diagrams* Completes a growing arithmetic pattern using models by identifying the missing members* Extends a decreasing arithmetic patterns* Extends patterns formed by letters*</p>
<p><i>New Vocabulary:</i> none</p>	<p><i>New Vocabulary:</i> none</p>	<p><i>New Vocabulary:</i> none</p>
<p><i>New Signs and Symbols:</i> none</p>	<p><i>New Signs and Symbols:</i> none</p>	<p><i>New Signs and Symbols:</i> ÷ division, × multiplication</p>

Subject: Mathematics
Goal Strand: Algebra
RIT Score Range: 191 - 200

Skills and Concepts to Enhance 181 - 190	Skills and Concepts to Develop 191 - 200	Skills and Concepts to Introduce 201 - 210
<p>Expressions, Equations, and Inequalities</p> <p>Solves basic facts addition and subtraction open sentences using diagrams and models (e.g., using balances)* Solves linear equations with basic facts - 1-step addition using a letter for the variable* Solves 1-step open sentences with missing addends (numbers 100 and under)</p>	<p>Expressions, Equations, and Inequalities</p> <p>Uses algebraic reasoning to solve problems involving equality relationships* Solves basic facts addition and subtraction open sentences using diagrams and models (e.g., using balances)* Solves complex open linear sentences using diagrams and models (e.g., using balances)* Solves 1-step open sentences with missing addends (numbers 100 and under) Solves 1-step open sentences with missing addends (numbers over 100) Solves simple open sentences with missing factors (numbers 100 and under)* Solves 2-step open sentences with missing addends*</p>	<p>Expressions, Equations, and Inequalities</p> <p>Uses algebraic reasoning to solve problems involving equality relationships* Uses simple linear equations to represent problem situations Describes a realistic situation using information given in a linear equation* Solves complex open linear sentences using diagrams and models (e.g., using balances)* Solves 1-step open sentences with missing addends (numbers over 100) Solves simple open sentences with missing factors (numbers 100 and under)* Solves 2-step open sentences with missing addends* Solves open sentences with basic-facts calculations on both sides of the sentence</p>
<p>Patterns, Relations, and Functions</p> <p>Extends a growing arithmetic pattern, defined by numbers Completes a growing arithmetic pattern using models by identifying the missing members* Completes arithmetic growth patterns in number tables by identifying the missing elements Extends a decreasing arithmetic patterns* Applies the rule to determine which set of letters is not like the other sets - other patterns*</p>	<p>Patterns, Relations, and Functions</p> <p>Extends a growing arithmetic pattern, defined by objects or diagrams* Completes a growing arithmetic pattern using models by identifying the missing members* Extends a decreasing arithmetic patterns* Extends patterns formed by letters*</p>	<p>Patterns, Relations, and Functions</p> <p>Extends a growing arithmetic pattern, defined by objects or diagrams* Extends a pattern formed by two arithmetic growing patterns - odd and even terms (such as 1,5,4,8,7,...) Extends a growing pattern of numbers - explicit quadratic rule - recursive rule is to add x more each time (such as 1,2,4,7,...)* Extends a pattern formed by rotating a geometric figure</p>
<p><i>New Vocabulary:</i> none</p>	<p><i>New Vocabulary:</i> none</p>	<p><i>New Vocabulary:</i> minimum</p>
<p>Symbols: none</p>	<p><i>New Signs and Symbols:</i> ÷ division, × multiplication</p>	<p><i>New Signs and Symbols:</i> () order of operations, + addition, = is equal to</p>

Subject: Mathematics
Goal Strand: Algebra
RIT Score Range: 201 - 210

Skills and Concepts to Enhance 191 - 200	Skills and Concepts to Develop 201 - 210	Skills and Concepts to Introduce 211 - 220
<p>Expressions, Equations, and Inequalities</p> <p>Uses algebraic reasoning to solve problems involving equality relationships*</p> <p>Solves basic facts addition and subtraction open sentences using diagrams and models (e.g., using balances)*</p> <p>Solves complex open linear sentences using diagrams and models (e.g., using balances)*</p> <p>Solves 1-step open sentences with missing addends (numbers 100 and under)</p> <p>Solves 1-step open sentences with missing addends (numbers over 100)</p> <p>Solves simple open sentences with missing factors (numbers 100 and under)*</p> <p>Solves 2-step open sentences with missing addends*</p>	<p>Expressions, Equations, and Inequalities</p> <p>Uses algebraic reasoning to solve problems involving equality relationships*</p> <p>Uses simple linear equations to represent problem situations</p> <p>Describes a realistic situation using information given in a linear equation*</p> <p>Solves complex open linear sentences using diagrams and models (e.g., using balances)*</p> <p>Solves 1-step open sentences with missing addends (numbers over 100)</p> <p>Solves simple open sentences with missing factors (numbers 100 and under)*</p> <p>Solves 2-step open sentences with missing addends*</p> <p>Solves open sentences with basic-facts calculations on both sides of the sentence</p>	<p>Expressions, Equations, and Inequalities</p> <p>Uses algebraic reasoning to solve problems involving equality relationships*</p> <p>Uses simple linear equations to represent problem situations</p> <p>Solves simple open sentences with missing factors (numbers over 100)</p> <p>Solves open sentences using the distributive property</p> <p>Solves open sentences with calculations on both sides of the sentence</p> <p>Solves 2-step open sentences with missing factors</p>
<p>Patterns, Relations, and Functions</p> <p>Extends a growing arithmetic pattern, defined by objects or diagrams*</p> <p>Completes a growing arithmetic pattern using models by identifying the missing members*</p> <p>Extends a decreasing arithmetic patterns*</p> <p>Extends patterns formed by letters*</p>	<p>Patterns, Relations, and Functions</p> <p>Extends a growing arithmetic pattern, defined by objects or diagrams*</p> <p>Extends a pattern formed by two arithmetic growing patterns - odd and even terms (such as 1,5,4,8,7,...)</p> <p>Extends a growing pattern of numbers - explicit quadratic rule - recursive rule is to add x more each time (such as 1,2,4,7,...)*</p> <p>Extends a pattern formed by rotating a geometric figure</p>	<p>Patterns, Relations, and Functions</p> <p>Extends a repeating pattern of geometric shapes in a grid*</p> <p>Extends a growing geometric pattern - using numbers*</p> <p>Extends a pattern formed by two arithmetic growing patterns - odd and even terms (such as 1,5,4,8,7,...)</p> <p>Extends, or completes, growing patterns defined by equations or number facts</p> <p>Extends a growing pattern of numbers - explicit quadratic rule - recursive rule is to add x more each time (such as 1,2,4,7,...)*</p> <p>Identifies rules and applies them to new patterns</p> <p>Determines the rule and completes a simple function machine output*</p>
<p><i>New Vocabulary:</i> none</p>	<p><i>New Vocabulary:</i> minimum</p>	<p><i>New Vocabulary:</i> none</p>
<p><i>New Signs and Symbols:</i> ÷ division, × multiplication</p>	<p><i>New Signs and Symbols:</i> () order of operations, + addition, = is equal to</p>	<p><i>New Signs and Symbols:</i> ? next in sequence</p>

Subject: Mathematics
Goal Strand: Algebra
RIT Score Range: 211 - 220

Skills and Concepts to Enhance 201 - 210	Skills and Concepts to Develop 211 - 220	Skills and Concepts to Introduce 221 - 230
<p>Expressions, Equations, and Inequalities</p> <p>Uses algebraic reasoning to solve problems involving equality relationships*</p> <p>Uses simple linear equations to represent problem situations</p> <p>Describes a realistic situation using information given in a linear equation*</p> <p>Solves complex open linear sentences using diagrams and models (e.g., using balances)*</p> <p>Solves 1-step open sentences with missing addends (numbers over 100)</p> <p>Solves simple open sentences with missing factors (numbers 100 and under)*</p> <p>Solves 2-step open sentences with missing addends*</p> <p>Solves open sentences with basic-facts calculations on both sides of the sentence</p>	<p>Expressions, Equations, and Inequalities</p> <p>Uses algebraic reasoning to solve problems involving equality relationships*</p> <p>Uses simple linear equations to represent problem situations</p> <p>Solves simple open sentences with missing factors (numbers over 100)</p> <p>Solves open sentences using the distributive property</p> <p>Solves open sentences with calculations on both sides of the sentence</p> <p>Solves 2-step open sentences with missing factors</p>	<p>Expressions, Equations, and Inequalities</p> <p>Describes and uses a variable with whole numbers, multiplication, and division in a contextual situation*</p> <p>Solves open sentences with calculations on both sides of the sentence</p> <p>Solves 2-step open sentences with missing factors</p>
<p>Patterns, Relations, and Functions</p> <p>Extends a growing arithmetic pattern, defined by objects or diagrams*</p> <p>Extends a pattern formed by two arithmetic growing patterns - odd and even terms (such as 1,5,4,8,7,...)</p> <p>Extends a growing pattern of numbers - explicit quadratic rule - recursive rule is to add x more each time (such as 1,2,4,7,...)*</p> <p>Extends a pattern formed by rotating a geometric figure</p>	<p>Patterns, Relations, and Functions</p> <p>Extends a repeating pattern of geometric shapes in a grid*</p> <p>Extends a growing geometric pattern - using numbers*</p> <p>Extends a pattern formed by two arithmetic growing patterns - odd and even terms (such as 1,5,4,8,7,...)</p> <p>Extends, or completes, growing patterns defined by equations or number facts</p> <p>Extends a growing pattern of numbers - explicit quadratic rule - recursive rule is to add x more each time (such as 1,2,4,7,...)*</p> <p>Identifies rules and applies them to new patterns</p> <p>Determines the rule and completes a simple function machine output*</p>	<p>Patterns, Relations, and Functions</p>
<p><i>New Vocabulary:</i> minimum</p>	<p><i>New Vocabulary:</i> none</p>	<p><i>New Vocabulary:</i> none</p>
<p><i>New Signs and Symbols:</i> () order of operations, + addition, = is equal to</p>	<p><i>New Signs and Symbols:</i> ? next in sequence</p>	<p><i>New Signs and Symbols:</i> none</p>

Subject: Mathematics
Goal Strand: Algebra
RIT Score Range: 221 - 230

Skills and Concepts to Enhance 211 - 220	Skills and Concepts to Develop 221 - 230	Skills and Concepts to Introduce 231 - 240
Expressions, Equations, and Inequalities Uses algebraic reasoning to solve problems involving equality relationships* Uses simple linear equations to represent problem situations Solves simple open sentences with missing factors (numbers over 100) Solves open sentences using the distributive property Solves open sentences with calculations on both sides of the sentence Solves 2-step open sentences with missing factors	Expressions, Equations, and Inequalities Describes and uses a variable with whole numbers, multiplication, and division in a contextual situation* Solves open sentences with calculations on both sides of the sentence Solves 2-step open sentences with missing factors	Expressions, Equations, and Inequalities
Patterns, Relations, and Functions Extends a repeating pattern of geometric shapes in a grid* Extends a growing geometric pattern - using numbers* Extends a pattern formed by two arithmetic growing patterns - odd and even terms (such as 1,5,4,8,7,...) Extends, or completes, growing patterns defined by equations or number facts Extends a growing pattern of numbers - explicit quadratic rule - recursive rule is to add x more each time (such as 1,2,4,7,...)* Identifies rules and applies them to new patterns Determines the rule and completes a simple function machine output*	Patterns, Relations, and Functions	Patterns, Relations, and Functions Applies the rule to determine which number does not belong - growing pattern: arithmetic*
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> ? next in sequence	<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> none

Subject: Mathematics
Goal Strand: Algebra
RIT Score Range: 231 - 240

Skills and Concepts to Enhance 221 - 230	Skills and Concepts to Develop 231 - 240	Skills and Concepts to Introduce Above 240
Expressions, Equations, and Inequalities Describes and uses a variable with whole numbers, multiplication, and division in a contextual situation* Solves open sentences with calculations on both sides of the sentence Solves 2-step open sentences with missing factors	Expressions, Equations, and Inequalities	Expressions, Equations, and Inequalities
Patterns, Relations, and Functions	Patterns, Relations, and Functions	Patterns, Relations, and Functions
	Applies the rule to determine which number does not belong - growing pattern: arithmetic*	Represents growing arithmetic patterns using algebraic expressions or equations*
<i>New Vocabulary: none</i>	<i>New Vocabulary: none</i>	<i>New Vocabulary: none</i>
<i>New Signs and Symbols: none</i>	<i>New Signs and Symbols: none</i>	<i>New Signs and Symbols: none</i>

Subject: Mathematics
Goal Strand: Algebra
RIT Score Range: Above 240

Skills and Concepts to Enhance 231 - 240	Skills and Concepts to Develop Above 240
Expressions, Equations, and Inequalities	Expressions, Equations, and Inequalities
Patterns, Relations, and Functions	Patterns, Relations, and Functions
Applies the rule to determine which number does not belong - growing pattern: arithmetic*	Represents growing arithmetic patterns using algebraic expressions or equations*
<i>New Vocabulary:</i> none	<i>New Vocabulary:</i> none
<i>New Signs and Symbols:</i> none	<i>New Signs and Symbols:</i> none