Skills and Concepts to Enhance (73% Probability*) 171 - 180	Skills and Concepts to Develop (50% Probability*) 181 - 190	Skills and Concepts to Introduce (27% Probability*) 191 - 200
Ratios and Proportional Relationships	**Ratios and Proportional Relationships**	**Ratios and Proportional Relationships**
• Completes a growing arithmetic pattern by naming missing members • Computes simple conversions among units of time (minutes in an hour, half hour, quarter hour)	• Completes arithmetic growth patterns in number tables by identifying the missing elements • Computes simple conversions among units of time (days, weeks)	• Solves problems involving basic percent concepts (e.g., 10%, 50%, 100%) • Converts between cups and pints • Converts between cups, pints, and quarts • Computes simple conversions among units of time (minutes, hours) • Solves simple problems involving miles/kilometers per hour • Writes the missing number in a proportion using basic facts
Perform Operations	**Perform Operations**	**Perform Operations**
• 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 two or three 2-digit number with regrouping • Adds 1- and/or 2-digit numbers with sums under 100 • Adds 3-digit numbers with no regrouping • Adds 3-digit numbers, with regrouping, with sums under 1000 • Solves real-world whole number addition problems with sums to 20 (result unknown) • 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) • Subtracts a 1-digit number from a 2-digit number that is less than 20 (whole numbers only) • Subtracts a 1-digit number from a 2-digit number with no regrouping, vertically • 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 • 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 • Adds 1-digit numbers with sums to 18 (with parentheses) • Recognizes addition and subtraction fact families through 18 • 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)	• Uses rounding to estimate answers to real-world problems involving addition of numbers less than 100 (whole numbers only) • Instantly recalls basic addition facts with sums to 18 in a table • Adds two or three 2-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 100 (result unknown) • Uses models to calculate differences through 100 (whole numbers) • Instantly recalls basic subtraction facts with minuend less than 10 • 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 • Subtracts multiple-digit numbers with no regrouping • 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 problems using the inverse relationship between addition and subtraction • Uses counting by multiples for multiplication • Instantly recalls basic multiplication facts where one factor is 6-12 and the other factor is 0-12	• Uses rounding to estimate answers to real-world problems involving numbers less than 1000 with addition and subtraction (whole numbers only) • Uses rounding to estimate answers to addition and subtraction problems (whole numbers only) • 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 20 (change unknown) • Solves whole number addition word problems with sums over 1000 • 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) • Subtracts a 2-digit number from a 3-digit number with a single regrouping • Subtracts 3- or 4-digit numbers with regrouping • Performs mental subtraction with numbers under 1000 • Subtracts multiple-digit numbers with no regrouping • Solves real-world whole number problems involving subtraction with numbers 100 and under • Solves problems using the inverse relationship between addition and subtraction • Instantly recalls basic multiplication facts where one factor is 6-12 and the other factor is 0-12 • Multiplies a 2- or 3-digit number by a 1-digit number with no regrouping • Multiplies a 2-digit number by a 1-digit number with regrouping • Multiplies a 3- or 4-digit number by a 1-digit number

Skills and Concepts to Enhance (73% Probability*) 171 - 180	Skills and Concepts to Develop (50% Probability*) 181 - 190	Skills and Concepts to Introduce (27% Probability*) 191 - 200
Perform Operations	Perform Operations	Perform Operations
• Tells time to the nearest hour	• Multiplies basic facts to 10 x 10 vertically	• Multiplies a 2-digit number by a 2-digit number with no regrouping
• Tells time to the nearest half hour	• Multiplies a 2-digit number by a 1-digit number with regrouping	• Performs mental computation with multiplication
• Tells time to the nearest 5 minutes	• Multiplies a 2-digit number by a 2-digit number with no regrouping	• Solves word problems involving basic whole number multiplication facts to 10 x 10
• Connects money with place value	• Solves word problems involving basic whole number multiplication facts to 10 x 10	• Solves word problems involving whole number multiplication with numbers greater than 10 x 10
• Determines the operation needed from a simple problem	• Uses manipulatives to divide a small set of objects into groups of equal size	• Uses manipulatives to divide a small set of objects into groups of equal size
	• Uses sharing for division	• Models whole number multiplication and division algorithms (e.g., shows multiplication as repeated addition and division as repeated subtraction)
	• 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
	• Models multiplication and division algorithms using arrays (whole numbers)	• Instantly recalls division facts with dividend and divisors less than 13
	• Instantly recalls division facts with dividend and divisors less than 10	• Divides a 2-digit number by a 1-digit number with no remainder
	• Solves real-world whole number problems involving addition and subtraction	• Solves word problems with whole number division facts with dividend and divisors less than 11
	• Recognizes addition and subtraction fact families through 18	• Solves simple word problems involving whole number division with remainder (e.g., 1-step, 1-digit divisor)
	• Demonstrates an understanding of the inverse relationship between multiplication and division	• Uses models to add and subtract fractions and connect the actions to algorithms
	• Adds decimals to the hundredths place (same number of digits)	• Subtracts fractions with like denominators without reducing
	• Identifies the value of a collection of coins to $1.00 (without picture of coins)	• Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators
	• Adds money with regrouping	• Solves real-world 1-step problems involving multiplication or division of a whole number by a fraction
	• Identifies the value of a collection of coins and bills to $10.00 by counting on (with picture of money)	• Adds decimals to the hundredths place (same number of digits)
	• Finds equivalent combinations of coins with the same value	• Adds decimals to the hundredths place in vertical format (not same number of digits)
	• Combines a collection of coins and identifies the correct notation	• Adds decimals to the thousandths place vertically with and without regrouping
	• Makes change to $1.00 by counting on or subtracting	• Identifies the value of a collection of coins to $1.00 (without picture of coins)
	• Computes with dollars and cents up to and including $5.00 and converts to decimals (addition/subtraction only)	• Adds money with regrouping
	• Computes 1 operation on addition or subtraction real-world problems involving money up to $5.00	• Identifies the value of a collection of coins and bills to $10.00 by counting on (without picture of money)
	• Identifies the correct time, given the words, and vice versa	• Finds equivalent combinations of coins with the same value
	• Determines elapsed clock time	• Subtracts decimals to the hundredths place (same number of digits) with regrouping
	• Determines elapsed time under 1 hour or to the hour	• Subtracts decimals to the thousandths place, vertically, with and without regrouping
	• Determines elapsed time involving whole hours, whole days, whole years	• Makes change to $1.00 by counting on or subtracting
	• Tells time to the nearest 5 minutes	
	• Determines the operation needed from a simple problem	
	• Identifies the number that is 1 less than a given number	

Skills and Concepts to Enhance (73% Probability*) 171 - 180	Skills and Concepts to Develop (50% Probability*) 181 - 190	Skills and Concepts to Introduce (27% Probability*) 191 - 200
Perform Operations	Perform Operations	Perform Operations
	• Distinguishes between odd and even numbers	• Solves real-world problems involving decimals (not money) using addition and subtraction
		• Computes with dollars and cents up to and including $5.00 and converts to decimals (addition/subtraction only)
		• Computes 1 operation on real-world problems involving money over $5.00 (addition/subtraction only)
		• Multiplies a decimal by whole number
		• Computes with dollars and cents up to and including $5.00 and converts to decimals (multiplication/division)
		• Computes 1 operation on real-world problems involving money over $5.00 (multiplication/division)
		• Computes basic operations with units of weight/mass
		• Identifies the correct time, given the words, and vice versa
		• 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
		• Solves simple problems involving elapsed time, with the conversion of hours
		• Determines the operation needed from a simple problem
		• Solves problems using tables
		• Distinguishes between odd and even numbers
		• Identifies numbers as composite
Extend and Use Properties	Extend and Use Properties	Extend and Use Properties
• Identifies whole numbers 100 - 999 using base-10 blocks	• Identifies the numeral and written name for whole numbers 101 to 999 (e.g., 342 is three hundred forty-two, and vice versa)	• Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph)
• 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 to 1000 to 9999 (e.g., 3456 is three thousand, four hundred fifty-six, and vice versa)	• Identifies whole numbers over 999 using base-10 blocks
• 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 10,000 to 100,000	• Identifies the numeral and written name for whole numbers with a zero between digits to the ten thousands place
• Identifies missing numbers in a series through 100	• Compares whole numbers through 999	• Identifies the numeral and written name for whole numbers 10,000 to 100,000
• Counts by 2's to 100	• Compares whole numbers through 9999	• Identifies the numeral and written name for whole numbers over 100,000
• Counts backwards from a given number (given number greater than 10)	• Rounds 2- and 3- digit whole numbers to the nearest ten	• Compares whole numbers to 100, using the symbols for 'less than', 'equal to', or 'greater than' (<, =, >)
• Recognizes and generates equivalent forms for the same number using physical models for whole numbers 11 to 20	• Rounds 3-digit whole numbers to the nearest hundred	• Compares whole numbers through the thousands using the symbols <, >, or =
• Compares sets of objects and identifies which is equal to, more than, or less than the other (1 to 10 objects)	• Counts objects that are grouped into tens and ones	• Rounds 2- and 3- digit whole numbers to the nearest ten
• Compares whole numbers through 999	• Identifies whole numbers under 100 given place value terms (e.g., 3 tens and 4 ones = 34)	• Rounds 3-digit whole numbers to the nearest hundred
• 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	

Skills and Concepts to Enhance (73% Probability*) 171 - 180	Skills and Concepts to Develop (50% Probability*) 181 - 190	Skills and Concepts to Introduce (27% Probability*) 191 - 200
Extend and Use Properties	Extend and Use Properties	Extend and Use Properties
• Identifies the place value and value of each digit in whole numbers through the tens place • Represents 1/2 with a diagram or model • Represents 1/4 with a diagram or model • Identifies one-half from a region or set	• 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 • Identifies the place value and value of each digit in whole numbers through the hundred thousands • Represents 3/4 with a diagram or model • Identifies equal parts by using models • Identifies 1/2 from a region or set • Identifies one-half from a region or set • Identifies 1/4 from a region or set • Identifies 2/4, 3/4, or 4/4 from a region or set • Identifies 2/3 or 3/3 from a region or set • Identifies tenths from a region or set • Identifies eighths from a region or set • Identifies a fraction (denominators other than 2, 3, 4, 8, 10) from a region or set • Compares and orders decimals to the hundredths place (same number of digits after decimal)	• 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 1/3 with a diagram or model • Represents fractions with denominators other than 2, 3, 4 with a diagram or model • Identifies 1/4 from a region or set • Identifies 1/3 from a region or set • Identifies 2/3 or 3/3 from a region or set • Identifies tenths from a region or set • Identifies a fraction (denominators other than 2, 3, 4, 8, 10) from a region or set • Identifies equivalent fractions using visual representations • Matches numeric and visual representation of equivalent fractions • Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers)
New Vocabulary: fact family, fourth, hundred, morning, thirds, thousand *New Signs and Symbols:* ( ) order of operations, a.m., ¢ cent sign, $ dollar sign, p.m., | tally mark	*New Vocabulary:* changed, clock, closest, digit, fourths, gave, half past, how much time, hundreds, left, left over, million, nearest, noon, o'clock, one, pennies, quarter past, quarter to, row, ten thousand, unifix cubes, what time *New Signs and Symbols:* { } set notation, ÷ division, long division symbol, : used with time, : used with time	*New Vocabulary:* billion, composite number, decade, deposit, each, grid, hundred million, miles per hour, prime number, quintillion, standard numeral, trillion *New Signs and Symbols:* ( ) ordered pair, °F degrees Fahrenheit, g gram, > greater than, lb pound, < less than, min minute, mph miles per hour, % percent, • point, R remainder

Explanatory Notes
* At the range mid-point, this is the probability students would correctly answer items measuring these concepts and skills. Both data from test items and review by NWEA curriculum specialists are used to place Learning Continuum statements into appropriate RIT ranges. Blank cells indicate data are limited or unavailable for this range or document version.

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