

Skills and Concepts to Enhance (73% Probability*) 181 - 190	Skills and Concepts to Develop (50% Probability*) 191 - 200	Skills and Concepts to Introduce (27% Probability*) 201 - 210
Ratios and Proportional Relationships <ul style="list-style-type: none"> • Completes arithmetic growth patterns in number tables by identifying the missing elements • Computes simple conversions among units of time (days, weeks) 	Ratios and Proportional Relationships <ul style="list-style-type: none"> • 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 	Ratios and Proportional Relationships <ul style="list-style-type: none"> • Converts between inches and feet • Solves simple problems involving measurement of length • Estimates simple conversions involving length between the customary and metric system • 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 • Applies dimensional analysis to simple real-world problems (time) • Solves simple problems involving miles per gallon • Solves simple problems involving miles/kilometers per hour • Determines unit price • Writes the missing number in a proportion using basic facts • Identifies the percent represented in a 2-D region
Perform Operations <ul style="list-style-type: none"> • 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 	Perform Operations <ul style="list-style-type: none"> • 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 	Perform Operations <ul style="list-style-type: none"> • Uses rounding to estimate answers to real-world problems involving numbers 1000 or greater with addition and subtraction (whole numbers only) • Uses rounding to estimate answers to addition and subtraction problems (whole numbers only) • Adds multiple-digit numbers, with regrouping, with sums over 1000 • Adds multiple-digit numbers with sums under 1000 • Performs mental computation with more than 4 addends • Subtracts 3- or 4-digit numbers with regrouping • Subtracts numbers with 5 digits or more with regrouping • Solves real-world whole number problems involving subtraction with numbers 100 and under (analysis) • Solves problems using the inverse relationship between addition and subtraction • 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 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

Explanatory Notes

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Skills and Concepts to Enhance (73% Probability*) 181 - 190	Skills and Concepts to Develop (50% Probability*) 191 - 200	Skills and Concepts to Introduce (27% Probability*) 201 - 210
<p>Perform Operations</p> <ul style="list-style-type: none"> 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 Multiplies basic facts to 10 x 10 vertically Multiplies a 2-digit number by a 1-digit number with regrouping 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 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 multiplication and division algorithms using arrays (whole numbers) Instantly recalls division facts with dividend and divisors less than 10 Solves real-world whole number problems involving addition and subtraction Recognizes addition and subtraction fact families through 18 Demonstrates an understanding of the inverse relationship between multiplication and division Adds decimals to the hundredths place (same number of digits) Identifies the value of a collection of coins to \$1.00 (without picture of coins) Adds money with regrouping 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 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>Perform Operations</p> <ul style="list-style-type: none"> 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 Multiplies a 2-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 x 10 Solves word problems involving whole number multiplication with numbers greater than 10 x 10 Uses manipulatives to divide a small set of objects into groups of equal size 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 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) 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 Solves real-world 1-step problems involving multiplication or division of a whole number by a fraction Adds decimals to the hundredths place (same number of digits) Adds decimals to the hundredths place in vertical format (not same number of digits) Adds decimals to the thousandths place vertically with and without regrouping Identifies the value of a collection of coins to \$1.00 (without picture of coins) 	<p>Perform Operations</p> <ul style="list-style-type: none"> Solves word problems involving whole number multiplication with numbers greater than 10 x 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 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 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 x 10 Determines the remainder in a real-world problem (whole numbers) Uses division for multiple-step real-world problems (whole numbers) Solves real-world problems involving 2-step multiple operations, whole numbers only Adds fractions with like denominators without reducing Adds whole numbers and fractions Uses models to add and subtract fractions and connect the actions to algorithms Subtracts fractions with like denominators without reducing Subtracts mixed fractions with like denominators with no regrouping Solves real-world 1-step problems involving addition and subtraction of fractions with like denominators Multiplies a fraction by a fraction without reducing to simplest form (simple problem) 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 Subtracts decimals through the hundred-thousandths place, vertically

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<p>Perform Operations</p> <ul style="list-style-type: none"> Identifies the correct time, given the words, and vice versa 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 Determines the operation needed from a simple problem Identifies the number that is 1 less than a given number Distinguishes between odd and even numbers 	<p>Perform Operations</p> <ul style="list-style-type: none"> Adds money with regrouping 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 Subtracts decimals to the hundredths place (same number of digits) with regrouping Subtracts decimals to the thousandths place, vertically, with and without regrouping Makes change to \$1.00 by counting on or subtracting 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 	<p>Perform Operations</p> <ul style="list-style-type: none"> Computes the value of multiple bills and coins (addition/subtraction only) Multiplies a decimal by whole number Divides decimal by a whole number Computes with dollars and cents up to and including \$5.00 and converts to decimals (multiplication/division) Computes addition and subtraction on multiple-step real-world problems involving money Computes money problems with multiple operations (addition/subtraction only) Computes addition, subtraction, multiplication, and division on multiple-step, real-world problems involving money Solves real-world problems involving addition and subtraction of integers Solves problems involving measurement of time Solves simple problems involving elapsed time, with the conversion of hours Solves problems using tables Writes a terminating decimal as a fraction or mixed number Expresses the equivalent form of a fraction, decimal, and/or percent (simple fraction)
<p>Extend and Use Properties</p> <ul style="list-style-type: none"> 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 	<p>Extend and Use Properties</p> <ul style="list-style-type: none"> Determines and names locations in the first quadrant on a labeled grid or coordinate system (e.g., map or graph) 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 	<p>Extend and Use Properties</p> <ul style="list-style-type: none"> 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

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<p>Extend and Use Properties</p> <ul style="list-style-type: none"> • Compares whole numbers through 999 • Compares whole numbers through 9999 • 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 • Identifies the place value and value of each digit in whole numbers through the hundred thousands • Represents $\frac{3}{4}$ with a diagram or model • Identifies equal parts by using models • Identifies $\frac{1}{2}$ from a region or set • Identifies one-half from a region or set • Identifies $\frac{1}{4}$ from a region or set • Identifies $\frac{2}{4}$, $\frac{3}{4}$, or $\frac{4}{4}$ 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 • 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) 	<p>Extend and Use Properties</p> <ul style="list-style-type: none"> • 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 • 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 = • 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 • Represents fractions with denominators other than 2, 3, 4 with a diagram or model • 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 • 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) 	<p>Extend and Use Properties</p> <ul style="list-style-type: none"> • Determines the distance between points, following grid lines, in the first quadrant on a coordinate graph (as in city blocks) • Locates the origin on a coordinate grid • 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 • Compares whole numbers through the billions using the symbols <, >, or = • Orders whole numbers a million or greater using < or > symbols • 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 • Rounds wholes numbers to the nearest billion • Explains the rules for rounding • Writes equivalent forms of whole numbers using place value (e.g., $54 = 4$ tens and 14 ones) • Identifies the place value and value of each digit in whole numbers through the billions • 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 • Identifies halves of a region using nonadjacent parts • Identifies equivalent fractions using visual representations • Expresses 1 in many different ways (e.g., $\frac{3}{3}$, $\frac{4}{4}$) • Converts a basic fractional numeral to lowest terms (e.g., halves, thirds, quarters) • Writes mixed numbers as improper fractions and improper fractions as mixed numbers • Compares fractions (e.g., common denominator, 1 in the numerator, denominator is 2, 3, 4, 6, 8, 10) • Orders fractions on a number line • Explains different interpretations of fractions (e.g., parts of a whole, parts of a set, and division of whole numbers by whole numbers) • Identifies a decimal on a number line to the tenths place • Rounds decimals to the nearest whole number

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Extend and Use Properties	Extend and Use Properties	Extend and Use Properties
		• Compares integers on a number line
<i>New Vocabulary:</i> 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	<i>New Vocabulary:</i> billion, composite number, decade, deposit, each, grid, hundred million, miles per hour, prime number, quintillion, standard numeral, trillion	<i>New Vocabulary:</i> biggest, coordinate, coordinate point, expanded numeral, larger, miles per gallon, origin
<i>New Signs and Symbols:</i> { } set notation, ÷ division, long division symbol, : used with time, : used with time	<i>New Signs and Symbols:</i> () ordered pair, °F degrees Fahrenheit, g gram, > greater than, lb pound, < less than, min minute, mph miles per hour, % percent, • point, R remainder	<i>New Signs and Symbols:</i> ft feet, in. inch, mpg miles per gallon, - negative number

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