**Pacing Guide**

**Mathematics 4th G**

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| **Unit 1 –** | **Place Value and Rounding of Multi- Digit Whole Numbers** | **Total Number of Instructional Days 14** |

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|  | **Common Core Standard Covered** | **Major Topics/Concepts** | **Number of days** |
| **1-1** | **Place Value of Multi-Digit Whole Numbers**  CCSS.MATH.CONTENT.4.NBT.1 | * Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.*For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*. | **2** |
| **1-2** | **Naming Numbers Within One Million**  CCSS.MATH.CONTENT.4.NBT.2 | * Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | **3** |
| **1-3** | **Forms of Multi-Digit Numbers**  CCSS.MATH.CONTENT.4.NBT.2 | * Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | **3** |
| **1-4** | **Comparing Multi-Digit Whole Numbers**  CCSS.MATH.CONTENT.4.NBT.2 | * Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons | **2** |
| **1-5** | **Rounding Multi-Digit Whole Numbers**  CCSS.MATH.CONTENT.4.NBT.3 | * Use place value understanding to round multi-digit whole numbers to any place. | **4** |

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| **Unit 2 –** | **Multi-Digit Whole Number Addition and Subtraction** | **Total Number of Instructional Days 14** |

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|  | **Common Core Standard Covered** | **Major Topics/Concepts** | **Number of Days** |
| **2-1** | **Multi-Digit Whole Number Addition**  CCSS.MATH.CONTENT.4.OA.3  CCSS.MATH.CONTENT.4.NBT.1  CCSS.MATH.CONTENT.4.NBT.2  CCSS.MATH.CONTENT.4.NBT.4 | * Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.*For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*. * Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. * Fluently add and subtract multi-digit whole numbers using the standard algorithm. * Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | **4** |
| **2-2** | **Multi-Digit Whole Number Subtraction**  CCSS.MATH.CONTENT.4.OA.3  CCSS.MATH.CONTENT.4.NBT.1  CCSS.MATH.CONTENT.4.NBT.2  CCSS.MATH.CONTENT.4.NBT.4 | * Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.*For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*. * Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. * Fluently add and subtract multi-digit whole numbers using the standard algorithm. * Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | **4** |
| **2-3** | **Solving Two-Step Subtraction Word Problems**  CCSS.MATH.CONTENT.4.OA.3  CCSS.MATH.CONTENT.4.NBT.1  CCSS.MATH.CONTENT.4.NBT.2  CCSS.MATH.CONTENT.4.NBT.4 | * Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.*For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*. * Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. * Fluently add and subtract multi-digit whole numbers using the standard algorithm. * Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | **2** |
| **2-4** | **Solving Multi-Step Addition and Subtraction Word Problems**  CCSS.MATH.CONTENT.4.OA.3  CCSS.MATH.CONTENT.4.NBT.1  CCSS.MATH.CONTENT.4.NBT.2  CCSS.MATH.CONTENT.4.NBT.4 | * Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.*For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*. * Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. * Fluently add and subtract multi-digit whole numbers using the standard algorithm. * Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | **2** |
| **2-5** | **Creating Word Problems Involving Addition and Subtraction**  CCSS.MATH.CONTENT.4.OA.3  CCSS.MATH.CONTENT.4.NBT.1  CCSS.MATH.CONTENT.4.NBT.2  CCSS.MATH.CONTENT.4.NBT.4 | * Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right.*For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division*. * Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. * Fluently add and subtract multi-digit whole numbers using the standard algorithm. * Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. | **2** |

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| **Unit 3 –** | **Multi-Digit Whole Number Multiplication** | **Total Number of Instructional Days 15** |

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|  | **Common Core Standard Covered** | **Major Topics/Concepts** | **Number of Days** |
| **3-1** | **Area and Perimeter Models**  CCSS.MATH.CONTENT.4.OA.1  CCSS.MATH.CONTENT.4.OA.2  CCSS.MATH.CONTENT.4.MD.3 | * Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations. * Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. * Apply the area and perimeter formulas for rectangles in real world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor*. | **3** |
| **3-2** | **Multiplying by 10, 100, and 1,000**  CCSS.MATH.CONTENT.4.NBT.5 | * Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | **3** |
| **3-3** | **Multiplying Two-Digit by One-Digit Number**  CCSS.MATH.CONTENT.4.NBT.5 | * Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | **3** |
| **3-4** | **Multiplying Three and Four-Digit by One-Digit**  CCSS.MATH.CONTENT.4.NBT.5 | * Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | **2** |
| **3-5** | **Multiplying Two-Digit by Two-Digit Number**  CCSS.MATH.CONTENT.4.NBT.5 | * Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | **2** |
| **3-6** | **Solve Multiplication Word Problems (Two-Step and Multi-Step)**  CCSS.MATH.CONTENT.4.OA.1  CCSS.MATH.CONTENT.4.OA.2  CCSS.MATH.CONTENT.4.OA.3  CCSS.MATH.CONTENT.4.NBT.5 | * Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 × 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations. * Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. * Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. * Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | **2** |

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| **Unit 4 –** | **Multi-Digit Whole Number Division** | **Total Number of Instructional Days 21** |

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|  | **Common Core Standard Covered** | **Major Topics/Concepts** | **Number of Days** |
| **4-1** | **Division Using Area Models**  CCSS.MATH.CONTENT.4.NBT.6 | * Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | **3** |
| **4-2** | **Whole Number Quotients and Remainders**  CCSS.MATH.CONTENT.4.NBT.6 | * Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | **4** |
| **4-3** | **Factors and Multiples**  CCSS.MATH.CONTENT.4.OA.4 | * Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite. | **2** |
| **4-4** | **Prime and Composite Numbers**  CCSS.MATH.CONTENT.4.OA.4 | * Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1-100 is prime or composite. | **2** |
| **4-5** | **Division of Multiples of 10, 100, and 1,000 by Single-Digit Numbers**  CCSS.MATH.CONTENT.4.OA.2  CCSS.MATH.CONTENT.4.NBT.6 | * Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison. * Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. | **2** |
| **4-6** | **Three and Four-Digit Division with Divisors of 2, 3, 4, and 5**  CCSS.MATH.CONTENT.4.OA.2  CCSS.MATH.CONTENT.4.NBT.6 | * Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. * Solve real-world and mathematical problems by writing and solving equations of the form x + p = q and px = q for cases in which p, q and x are all nonnegative rational numbers. | **2** |
| **4-7** | **Division with a Zero in the Dividend or in the Quotient**  CCSS.MATH.CONTENT.4.OA.2  CCSS.MATH.CONTENT.4.NBT.6 | * Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. * Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. | **2** |
| **4-8** | **Division with Divisors of 6, 7, 8, and 9**  CCSS.MATH.CONTENT.4.OA.2  CCSS.MATH.CONTENT.4.NBT.6 | * Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. * Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. | **2** |
| **4-9** | **Solve One-Step Division Word Problems**  CCSS.MATH.CONTENT.4.OA.2  CCSS.MATH.CONTENT.4.OA.3  CCSS.MATH.CONTENT.4.NBT.6 | * Use variables to represent numbers and write expressions when solving a real-world or mathematical problem; understand that a variable can represent an unknown number, or, depending on the purpose at hand, any number in a specified set. * Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding. * Use variables to represent two quantities in a real-world problem that change in relationship to one another; write an equation to express one quantity, thought of as the dependent variable, in terms of the other quantity, thought of as the independent variable. Analyze the relationship between the dependent and independent variables using graphs and tables, and relate these to the equation. | **2** |

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| **Unit 5 –** | **Fractions** | **Total Number of Instructional Days 34** |

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|  | **Common Core Standard Covered** | **Major Topics/Concepts** | **Number of Days** |
| **5-1** | **Decomposing Fractions to Show Equivalence**  CCSS.MATH.CONTENT.4.NF.3a  CCSS.MATH.CONTENT.4.NF.3b  CCSS.MATH.CONTENT.4.NF.4a | * Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. * Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. *Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8*. * Understand a fraction *a*/*b* as a multiple of 1/*b*. *For example, use a visual fraction model to represent 5/4 as the product 5 × (1/4), recording the conclusion by the equation 5/4 = 5 × (1/4)*. | **5** |
| **5-2** | **Fraction Equivalence Using Multiplication and Division**  CCSS.MATH.CONTENT.4.NF.1  CCSS.MATH.CONTENT.4.NF.3a | * Explain why a fraction *a*/*b* is equivalent to a fraction (*n* × *a*)/(*n* × *b*) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. * Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. | **4** |
| **5-3** | **Comparing Fractions**  CCSS.MATH.CONTENT.4.NF.2 | * Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. | **3** |
| **5-4** | **Addition and Subtraction of Fractions**  CCSS.MATH.CONTENT.4.NF.1  CCSS.MATH.CONTENT.4.NF.3a  CCSS.MATH.CONTENT.4.NF.3d | * Explain why a fraction *a*/*b* is equivalent to a fraction (*n* × *a*)/(*n* × *b*) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. * Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. * Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem. | **5** |
| **5-5** | **Fractions Greater Than One**  CCSS.MATH.CONTENT.4.NF.2  CCSS.MATH.CONTENT.4.NF.3b  CCSS.MATH.CONTENT.4.NF.3c  CCSS.MATH.CONTENT.4.NF.4a | * Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. * Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. *Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8*. * Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. * Understand a fraction *a*/*b* as a multiple of 1/*b*. *For example, use a visual fraction model to represent 5/4 as the product 5 × (1/4), recording the conclusion by the equation 5/4 = 5 × (1/4)*. | **5** |
| **5-6** | **Addition Involving Mixed Numbers**  CCSS.MATH.CONTENT.4.NF.3c | * Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. | **4** |
| **5-7** | **Subtraction Involving Mixed Numbers**  CCSS.MATH.CONTENT.4.NF.3c | * Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. | **4** |
| **5-8** | **Repeated Addition of Fractions as Multiplication**  CCSS.MATH.CONTENT.4.NF.4a  CCSS.MATH.CONTENT.4.NF.4b | * Understand a fraction *a*/*b* as a multiple of 1/*b*. *For example, use a visual fraction model to represent 5/4 as the product 5 × (1/4), recording the conclusion by the equation 5/4 = 5 × (1/4)*. * Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. *For example, use a visual fraction model to express 3 × (2/5) as 6 × (1/5), recognizing this product as 6/5. (In general, n × (a/b) = (n × a)/b.)* | **4** |

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| **Unit 6 –** | **Decimal Fractions** | **Total Number of Instructional Days 16** |

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|  | **Common Core Standard Covered** | **Major Topics/Concepts** | **Number of Days** |
| **6-1** | **Tenths**  CCSS.MATH.CONTENT.4.NF.5  CCSS.MATH.CONTENT.4.NF.6  CCSS.MATH.CONTENT.4.NF.7 | * Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100*. * Use decimal notation for fractions with denominators 10 or 100. *For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram*. * Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model. | **3** |
| **6-2** | **Hundredths**  CCSS.MATH.CONTENT.4.NF.5  CCSS.MATH.CONTENT.4.NF.6  CCSS.MATH.CONTENT.4.NF.7 | * Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100*. * Use decimal notation for fractions with denominators 10 or 100. *For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram*. * Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model. | **3** |
| **6-3** | **Fractions to Decimals and Decimals to Fractions**  CCSS.MATH.CONTENT.4.NF.1  CCSS.MATH.CONTENT.4.NF.5  CCSS.MATH.CONTENT.4.NF.6  CCSS.MATH.CONTENT.4.NF.7 | * Explain why a fraction *a*/*b* is equivalent to a fraction (*n* × *a*)/(*n* × *b*) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. * Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100*. * Use decimal notation for fractions with denominators 10 or 100. *For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram*. * Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model. | **2** |
| **6-4** | **Comparing and Ordering Decimals**  CCSS.MATH.CONTENT.4.NF.7 | * Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model. | **3** |
| **6-5** | **Addition with Tenths and Hundredths**  CCSS.MATH.CONTENT.4.NF.3c  CCSS.MATH.CONTENT.4.NF.5  CCSS.MATH.CONTENT.4.NF.6 | * Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction. * Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100*. * Use decimal notation for fractions with denominators 10 or 100. *For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram*. | **3** |
| **6-6** | **Money as Decimal Numbers**  CCSS.MATH.CONTENT.4.NF.5  CCSS.MATH.CONTENT.4.NF.6  CCSS.MATH.CONTENT.4.MD.A.2 | * Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.2 *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100*. * Use decimal notation for fractions with denominators 10 or 100. *For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram*. * Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. | **2** |

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| **Unit 7 –** | **Geometry** | **Total Number of Instructional Days 22** |

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|  | **Common Core Standard Covered** | **Major Topics/Concepts** | **Number of Days** |
| **7-1** | **The Undefined Terms in Geometry**  CCSS.MATH.CONTENT.4.G.1 | * Recognize a statistical question as one that anticipates variability in the data related to the question and accounts for it in the answers. * Understand that a set of data collected to answer a statistical question has a distribution which can be described by its center, spread, and overall shape. * Recognize that a measure of center for a numerical data set summarizes all of its values with a single number, while a measure of variation describes how its values vary with a single number. | **3** |
| **7-2** | **Angles**  CCSS.MATH.CONTENT.4.G.1 | * Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. | **2** |
| **7-3** | **Parallel and Perpendicular Lines**  CCSS.MATH.CONTENT.4.G.1 | * Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. | **2** |
| **7-4** | **Measuring and Sketching Angles**    CCSS.MATH.CONTENT.4.MD.C.5  CCSS.MATH.CONTENT.4.MD.C.6 | * Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement. * Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure. | **3** |
| **7-5** | **Addition of Angle Measures**  CCSS.MATH.CONTENT.4.MD.C.7 | * Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure. | **3** |
| **7-6** | **Symmetry in 2D Figures**  CCSS.MATH.CONTENT.4.G.1  CCSS.MATH.CONTENT.4.G.3 | * Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. * Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry. | **3** |
| **7-7** | **Triangles**  CCSS.MATH.CONTENT.4.G.2 | * Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. | **3** |
| **7-8** | **Quadrilaterals**  CCSS.MATH.CONTENT.4.G.2 | * Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specified size. Recognize right triangles as a category, and identify right triangles. | **3** |

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| **Unit 8 –** | **Unit Conversion and Measurements** | **Total Number of Instructional Days 17** |

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|  | **Common Core Standard Covered** | **Major Topics/Concepts** | **Number of Days** |
| **8-1** | **Measurements of Length**  **8-1a The Metric Units of Length**  CCSS.MATH.CONTENT.4.MD.A.1 | * Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...* | **2** |
|  | **8-1b The Customary Units of Length**  CCSS.MATH.CONTENT.4.MD.A.1 | * Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...* | **2** |
| **8-2** | **Measurements of Weight**  **8-2a The Metric Units of Weight**  CCSS.MATH.CONTENT.4.MD.A.1  **8-2b The Customary Units of Weight**  CCSS.MATH.CONTENT.4.MD.A.1 | * Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...* * Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...* | **2**  **2** |
| **8-3** | **Measurements of Capacity**  **8-2a The Metric Units of Capacity**  CCSS.MATH.CONTENT.4.MD.A.1  **8-2b The Customary Units of Capacity**  CCSS.MATH.CONTENT.4.MD.A.1 | * Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...* * Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...* | **2**  **2** |
| **8-4** | **Measurements of Time**  CCSS.MATH.CONTENT.4.MD.A.1 | * Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...* | **2** |
| **8-5** | **Solve Word Problems Involving Measurements**  CCSS.MATH.CONTENT.4.MD.A.1  CCSS.MATH.CONTENT.4.MD.A.2 | * Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...* * Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. | **3** |