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| **Content Area:** | | **MATHEMATICS** | | **Grade Level: 5** | **Pacing: 15 Days** |
| **Domains: Number and Operations in Base Ten, Operations and Algebraic Thinking** | | **Chapter 1: Place Value, Multiplication, and Expressions** | | | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | | |
| **5.OA.1** | Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. | | | | |
| **5.OA.2** | Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product. | | | | |
| **5.NBT.A.1** | Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. | | | | |
| **5.NBT.A.2** | Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. | | | | |
| **5.NBT.B.5** | Fluently multiply multi-digit whole numbers using the standard algorithm. | | | | |
| **5.NBT.B.6** | Find whole number quotients of whole numbers with up to four digit dividends and two 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. | | | | |
| **Differentiated Instruction** | | | **Essential Question** | | |

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| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | * How can you use place value, multiplication, and expressions to represent and solve problems? |
| Knowledge: Students will… | ASSESSEMENTS: |
| * Recognize the 10 to 1 relationship among place-value positions. * Read and write whole numbers through hundred millions. * Use properties of operations to solve problems. * Write and evaluate repeated factors in exponent form. * Use a basic fact and a pattern to multiply mentally by multiples of 10, 100, and 1,000. * Multiply by 1-digit numbers. * Multiply by 2-digit numbers. * Use multiplication to solve division problems. * Use the strategy *solve a simpler problem* to solve problems. * Write numerical expressions. * Use the order of operations to evaluate numerical expressions. * Evaluate numerical expressions with parentheses, brackets, and braces. | * Teacher observations * Student Assessments—Go Math Chapter tests * On-Demands * Enrichment test * Basic facts review |
| RESOURCES | |



**Go Math Resources**

* Animated Math Models
* iTools
* Student Workbooks
* Mega Math
* Grab and Go Differentiated Center Kit
* Math Concept Readers
* ELL Lessons- as needed
* Enrichment Lessons- as needed
* Reteach Lessons- as needed
* RTI Lessons-as needed

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| **Content Area:** | | **MATHEMATICS** | | **Grade Level: 5** | **Pacing: 12 days** |
| **Domains: Number and Operations in Base Ten, Number and**  **Operations- Fractions** | | **Chapter 2- Divide Whole Numbers** | | | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | | |
| **5.NBT.B.6** | Find whole number quotients of whole numbers with up to four digit dividends and two 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. | | | | |
| **5.NF.B.3** | Interpret a fraction as division of the numerator by the denominator (*a*/*b* = *a* ÷ *b*). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?* | | | | |
| **Differentiated Instruction** | | | **Essential Question** | | |
| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | | | * How can you divide whole numbers? | | |

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| **Knowledge: Students will …** | **ASSESSEMENTS:** |
| * Place the first digit in the quotient by estimating or using place value. * Divide 3- and 4-digit dividends by 1-digit divisors? * Model division with 2-digit divisors using base-ten blocks. * Use partial quotients to divide by 2-digit divisors. * Estimate quotients using compatible numbers. * Divide by 2-digit divisors. * Solve division problems and decide when to write a remainder as a fraction. * Adjust the quotient if the estimate is too high or too low. * Solve problems by using the strategy *draw a diagram*. | * Teacher observations * Student Assessments—Go Math Chapter tests * On-Demands * Enrichment test * Basic facts review |
| **RESOURCES** | |
| **Go Math Resources**   * Animated Math Models * iTools * Student Workbooks * Mega Math * Grab and Go Differentiated Center Kit * Math Concept Readers * ELL Lessons- as needed * Enrichment Lessons- as needed * Reteach Lessons- as needed * RTI Lessons-as needed | |



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| **Content Area:** | | **MATHEMATICS** | | **Grade Level: 5** | **Pacing: 15 days** |
| **Domain:**  **Number and Operations in Base Ten** | | **Chapter 3- Add and Subtract Decimals** | | | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | | |
| **5.NBT.A.1** | Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. | | | | |
| **5.NBT.A.3** | Read, write, and compare decimals to thousandths.   1. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., 347.392 = 3 × 100 + 4 × 10   + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000).   1. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. | | | | |
| **5.NBT.A.4** | Use place value understanding to round decimals to any place. | | | | |
| **5.NBT.B.7** | Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. | | | | |
| **Differentiated Instruction** | | | **Essential Question** | | |
| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | | | * How can you add and subtract decimals? | | |

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| **Knowledge: Students will …** | **ASSESSEMENTS:** |
| * Model, read, and write decimals to thousandths. * Compare and order decimals to thousandths using place value. * Round decimals to any place. * Model decimal addition using base-ten blocks. * Model decimal subtraction using base-ten blocks. * Make reasonable estimates of decimal sums and differences. * Add decimals using place value. * Subtract decimals using place value. * Identify, describe, and create numeric patterns with decimals. * Solve problems using the strategy *make a table.* * Choose a method to find a decimal sum or difference. | * Teacher observations * Student Assessments—Go Math Chapter tests * On-Demand: * Enrichment test * Basic facts review |
| **RESOURCES** | |
| **Go Math Resources**   * Animated Math Models * iTools * Student Workbooks * Mega Math * Grab and Go Differentiated Center Kit * Math Concept Readers * ELL Lessons- as needed * Enrichment Lessons- as needed * Reteach Lessons- as needed * RTI Lessons-as needed | |

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| **Content Area:** | | **MATHEMATICS** | **Grade Level: 5** | | **Pacing: 11 days** |
| **Domain:**  **Number and Operations in Base Ten** | | **Chapter 4- Multiply Decimals** | | | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | | |
| **5.NBT.A.2** | Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. | | | | |
| **5.NBT.B.7** | Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. | | | | |
| **Differentiated Instruction** | | | | **Essential Question** | |
| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | | | | * How can you solve decimal multiplication problems? | |
| **Knowledge: Students will …** | | | | **ASSESSEMENTS:** | |
| * Find patterns in products when multiplying by powers of 10. * Model multiplication of whole numbers and decimals. * Multiply a decimal and a whole number using drawings and place value. * Use expanded form and place value to multiply a decimal and a whole number. * Solve problems using the strategy *draw a diagram* to multiply money. * Model multiplication of decimals. * Place the decimal point in decimal multiplication. * Multiply decimals with zeros in the product. | | | | * Teacher observations * Student Assessments—Go Math Chapter tests * On-Demands * Enrichment test * Basic facts review | |

**RESOURCES**

**Go Math Resources**

* Animated Math Models
* iTools
* Student Workbooks
* Mega Math
* Grab and Go Differentiated Center Kit
* Math Concept Readers
* ELL Lessons- as needed
* Enrichment Lessons- as needed
* Reteach Lessons- as needed
* RTI Lessons-as needed

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| **Content Area:** | | **MATHEMATICS** | | **Grade Level: 5** | **Pacing: 11 days** |
| **Domain:**  **Number and Operations in Base Ten** | | **Chapter 5 – Divide Decimals** | | | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | | |
| **5.NBT.A.2** | Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. | | | | |
| **5.NBT.B.7** | Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. | | | | |
| **5.NF.B.3** | Interpret a fraction as division of the numerator by the denominator (*a*/*b* = *a* ÷ *b*). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?* | | | | |
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| **Differentiated Instruction** | | | **Essential Question** | | |
| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | | | * How can you solve decimal division problems? | | |

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| **Knowledge: Students will …** | **ASSESSEMENTS:** |
| * Find patterns in quotients when dividing by powers of 10. * Model division of decimals by whole numbers. * Estimate decimal quotients. * Divide decimals by whole numbers. * Model division by decimals. * Place the decimal point in decimal division. * Write a zero in the dividend to find a quotient. * Solve multistep decimal problems using the strategy   *work backward.* | * Teacher observations * Student Assessments—Go Math Chapter tests * On-Demands * Enrichment test * Basic facts review |
| **RESOURCES** | |
| **Go Math Resources**   * Animated Math Models * iTools * Student Workbooks * Mega Math * Grab and Go Differentiated Center Kit * Math Concept Readers * ELL Lessons- as needed * Enrichment Lessons- as needed * Reteach Lessons- as needed * RTI Lessons-as needed | |

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| **Content Area:** | | MATHEMATICS | | **Grade Level: 5** | **Pacing: 13 days** |
| **Domain:** | | **Chapter 6- Add and Subtract Fractions with Unlike Denominators** | | | |
| **Number and Operations- Fractions** | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | | |
| **5.NF.A.1** | Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example, 2/3 + 5/4 = 8/12 + 15/12 = 23/12. (In general, a/b + c/d = (ad + bc)/bd.)* | | | | |
| **5.NF.A.2** | Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2*. | | | | |
| **Differentiated Instruction** | | | **Essential Question** | | |
| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | | | * How can you add and subtract decimals through thousandths? | | |

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| **Knowledge: Students will …** | **ASSESSEMENTS:** |
| * Use models to add fractions with unlike denominators. * Make reasonable estimates of fraction sums and differences. * Find a common denominator to write equivalent fractions. * Use equivalent fractions to add and subtract fractions. * Add and subtract mixed numbers with unlike denominators. * Rename to find the difference of two mixed numbers. * Identify, describe, and create numeric patterns with fractions. * Solve problems using the strategy *work backward*. * Add fractions and mixed numbers with unlike denominators using the properties. | * Teacher observations * Student Assessments—Go Math Chapter tests * On-Demands * Enrichment test * Basic facts review |
| **RESOURCES** | |
| **Go Math Resources**   * Animated Math Models * iTools * Student Workbooks * Mega Math * Grab and Go Differentiated Center Kit * Math Concept Readers * ELL Lessons- as needed * Enrichment Lessons- as needed * Reteach Lessons- as needed * RTI Lessons-as needed | |

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| **Content Area:** | | MATHEMATICS | | **Grade Level: 5** | **Pacing: 13 days** |
| **Domain:** | | **Chapter 7- Percent and Probability** | | | |
| **Number and Operations- Fractions** | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | | |
| **5.NF.B.4** | Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.   1. interpret the product (*a*/*b*) × *q* as a parts of a partition of *q* into *b* equal parts; equivalently, as the result of a sequence of operations *a* × *q* ÷ *b*. *For example, use a visual fraction model to show (2/3) × 4 = 8/3, and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15. (In general, (a/b) × (c/d) = ac/bd.)* 2. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. | | | | |
| **5.NF.B.5** | Interpret multiplication as scaling (resizing), by:   1. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. 2. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence *a*/*b* = (*n* × *a*)/(*n* × *b*) to the effect of multiplying *a*/*b* by 1. | | | | |
| **5.NF.B.6** | Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem. | | | | |
| **Differentiated Instruction** | | | **Essential Question** | | |
| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | | | * What are some ways that probabilities can be expressed? | | |

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| **Knowledge: Students will …** | **ASSESSEMENTS:** |
| * Model to find the operational part of a group. * Model the product of a fraction and a whole number. * Multiply fractions and whole numbers. * Multiply fractions using models. * Relate the size of the product compared to the size of one factor when multiplying fractions. * Multiply fractions. * Use a model to multiply two mixed numbers and find the area of a rectangle. * Relate the size of the product to the factors when multiplying fractions greater than one. * Multiply mixed numbers. * Solve problems using the strategy *guess, check, and revise*. | * Teacher observations * Student Assessments—Go Math Chapter tests * On-Demands * Enrichment test * Basic facts review |
| **RESOURCES** | |
| **Go Math Resources**   * Animated Math Models * iTools * Student Workbooks * Mega Math * Grab and Go Differentiated Center Kit * Math Concept Readers * ELL Lessons- as needed * Enrichment Lessons- as needed * Reteach Lessons- as needed * RTI Lessons-as needed | |

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| **Content Area:** | | MATHEMATICS | | **Grade Level: 5** | **Pacing: 8 days** |
| **Domain:** | | **Chapter 8- Divide Fractions** | | | |
| **Number and Operations- Fractions** | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | | |
| **5.NF.B.3** | Interpret a fraction as division of the numerator by the denominator (*a*/*b* = *a* ÷ *b*). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?* | | | | |
| **5.NF.B.7** | Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.   1. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for (1/3) ÷ 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) × 4 = 1/3*. 2. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4*. 3. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?* | | | | |
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| **Differentiated Instruction** | | | **Essential Question** | | |
| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | | | * How can you solve equations and inequalities? | | |

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| **Knowledge: Students will …** | **ASSESSEMENTS:** |
| * Divide a whole number by a fraction and divide a fraction by a | * Teacher observations |
| whole number.   * Solve problems using the strategy *draw a diagram*. * Interpret a fraction as division and solve whole-number division problems that result in a fraction or mixed number. | * Student Assessments—Go Math Chapter tests * On-Demand: * Enrichment test * Basic facts review |
| * Divide a whole number by a fraction and divide a fraction by a |  |
| whole number. |  |
| * Represent division by drawing diagrams and writing story |  |
| problems and equations. |  |
| **RESOURCES** | |
| **Go Math Resources**   * Animated Math Models * iTools * Student Workbooks * Mega Math * Grab and Go Differentiated Center Kit * Math Concept Readers * ELL Lessons- as needed * Enrichment Lessons- as needed * Reteach Lessons- as needed * RTI Lessons-as needed | |

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| **Content Area:** | | MATHEMATICS | **Grade Level: 5** | **Pacing: 10 days** |
| **Domains: Measurement and Data, Geometry, Operations and Algebraic Thinking** | | **Chapter 9- Algebra: Patterns and Graphing** | | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | |
| **5.OA.1** | Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. | | | |
| **5.OA.B.3** | Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. *For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so*. | | | |
| **5.NF.B.7** | Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.  a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for (1/3) ÷ 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) × 4 = 1/3*. | | | |
| **5.MD.B.2** | Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally*. | | | |
| **5.G.A.1** | Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate). | | | |
| **5.G.A.2** | Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. | | | |
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| **Differentiated Instruction** | **Essential Question** |
| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | * How can you use line plots, coordinate grids, and patterns to help you graph and interpret data? |
| **Knowledge: Students will …** | **ASSESSEMENTS:** |
| * Make and use line plots with fractions to solve problems. * Graph and name points on a coordinate grid using ordered pairs. * Collect and graph data on a coordinate grid. * Analyze and display data in a line graph. * Use two rules to generate a numerical pattern and identify the relationship between the corresponding terms in the patterns. * Solve problems using the strategy *solve a simpler problem*. | * Teacher observations * Student Assessments—Go Math Chapter tests * On-Demands * Enrichment test * Basic facts review |
| **RESOURCES** | |
| **Go Math Resources**   * Animated Math Models * iTools * Student Workbooks * Mega Math * Grab and Go Differentiated Center Kit * Math Concept Readers * ELL Lessons- as needed * Enrichment Lessons- as needed * Reteach Lessons- as needed * RTI Lessons-as needed | |

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| **Content Area:** | | MATHEMATICS | | **Grade Level: 5** | **Pacing: 10 days** |
| **Domain:**  **Measurement and Data** | | **Chapter 10- Convert Units of Measure** | | | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | | |
| **5.MD.A.1** | Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. | | | | |
| **Differentiated Instruction** | | | **Essential Question** | | |
| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | | | * What strategies can you use to compare and convert measurements? | | |
| **Knowledge: Students will …** | | | **ASSESSEMENTS:** | | |
| * Compare, contrast, and convert customary units of length. * Compare, contrast, and convert customary units of capacity. * Compare, contrast, and convert customary units of weight. * Covert measurement units to solve multistep problems. * Compare, contrast, and convert metric units. * Solve problems about customary and metric conversions using the strategy *make a table*. * Convert units of time to solve elapsed time problems. | | | * Teacher observations * Student Assessments—Go Math Chapter tests * On-Demands * Enrichment test * Basic facts review | | |

**RESOURCES**

**Go Math Resources**

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* Student Workbooks
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| **Content Area:** | | MATHEMATICS | | **Grade Level: 5** | **Pacing: 15 days** |
| **Domain:** | | **Chapter 11- Algebra: Perimeter, Area, and Volume** | | | |
| **Number and Operations in Base Ten** | |
| **New Jersey Student Learning Standards (NJSLS)** | | | | | |
| **5.MD.C.3** | Recognize volume as an attribute of solid figures and understand concepts of volume measurement.   1. A cube with side length 1 unit, called a unit cube, is said to have “one cubic unit” of volume and can be used to measure volume. 2. A solid figure, which can be packed without gaps or overlaps using *n* unit cubes is said to have a volume of *n* cubic units. | | | | |
| **5.MD.C.4** | Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft., and non-standard units. | | | | |
| **5.MD.C.5** | Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.  a. Find the volume of a right rectangular prism with whole number side lengths by packing it with unit cubes, and show that the volume is the same as it would be found by multiplying the height by the area of the base. Represent threefold whole number products as volumes,  e.g. to represent the associative property of multiplication.   1. Apply the formula V= l x w x h and V= B x h for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems. 2. Recognize volume as additive. Find volumes of solid figures composed of 2 non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. | | | | |
| **5.G.B.3** | Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles. | | | | |
| **5.G.B.4** | Classify two-dimensional figures in a hierarchy based on properties. | | | | |
| **Differentiated Instruction** | | | **Essential Question** | | |
| * Enrichment Activities * Reteach Activities * Grab and Go and Teacher made games * Chapter Literature * Grab and Go Activity Cards * Soar to Success Math * Mega Math * iPad * Laptops * Projects | | | * How can you use properties of polygons and solid figures to find perimeter, area, and volume? | | |

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| **Knowledge: Students will …** | **ASSESSEMENTS:** |
| * Identify and classify polygons. * Classify and draw triangles using their properties. * Classify and compare quadrilaterals using their properties. * Solve problems using the strategy *act it out*. * Identify, describe, and classify three-dimensional figures. * Understand unit cubes and how they can be used to build a solid figure. * Count unit cubes that fill a solid figure to find volume. * Estimate the volume of a rectangular prism. * Find the volume of rectangular prisms. * Use a formula to find the volume of a rectangular prism. * Use the strategy *make a table* to compare volumes. * Find the volume of combined rectangular prisms. | * Teacher observations * Student Assessments—Go Math Chapter tests * On-Demands * Enrichment test * Basic facts review |
| **RESOURCES** | |
| **Go Math Resources**   * Animated Math Models * iTools * Student Workbooks * Mega Math * Grab and Go Differentiated Center Kit * Math Concept Readers * ELL Lessons- as needed * Enrichment Lessons- as needed * Reteach Lessons- as needed * RTI Lessons-as needed | |

All Standards are included in the table on the following pages.

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| **5.OA.1** | Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols. |
| **5.OA.2** | Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. For example, express the calculation “add 8 and 7, then multiply by 2” as 2 × (8 + 7). Recognize that 3 × (18932 + 921) is three times as large as 18932 + 921, without having to calculate the indicated sum or product. |
| **5.OA.B.3** | Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. *For example, given the rule “Add 3” and the starting number 0, and given the rule “Add 6” and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so*. |
| **5.NBT.A.1** | Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. |
| **5.NBT.A.2** | Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. |
| **5.NBT.A.3** | Read, write, and compare decimals to thousandths.   1. Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., 347.392 = 3 × 100 + 4 × 10   + 7 × 1 + 3 × (1/10) + 9 × (1/100) + 2 × (1/1000).   1. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. |
| **5.NBT.A.4** | Use place value understanding to round decimals to any place. |
| **5.NBT.B.5** | Fluently multiply multi-digit whole numbers using the standard algorithm. |
| **5.NBT.B.6** | Find whole number quotients of whole numbers with up to four digit dividends and two 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. |
| **5.NBT.B.7** | Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. |
| **5.NF.A.1** | Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. *For example, 2/3 + 5/4 = 8/12 + 15/12 = 23/12. (In general, a/b + c/d = (ad + bc)/bd.)* |
| **5.NF.A.2** | Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. *For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2*. |
| **5.NF.B.3** | Interpret a fraction as division of the numerator by the denominator (*a*/*b* = *a* ÷ *b*). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. *For example, interpret 3/4 as the result of dividing 3 by 4, noting that 3/4 multiplied by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size 3/4. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?* |

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| **5.NF.B.4** | Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.   1. interpret the product (*a*/*b*) × *q* as a parts of a partition of *q* into *b* equal parts; equivalently, as the result of a sequence of operations *a* × *q* ÷ 2. *For example, use a visual fraction model to show (2/3) × 4 = 8/3, and create a story context for this equation. Do the same with (2/3) × (4/5)*   *= 8/15. (In general, (a/b) × (c/d) = ac/bd.)*  b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas. |
| **5.NF.B.5** | Interpret multiplication as scaling (resizing), by:   1. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. 2. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence *a*/*b* = (*n* × *a*)/(*n* × *b*) to the effect of multiplying *a*/*b* by 1. |
| **5.NF.B.6** | Solve real world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem. |
| **5.NF.B.7** | Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.   1. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for (1/3)*   *÷ 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) × 4 = 1/3*.   1. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for 4 ÷ (1/5), and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 × (1/5) = 4*. 2. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share 1/2 lb of chocolate equally? How many 1/3-cup servings are in 2 cups of raisins?* |
| **5.MD.A.1** | Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems. |
| **5.MD.B.2** | Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. *For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally*. |

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| **5.MD.C.3** | Recognize volume as an attribute of solid figures and understand concepts of volume measurement.   1. A cube with side length 1 unit, called a unit cube, is said to have “one cubic unit” of volume and can be used to measure volume. 2. A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. |
| **5.MD.C.4** | Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft., and improvised units. |
| **5.MD.C.5** | Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.   1. Find the volume of a right rectangular prism with whole number side lengths by packing it with unit cubes, and show that the volume is the same as it would be found by multiplying the height by the area of the base. Represent threefold whole number products as volumes, e.g. to represent the associative property of multiplication. 2. Apply the formula V= l x w x h and V= B x h for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths in the context of solving real world and mathematical problems. 3. Recognize volume as additive. Find volumes of solid figures composed of 2 non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems. |
| **5.G.A.1** | Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., *x*-axis and *x*-coordinate, *y*-axis and *y*-coordinate). |
| **5.G.A.2** | Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation. |
| **5.G.B.3** | Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles. |
| **5.G.B.4** | Classify two-dimensional figures in a hierarchy based on properties. |

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| **Assessments** | Formative, summative, alternative assessments, performance assessments, project assessments, performance tasks, exit tickets, observations, MAP, benchmarks, Model Curriculum Assessment & Resources |
| **21st Century Skills and Career Integration** | Informational sources, text features, appropriate financial literacy skills |
| **Technology Integration** | Digital tools; iPads, computers, Reflex Math, Learn Zillion, Illustrated Mathematics |
| **Interdisciplinary Connections** | Social Studies and Science- Informational Text |
| **Core Instructional and Supplemental Materials** | Core Instruction: Go Math Series, GoMath Support / Intervention Materials, Model Curriculum Resources, Curriculum Resources Folder |
| **Modifications/Accommodations** | ELL: Alternate responses, extended time, teacher modeling, simplified directions, vocabulary banks, manipulatives, nonverbal responses, sentence frames, prompts, partner talk  Special Education: Enlarged graph paper, small group instruction, highlighted  instructions/keywords and/or computation signs, hands on activities, visual cues, number line, modified assessment, models  G&T: Enrichment activities, centers, projects, flexible grouping, interest centers, learning log, extension activities, small group  504/Students at Risk: Enlarged graph paper, small group instruction, highlighted  instructions/keywords and/or computation signs, hands on activities, visual cues, number line, modified assessment, models |