New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 1 Place Value, Addition, and Subtraction to One Million (11 days)
Domain:	Number and Operations in Base Ten (4.NBT)		

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.*
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.
4.NBT.3	Use place value understanding to round multi-digit whole numbers to any place.
4.NBT.4	Fluently add and subtract multi-digit whole numbers using the standard algorithm.
4.OA.3	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.

Essential Questions	Objectives: Students will be able to …

• How can you describe the value of a digit? • How can you read and write numbers through hundred thousands? • How can you compare and order numbers? • How can you round numbers? • How can you rename a whole number? • How can you add whole numbers? • How can you subtract whole numbers? • How can you use the strategy *draw a diagram* to solve problems with addition and subtraction?	• model the 10-1 relationship among place-value positions in the base ten number system. • read and write whole numbers in standard form, word form, and expanded form. • compare and order whole numbers based on the values of the digits in each number. • round a whole number to any place. • rename whole numbers by regrouping. • add whole numbers and determine whether solutions to addition problems are reasonable. • subtract whole numbers and determine whether solutions to subtraction problems are reasonable. • apply the strategy *draw a diagram* to solve comparison problems with addition and subtraction.

Differentiation	ASSESSMENT
• Soar to Success Math • Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math	• Prerequisite Skills Inventory (Assessment Guide) • Beginning-of-Year Test (Benchmark) (Assessment Guide) • Show What You Know (Chapter 1 Pretest-Student Edition) • Chapter 1 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide)

RESOURCES/MATERIALS

- Go Math Chapter 1 Lessons (1,2,3,4,5,6,7,8)
- Suggested Homework: Go Math Standards Practice book
- MathBoard
- Problems of the Day (eTransparencies)
- Animated Math Models
- Base-ten blocks
- *i*Tools

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 2 Multiply by 1-Digit Numbers (15 days)
Domains:	**Operations and Algebraic Thinking (4.OA) Number and Operations in Base Ten (4.NBT)**		

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.
4.OA.1	Interpret a multiplication equation as a comparison, e.g., interpret 35=5x7 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.
4.OA.2	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.
4.OA.3	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.

Essential Questions	Objectives: Students will be able to…
• How can you model multiplicative comparisons? • How does a model help you solve a comparison problem? • How does understanding place value help you multiply tens, hundreds, and thousands? • How can you estimate products by rounding and determine if exact answers are reasonable? • How can you use the Distributive Property to multiply a 2-digit number by a 1-digit number? • How can you use expanded form to multiply a multi-digit number by a 1-digit number? • How can you use place value and partial products to multiply by a 1-digit number? • How can you use mental math and properties to help you multiply numbers? • When can you use the *draw a diagram* strategy to solve a multistep multiplication problem? • How can you use regrouping to multiply a 2-digit number by a 1-digit number? • How can you use regrouping to multiply? • How can you represent and solve multistep problems using equations?	• relate multiplication equations and comparison statements. • solve problems involving multiplicative comparison and additive comparison. • multiply tens, hundreds, and thousands by whole numbers through 10. • estimate products by rounding and determine if exact answers to multiplication problems are reasonable. • apply the Distributive Property to multiply a 2-digit number by a 1-digit number. • multiply a multi-digit number by a 1-digit number using expanded form. • multiply a multi-digit number by a 1-digit number using place value and partial products. • apply mental math and properties to multiply a multi-digit number by a 1-digit number. • apply the *draw a diagram* strategy to solve multi-step problems. • multiply a 2-digit number by a 1-digit number using regrouping. • multiply a multi-digit number by a 1-digit number using regrouping. • represent and solve multistep problems using equations.

Differentiation	Assessment
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 2 Pretest-Student Edition) • Chapter 2 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 1

RESOURCES/MATERIALS

- Go Math Chapter 2 Lessons (1,2,3,4,5,6,7,8,10,11,12)
- Suggested Homework: Go Math Standards Practice book
- MathBoard
- Problems of the Day (eTransparencies)
- Animated Math Models
- Base-ten blocks
- Grid paper
- Color pencils
- *i*Tools

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 3 Multiply 2-Digit Numbers (10 days)
Domains:	**Operations and Algebraic Thinking (4.OA) Number and Operations in Base Ten (4.NBT)**		

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.
4.OA.3	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.

Essential Questions	Objectives: Students will be able to…
• What strategies can you use to multiply bytens? • What strategies can you use to estimateproducts? • How can you use area models and partial products to multiply 2- digit numbers? • How can you use place value and partial products to multiply 2- digit numbers? • How can you use regrouping to multiply 2-digitnumbers? • How can you find and record products of two 2-digit numbers? • How can you use the strategy *draw a diagram* to solve multistep multiplication problems?	• apply place value and multiplication properties to multiply by tens. • estimate products by rounding or by using compatible numbers. • apply area models and partial products to multiply 2-digit numbers. • multiply 2-digit numbers using place value and partial products. • multiply 2-digit numbers using regrouping. • choose a method to multiply 2-digitnumbers. • apply the strategy *draw a diagram* to solve multistep multiplication problems.

Differentiation	Assessment
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 3 Pretest-Student Edition) • Chapter 3 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 2

RESOURCES/MATERIALS

- Go Math Chapter 3 Lessons (1,2,3,4,5,6,7)
- Suggested Homework: Go Math Standards Practice book
- MathBoard
- Problems of the Day (eTransparencies)
- Animated Math Models
- Color pencils
- *i*Tools

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 4 Divide by 1-Digit Numbers (15 days)
Domains:	Operations and Algebraic Thinking (4.OA) Number and Operations in Base Ten (4.NBT)		

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 calculations by using equations, rectangular arrays, and/or area models.
4.OA.3	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.

Essential Questions	Objectives: Students will be able to…
• How can you use multiples to estimate quotients? • How can you use models to divide whole numbers that do not divide evenly? • How can you use remainders in division problems? • How can you divide numbers through thousands by whole numbers through 10? • How can you use compatible numbers to estimate quotients? • How can you use the Distributive Property to find quotients? • How can you use repeated subtraction and multiples to find quotients? • How can you use partial quotients to divide by 1-digit divisors? • How can you use base-ten blocks to model division with regrouping? • How can you use place-value to know where to place the first digit in the quotient? • How can you divide multi-digit numbers and check your answers? • How can you use the strategy *draw a diagram* to solve multistep division problems?	• estimate quotients using multiples. • divide whole numbers that do not divide evenly using models. • solve division problems using remainders. • divide tens, hundreds, and thousands by whole numbers through 10. • estimate quotients using compatible numbers. • apply the Distributive Property to find quotients. • find quotients using repeated subtraction and multiples. • divide using partial quotients. • model division with regrouping using base-ten blocks. • apply place value to determine where to place the first digit of a quotient. • divide multi-digit numbers by 1-digit divisors. • solve problems by using the strategy *draw a diagram*.

Differentiation	Assessment
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 4 Pretest-Student Edition) • Chapter 4 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 3

RESOURCES/MATERIALS

- Go Math Chapter 4 Lessons (1,2,3,4,5,6,7,8,9,10,11,12)
- Suggested Homework: Go Math Standards Practice book
- MathBoard
- Problems of the Day (eTransparencies)
- Animated Math Models
- Base-Ten Blocks
- Grid Paper
- Color pencils
- Counters
- *i*Tools

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 5 Factors, Multiples, and Patterns (9 days)
Domain:	**Operations and Algebraic Thinking (4.OA)**		

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.
4.OA.5	Generate a number pattern or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.

Essential Questions	Objectives: Students will be able to…
• How can you use models to find factors? • How can you tell whether one number is a factor of another number? • How can you use the *make a list* strategy to solve problems with common factors? • How are factors and multiples related? • How can you tell whether a number is prime or composite? • How can you make and describe patterns?	• identify all the factors of a number by using models. • determine whether a number is a factor of a given number. • solve problems by using the strategy *make a list*. • explain the relationship between factors and multiples and determine whether a number is a multiple of a given number. • determine whether a number is prime or composite. • generate a number pattern and describe features of the pattern.

Differentiation	Assessment
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 5 Pretest-Student Edition) • Chapter 5 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 4

RESOURCES/MATERIALS

- Go Math Chapter 5 Lessons (1,2,3,4,5,6)
- Suggested Homework: Go Math Standards Practice book
- MathBoard
- Problems of the Day (eTransparencies)
- Animated Math Models
- Square Tiles
- Grid Paper
- Color pencils
- *i*Tools

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 6 Fraction Equivalence and Comparison (11 days)
Domain:	Number and Operations -- Fractions (4.NF)		

4.NF.1	Explain why a fraction a/b is equivalent to a fraction (n X a)/(n X 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.
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 ½. 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.

Essential Questions	Objectives: Students will be able to…
• How can you use models to show equivalent fractions? • How can you use multiplication to find equivalent fractions? • How can you write a fraction as an equivalent fraction in simplest form? • How can you write a pair of fractions as fractions with a common denominator? • How can you use the strategy *make a table* to solve problems using equivalent fractions? • How can you use benchmark fractions to compare fractions? • How can you compare fractions? • How can you order fractions?	• find equivalent fractions using models. • generate equivalent fractions using multiplication • write and identify equivalent fractions in simplest form. • represent a pair of fractions as fractions with a common denominator using concepts of equivalent fractions. • apply the strategy *make a table* to solve problems using equivalent fractions. • compare fractions using benchmarks. • compare fractions by first writing them as fractions with a common numerator or a common denominator. • compare and order fractions.

Differentiation	Assessment
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 6 Pretest-Student Edition) • Chapter 6 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 5

RESOURCES/MATERIALS

- Go Math Chapter 6 Lessons (1,2,3,4,5,6,7,8)
- Suggested Homework: Go Math Standards Practice book
- MathBoard
- Problems of the Day (eTransparencies)
- Animated Math Models
- Fraction Strips
- Color pencils
- *i*Tools

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 7 Add and Subtract Fractions (13 days)
Domain:	Number and Operations -- Fractions (4.NF)		

4.NF.3	Understand a fraction a/b with a > 1 as a sum of fractions 1/b. a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. b. 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* c. 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. d. 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.

Essential Questions	Objectives: Students will be able to…
• When can you add or subtract parts of a whole? • How can you write a fraction as a sum of fractions with the same denominators? • How can you add fractions with like denominators using models? • How can you subtract fractions with like denominators using models? • How can you add and subtract fractions with like denominators? • How can you rename mixed numbers as fractions greater than 1 and rename fractions greater than 1 as mixed numbers? • How can you add and subtract mixed numbers with like denominators? • How can you rename a mixed number to help you subtract? • How can you add fractions with like denominators using the properties of addition? • How can you use the strategy *act it out* to solve multistep problems with fractions?	• explain that to add or subtract fractions, they must refer to parts of the same whole. • decompose a fraction by writing it as a sum of fractions with the same denominators. • represent and find sums involving fractions using models. • represent and find differences involving fractions using models. • solve word problems involving addition and subtraction with fractions. • write fractions greater than 1 as mixed numbers and write mixed numbers as fractions greater than 1. • add and subtract mixed numbers. • rename mixed numbers to subtract. • apply the properties of addition to add fractions. • apply the strategy *act it out* to solve multistep fraction problems.

Differentiation	Assessment
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 7 Pretest-Student Edition) • Chapter 7 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 6

RESOURCES/MATERIALS

- Go Math Chapter 7 Lessons (1,2,3,4,5,6,7,8,9,10)
- Suggested Homework: Go Math Standards Practice book
- MathBoard
- Problems of the Day (eTransparencies)
- Animated Math Models
- Fraction Circles
- Fraction Strips
- Color pencils
- *i*Tools

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 8 Multiply Fractions by Whole Numbers (8 days)
Domain:	Number and Operations -- Fractions (4.NF)		

4.NF.4	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. a. Understand a fraction a/b as a multiple of 1/b. b. Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. c. Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem.

Essential Questions	Objectives: Students will be able to…
• How can you write a fraction as a product of a whole number and a unit fraction? • How can you write a product of a whole number and a fraction as a product of a whole number and a unit fraction? • How can you use a model to multiply a fraction by a whole number? • How can you multiply a fraction by a whole number to solve a problem? • How can you use the strategy *draw a diagram* to solve comparison problems with fractions?	• write a fraction as a product of a whole number and a unit fraction. • write a product of a whole number and a fraction as a product of a whole number and a unit fraction. • multiply a fraction by a whole number using a model. • multiply a fraction by a whole number to solve a problem. • solve comparison problems with fractions using the strategy *draw a diagram*.
Differentiation	**Assessment**
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 8 Pretest-Student Edition) • Chapter 8 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 7

RESOURCES/MATERIALS
• Go Math Chapter 8 Lessons (1,2,3,4,5) • Suggested Homework: Go Math Standards Practice book • MathBoard • Problems of the Day (eTransparencies) • Animated Math Models • *i*Tools

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 9 Relate Fractions and Decimals (10 days)
Domain:	**Number and Operations -- Fractions (4.NF)** **Measurement and Data (4.MD)**		

4.NF.5	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.
4.NF.6	Use decimal notation for fractions with denominators 10 and 100.
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.
4.MD.2	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.

Essential Questions	Objectives: Students will be able to…
• How can you record tenths as fractions and decimals? • How can you record hundredths as fractions and decimals? • How can you record tenths and hundredths as fractions and decimals? • How can you relate fractions, decimals, and money? • How can you use the strategy *act it out* to solve problems that use money? • How can you add fractions when the denominators are 10 or 100? • How can you compare decimals?	• record tenths as fractions and as decimals. • record hundredths as fractions and as decimals. • record tenths and hundredths as fractions and decimals. • translate among representations of fractions, decimals, and money. • solve problems by using the strategy *act It out*. • add fractions when the denominators are 10 or 100. • compare decimals to hundredths by reasoning about their size.
Differentiation	**Assessment**
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 9 Pretest-Student Edition) • Chapter 9 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 8
RESOURCES/MATERIALS	
• Go Math Chapter 9 Lessons (1,2,3,4,5,6,7) • Suggested Homework: Go Math Standards Practice book • MathBoard • Problems of the Day (eTransparencies) • Animated Math Models • Coins • Bills • *i*Tools	

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 10 Two Dimensional Figures (10 days)
Domain:	Geometry (4.G) Operations and Algebraic Thinking (4.OA)		

4.G.1	Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.
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.
4.G.3	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.
4.OA.5	Generate a number pattern or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.

Essential Questions	Objectives: Students will be able to…
• How can you identify and draw points, lines, line segments, rays, and angles? • How can you classify triangles by the size of their angles? • How can you identify and draw parallel lines and perpendicular lines? • How can you sort and classify quadrilaterals? • How can you check if a shape has line symmetry? • How do you find lines of symmetry? • How can you use the strategy *act it out* to solve pattern problems?	• identify and draw points, lines, line segments, rays, and angles. • classify triangles by the size of their angles. • identify and draw parallel lines and perpendicular lines. • sort and classify quadrilaterals. • determine whether a figure has a line of symmetry. • identify and draw lines of symmetry in two-dimensional figures. • solve pattern problems using the strategy *act it out*.
Differentiation	**Assessment**
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 10 Pretest-Student Edition) • Chapter 10 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 9
RESOURCES/MATERIALS	
• Go Math Chapter 10 Lessons (1,2,3,4,5,6,7) • Suggested Homework: Go Math Standards Practice book • MathBoard • Problems of the Day (eTransparencies) • Animated Math Models • Rulers • Color pencils • Scissors • Tracing paper • Dot paper • Counters • Pattern Blocks • *i*Tools	

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 11 Angles (8 days)
Domain:	Measurement and Data (4.MD)		

4.MD.5	Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurements: a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. b. An angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees.
4.MD.6	Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.
4.MD.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.

Essential Questions	Objectives: Students will be able to…
• How can you relate angles and fractional parts of a circle? • How are degrees related to fractional parts of a circle? • How can you use a protractor to measure and draw angles? • How can you determine the measure of an angle separated in to parts? • How can you use the strategy *draw a diagram* to solve angle measurement problems?	• relate angles and fractional parts of a circle. • relate degrees to fractional parts of a circle by understanding that an angle that measures *n*°turns through n/360 of a circle. • use a protractor to measure an angle and draw an angle with a given measure. • determine the measure of an angle separated into parts. • solve angle measurement problems using the strategy *draw a diagram*.
Differentiation	**Assessment**
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 11 Pretest-Student Edition) • Chapter 11 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 10
RESOURCES/MATERIALS	
• Go Math Chapter 11 Lessons (1,2,3,4,5) • Suggested Homework: Go Math Standards Practice book • MathBoard • Problems of the Day (eTransparencies) • Animated Math Models • Fraction Circles • Protractors • Scissors • Construction paper • *i*Tools	

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 12 Relative Sizes of Measurement Units (14 days)
Domain:	Measurement and Data (4.MD)		

4.MD.1	Know relative sizes of measurement units within one system of units including km, m, cm, mm; 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.
4.MD.2	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.
4.MD.4	Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots.

Essential Questions	Objectives: Students will be able to…
• How can you use benchmarks to understand the relative sizes of measurement units? • How can you use models to compare customary units of length? • How can you use models to compare customary units of weight? • How can you use models to compare customary units of liquid volume? • How can you make and interpret line plots with fractional data? • How can you use models to compare metric units of length? • How can you use models to compare metric units of mass and liquid volume? • How can you use models to compare units of time? • How can you use the strategy *draw a diagram* to solve elapsed time problems? • How can you solve problems involving mixed measures? • How can you use patterns to write number pairs for measurement units?	• determine the relative sizes of measurement units using benchmarks. • compare customary units of length using models. • compare customary units of weight using models. • compare customary units of liquid volume using models. • create and interpret line plots with fractional data. • compare metric units of length using models. • compare metric units of mass and liquid volume using models. • compare units of time using models. • solve elapsed time problems using the strategy *draw a diagram*. • solve problems involving mixed measures. • write number pairs for measurement units using patterns.
Differentiation	**Assessment**
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 12 Pretest-Student Edition) • Chapter 12 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 11

RESOURCES/MATERIALS
• Go Math Chapter 12 Lessons (1,2,3,4,5,6,7,8,9,10,11) • Suggested Homework: Go Math Standards Practice book • MathBoard • Problems of the Day (eTransparencies) • Animated Math Models • Rulers (customary and metric) • Yardsticks/Metersticks • 1-Inch Grid Paper • Scissors • Tape • Color Pencils • *i*Tools

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 13 Perimeter and Area (9 days)
Domain:	**Measurement and Data (4.MD)**		
4.MD.3	Apply the area and perimeter formulas for rectangles in real world and mathematical problems.		

Essential Questions	Objectives: Students will be able to…
• How can you use a formula to find the perimeter of a rectangle? • How can you use a formula to find the area of a rectangle? • How can you find the area of combined rectangles? • How can you find an unknown measure of a rectangle given its area or perimeter? • How can you use the strategy *solve a simpler problem* to solve area problems?	• calculate the perimeter of a rectangle using a formula. • calculate the area of a rectangle using a formula. • determine the area of combined rectangles. • determine the unknown measure of a side of a rectangle when given the perimeter or area. • apply the strategy *solve a simpler problem* to solve area problems.
Differentiation	**Assessment**
• Grab and Go Centers • ELL Activity Guide • Go Math Re-teach Book • Go Math Enrich Book • Go Math Enrich Activity • Go Math Strategic Intervention Guide • Go Math Intensive Intervention Guide • HMH Mega Math • Soar to Success Math	• Show What You Know (Chapter 13 Pretest-Student Edition) • Chapter 13 Test (Assessment Guide) • Lesson Quick Checks (Student Edition) • Mid-Chapter Checkpoint (Student Edition) • Performance Assessment (Assessment Guide) • Math On-Demand 12 • End-of-Year Test (Benchmark) (Assessment Guide)

RESOURCES/MATERIALS

- Go Math Chapter 13 Lessons (1,2,3,4,5)
- Suggested Homework: Go Math Standards Practice book
- MathBoard
- Problems of the Day (eTransparencies)
- Animated Math Models
- 1-Centimeter Grid Paper
- *i*Tools

New Jersey Student Learning Standards (NJSLS) Content Area:	MATHEMATICS	Grade Level: 4	Unit 14 Getting Ready for Grade 5 (25 days)
Domains:	**Operations and Algebraic Thinking (4.OA, 5.OA) Number and Operations in Base Ten (4.NBT, 5.NBT) Number and Operations -- Fractions (4.NF, 5.NF) Geometry (5.G) Measurement and Data (4.MD, 5.MD)**		

4.OA.3	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.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.
4.OA.5	Generate a number pattern or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself.
5.OA.1	Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.
5.OA.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.
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.
4.NBT.3	Use place value understanding to round multi-digit whole numbers to any place.

4.NBT.4	Fluently add and subtract multi-digit whole numbers using the standard algorithm.
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.
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 calculations by using equations, rectangular arrays, and/or area models.
5.NBT.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.2	Explain patterns in the number of zeroes 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.3	Read, write, and compare decimals to thousandths. a. Read and write decimals to hundredths using base-ten numerals, number names, and expanded form, e.g., 347.392 = 3 X 100 + 4 X 10 + 7 X 1 + 3 X (1/10) + 9 X (1/100) + 2 X (1/1,000). b. 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.4	Use place value understanding to round decimals to any place.
5.NBT.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.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.

4.NF.3	Understand a fraction a/b with $a > 1$ as a sum of fractions $1/b$. d. 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.
4.NF.4	Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. *c.* Solve word problems involving multiplication of a fraction by a whole number, e.g., by using visual fraction models and equations to represent the problem. *For example, if each person at a party will eat 3/8 of a pound of roast beef, and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?*
4.NF.6	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*.
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.
5.NF.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.3	Interpret a fraction as division of the numerator by the denominator ($a/b = a \div b$). 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.4	Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. 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.5	Interpret multiplication as scaling (resizing), by: b. 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 $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.
5.NF.7	Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. b. 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*.
5.G.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).
4.MD.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), ...*
4.MD.3	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*.
5.MD.5	Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume. b. Apply the formulas $V = l \times w \times h$ and $V = b \times h$ 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.

Essential Questions	Objectives: Students will be able to…
• How can you find sums of decimal amounts in dollars and cents? • How can you find differences between decimal amounts in dollars and cents? • How can you use the order of operations to find the value of expressions? • How can you use patterns to divide by multiples often? • How can you use models to divide? • How can you read, write, and represent whole numbers through millions? • How can you use place value to read, write, and represent decimals? • How can you round decimal amounts, including amounts of money, to the nearest whole number or dollar? • How can you use place value to compare decimals? • How can you find factors of multiples of 10, 100, and 1,000? • How can you use multiplication to describe a pattern? • How can you add fractions when one denominator is a multiple of the other? • How can you subtract fractions when one denominator is a multiple of the other? • How does the size of the product compare to the size of each factor when multiplying fractions in real-world situations? • How can you use repeated subtraction to solve problems involving division with fractions? • How can you write division problems as fractions? • How can you use ordered pairs to locate points on a grid? • How can you use tiling to find the area of a rectangle? • How can you find the product of three factors? • How can you find the area of the base of a rectangular prism?	• calculate sums of decimal amounts in dollars and cents. • calculate differences between decimal amounts in dollars and cents. • determine the value of expressions using the order of operations. • divide by multiples of ten using patterns. • divide with 2-digit divisors using base-ten blocks. • read and write whole numbers through millions. • read and write decimals using place value. • round decimal amounts, including money amounts, to the nearest whole number or dollar. • compare decimals to hundredths using place value. • decompose multiples of 10, 100, and 1,000. • describe patterns using multiplication. • add fractions when one denominator is a multiple of the other. • subtract fractions when one denominator is a multiple of the other. • compare the size of the product to the size of each factor when multiplying fractions in real-world situations. • solve problems involving division with fractions using repeated subtraction. • write division problems as fractions. • locate points on a grid using ordered pairs. • determine the area of a rectangle using tiling. • determine the product of three factors. • calculate the area of the base of a rectangular prism.

Differentiation	Assessment
• Grab and Go Centers • Go Math Re-teach Online • HMH Mega Math	• Getting Ready Test Lessons 1-11 (Assessment Guide) • Getting Ready Test Lessons 12-20 (Assessment Guide) • Math On-Demand 13

RESOURCES/MATERIALS

- Go Math Getting Ready for Grade 5 Lessons (1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20)
- Go Math Standards Practice book
- Suggested Homework: Go Math Online Standards Practice
- Animated Math Models
- MathBoard
- Base-Ten Blocks
- Fractions Strips
- Number Lines
- iTools

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