

Performance Indicator	Beginning- 1	Developing- 2	Secure- 3	Exceeding- 4	Assessed
Writes and interprets numerical expressions. NY-5.OA.1 NY-5.OA.2	- Inconsistently uses parentheses to write simple numerical equations. - Inconsistently, even with support, applies the order of operations to make expressions true. - Inconsistently interprets simple numerical expressions without evaluating them.	- Inconsistently uses parentheses, brackets, or braces to write simple numerical equations. - With support, can apply the order of operations to make expressions true. - Interprets simple numerical expressions without evaluating them.	- Uses parentheses, brackets, or braces to write numerical equations. - Can apply the order of operations to make expressions true. - Interprets numerical expressions without evaluating them.	- Can independently and consistently use parentheses, brackets, or braces to write numerical equations including rational numbers and exponents. - Can apply and solve numerical expressions in real world and mathematical problems. - Interprets numerical expressions without evaluating them.	T1
Generates, analyzes, and explains patterns that follow a given rule. NY-5.OA.3	- Inconsistently, even with support, generates two numerical patterns using two given rules to create tables, graphs and equations. - Inconsistently, even with support, compares and analyzes patterns within the data - Inconsistently, even with support, uses the data created to form and graph ordered pairs on a coordinate plane.	- Inconsistently generates two numerical patterns using two given rules to create tables, graphs and equations. - Inconsistently compares and analyzes patterns within the data - Inconsistently uses the data created to form and graph ordered pairs on a coordinate plane.	- Generate two numerical patterns using two given rules to create tables, graphs and equations. - Compare and analyze patterns within the data - Uses the data created to form and graph ordered pairs on a coordinate plane.	- Generate two or more numerical patterns using two or more given rules to create tables, graphs and equations. - Compare and analyze patterns within the data and create a numerical expression using a variable. - Uses the data created to form and graph ordered pairs on a coordinate plane and in multiple quadrants. - Creates real world and mathematical problems to be graphed in the first quadrant of a coordinate plane.	T3
Demonstrates the understanding of the place value system for fractions, decimals and exponents NY- 5.NBT.1 NY-5.NBT.2	- Even with support, inconsistently reads, writes and compares decimals to thousandths - Inconsistently recognizes patterns of numbers using language such as	- Inconsistently reads, writes and compares decimals to thousandths - Can recognize some patterns of numbers using language such as 10 times as much and 1/10 of, but needs	- Reads, writes and compares decimals to thousandths - Recognize and Explain patterns of numbers using language such as 10 times as much and 1/10 of - Use whole number	NA	T2

Performance Indicator	Beginning- 1	Developing- 2	Secure- 3	Exceeding- 4	Assessed
NY- 5.NBT.3 NY- 5.NBT.4	10 times as much and $\frac{1}{10}$ of, but needs support to explain - Even with support, inconsistently uses whole number exponents to denote powers of 10 - Even with support, inconsistently uses place value to round decimals to any place	support to explain - Inconsistently uses whole number exponents to denote powers of 10 - Inconsistently uses place value to round decimals to any place	exponents to denote powers of 10 Use place value to round decimals to any place		
Uses the four operations with whole numbers to solve problems. NY-4.OA.1 NY-4.OA.2 NY-4.OA.3 NY.4.NBT.4 NY.5.NBT.5 NY.5.NBT.6	- Even with support, inconsistently solves multi-step word problems involving whole numbers with whole number answers. - Inconsistently, even with support, adds, subtracts, multiplies multi-digit whole numbers using the standard algorithm or other strategy. - Inconsistently multiplies 2 digits by 2 digit numbers - Inconsistently finds whole-number quotients and remainders with up to three-digit dividends and one-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between	- Without support Inconsistently solves multi-step word problems involving whole numbers with whole number answers. - Inconsistently adds, subtracts, multiplies multi-digit whole numbers using the standard algorithm or other strategy. - Inconsistently multiplies multi-digit whole numbers. - Finds 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. - Inconsistently illustrates and explains the calculation by using equations, arrays, and/or	- Solves multi-step word problems involving whole numbers including problems in which remainders must be interpreted. - Fluently adds, subtracts, multiplies multi-digit whole numbers using the standard algorithm or other strategy. - Multiplies multi-digit whole numbers accurately. - Finds whole-number quotients and remainders 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. - Can illustrate and explain the calculation by using equations, arrays, and/or models. - Can check reasonableness of answers using mental computation and estimation strategies including	- Student can independently and consistently solves multi-step word problems involving whole numbers including problems in which remainders must be interpreted. - Fluently adds, subtracts, multiplies multi-digit whole numbers using the standard algorithm or other strategy. - Multiplies multi-digit numbers accurately. - Finds whole-number quotients and remainders 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. - Can illustrate and explain the calculation by using equations, arrays, and/or models. - Can check reasonableness of answers using estimation.	T1, T2, T3

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	multiplication and division. Inconsistently illustrates and explains the calculation by using equations, arrays, and/or models.	models.	rounding.		
Uses the four operations with decimals to the hundredths to solve problems. NY-5.NBT.7	- Inconsistently, even with support, adds, subtracts, multiplies or divides to hundredths, using concrete models or drawings and strategies based on place value and properties of operations. - Unable to state in writing the method and explain the reasoning used.	- Adds, subtracts, multiplies and divides to hundredths, with some errors, using concrete models or drawings and strategies based on place value and properties of operations. - Inconsistently attempts to state in writing the method and explain the reasoning used.	- Adds, subtracts, multiplies and divides decimals to hundredths, using concrete models or drawings and strategies based on place value and properties of operations. - Can state in writing the method and explain the reasoning used.	NA	T2
Uses equivalent fractions as a strategy to add and subtract fractions. NY-5.NF.1 NY-5.NF.2	- Inconsistently, even with support, adds and subtracts two fractions with unlike denominators by finding common denominators - Inconsistently, with support solves word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators. - Inconsistently, with support uses visual fraction models or equations to represent	Inconsistently adds and subtracts two fractions or mixed numbers with unlike denominators by finding common denominators - Inconsistently solves word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators. - Inconsistently uses visual fraction models or equations to represent the problem. - Inconsistently uses benchmark fractions and number sense of fractions	- Adds and subtracts two fractions or mixed numbers with unlike denominators by finding common denominators - Solves word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators. - Uses visual fraction models or equations to represent the problem. - Uses benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.	- Adds and subtracts two fractions or mixed numbers with unlike denominators by finding the lowest common denominators. Able to reduce their answer to lowest terms. - Solves word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators. - Uses visual fraction models or equations to represent the problem. - Uses benchmark fractions and number sense of fractions to estimate mentally	T1, T2

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	- the problem. - Inconsistently, with support uses benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers.	to estimate mentally and assess the reasonableness of answers.		and assess the reasonableness of answers.	
Applies understandings of multiplication and division to multiply and divide fractions. NY-5.NF.3 NY-5.NF.4 NY-5.NF.6 NY-5.NF.7	- Inconsistently, with support, Multiplies or divides fractions to solve problem.. - Multiplies a whole number by a fraction. - Inconsistently solves word problems involving multiplication of a fraction and a fraction using visual models or equations to represent the problem. - Needs support to divide unit fractions by non-zero whole numbers and whole numbers by unit fractions, using visual fraction models.	- Multiplies fractions OR divides unit fractions using visual fraction models. - Inconsistently solves word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers. - Interprets the fraction as division of the numerator by the denominator - Multiplies a fraction by fraction using visual fraction models. - Inconsistently solves real world problems involving multiplication (fraction of a fraction and fraction and a whole numbers) and division (unit fractions by non-zero whole numbers and division of whole numbers by unit fractions) using visual fraction models.	- Multiplies fractions AND divides unit fractions using fraction models or equations to solve the problem. - Solves word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers. - Interprets the fraction as division of the numerator by the denominator - Identifies and describes a simple model representing the solution. - Multiplies a fraction by fraction using context for mathematics including rectangular areas. - Solves real world problems involving multiplication (fraction of a fraction and a fraction, fraction and whole numbers and fractions and mixed numbers) and division (unit fractions by non-zero whole numbers and division of whole numbers by unit fractions) using visual fraction models or equation to represent the	- Student independently and consistently multiplies fractions and divides unit fractions using fraction models or equations to solve the problem. - Solves word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers. - Interprets the fraction as division of the numerator by the denominator - Identifies and describes a simple model representing the solution. - Multiplies a fraction by fraction using context for mathematics including rectangular areas. - Solves multi-step, real world problems involving multiplication(fraction of a fraction and a fraction, fraction and whole numbers and fractions and mixed numbers) and division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, using fraction	T2

Performance Indicator	Beginning- 1	Developing- 2	Secure- 3	Exceeding- 4	Assessed
			problem.	models or equation to represent the problem.	
Converts like measurement units within a given measurement system (i.e. cm to m). NY-5.MD.1	- With support, Converts among standard measurement units within a given measurement system with some errors. - Inconsistently uses the conversion in solving single-step, real world problems using manipulatives or visual models.	- Converts among standard measurement units within a given measurement system with some errors. - Uses the conversion in solving single-step, real world problems using manipulatives or visual models.	- Converts among standard measurement units within a given measurement system. - Uses the conversion in solving multi-step, real world problems using manipulatives or visual models. - Chooses appropriate measurement unit based on the given context.	- Converts among multiple standard measurement units within and between given measurement systems to solving multi-step, real world problems. - Chooses appropriate measurement unit based on the given context.	T2
Represents and interprets data. NY-5.MD.2	- Creates a line plot to display a data set of measurements with whole numbers. - Inconsistently, with support, solves problems involving information presented in the line plots.	- Creates a line plot to display a data set of measurements in fractions of a unit with <u>like</u> denominators ($\frac{1}{8}$, $\frac{3}{8}$). - Inconsistently solves problems involving information presented in the line plots.	- Creates a line plot to display a data set of measurements in fractions of a the unit ($\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{8}$). - Use operations on fractions to solve problems involving information presented in the line plots.	- Creates a line plot to display a data set of measurements in fractions with any denominator including ($\square$). - Creates and solves problems using the information provided in the line plots.	T2
Understands concepts of volume and relates volume to multiplication and addition. NY-5.MD.3 NY-5.MD.4 NY-5.MD.4	- Recognizes that volume is an attribute of a solid figure that can be measured. - Given a visual model and the formula for volume, inconsistently solves real world and mathematical problems by applying the formula for volume.	- Recognizes that volume is an attribute of a solid figure and is measured in cubic units which can be packed without gaps or overlaps using n unit cubes. - Given a visual model and the formula for volume, inconsistently solves real world and mathematical problems by applying the formula for volume. - Inconsistently writes an	- Consistently recognizes that volume is an attribute of a solid figure measured in cubic units which can be packed without gaps or overlaps using n unit cubes. - Solves real world and mathematical problems to find the volume of rectangular prism. - Writes an equation illustrating the unit cube pattern. - Relates volume to the	Solves and justifies real world and mathematical problems to find the volume of irregular figures. (demonstrates understandings stated under secure)	T1

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	Inconsistently understands volume as additive given two overlapping rectangular prisms.	equation illustrating the unit cube pattern. Given a visual model, relates volume to the operation of multiplication by applying a given formula for area and recognize volume as additive given solid figures composed of two non-overlapping rectangular prisms.	operation of multiplication and recognizes volume as additive given solid figures composed of two non-overlapping rectangular prisms.		
Graphs points to solve real world problems. NY-5.G.1 NY-5.G.2	Even with support, Inconsistently, represents real-world mathematical problems by locating points in the first quadrant of a coordinate plane.	Inconsistently, represents real-world mathematical problems by locating and graphing points in the first quadrant of a coordinate plane.	- Represents real-world mathematical problem by locating and graphing points in the first quadrant of a coordinate plane. - Interprets coordinate values of points in the context of the word problem or situation.	- Represents real-world mathematical problem by locating and graphing points in a coordinate plane. - Interprets coordinate values of points in the context of the word problem or situation. on coordinate plane. - Graphs and solves problems using multiple quadrants.	T3
Classifies 2-dimensional shapes based on their properties. NY-5.G.3 NY-5.G.4	- Even with support, inconsistently, Identifies two-dimensional figures in a hierarchy based on their properties. - Classifies two-dimensional figures based on their attributes.	- Classifies two-dimensional figures in a hierarchy based on their properties with some errors. - Understands that shared attributes categorize two-dimensional figures.	- Classifies two-dimensional figures in a hierarchy based on their properties. - Understands that attributes belonging to a category of two-dimensional figures also belongs to all subcategories of that category (i.e. All rectangles have four right angles and squares are rectangles, so all squares have four right angles). - Use appropriate tools to determine between categories and subcategories.	- Classifies three-dimensional figures in a hierarchy based on their properties. - Understands that attributes belonging to a category of two-dimensional figures also belongs to all subcategories of that category (i.e. All rectangles have four right angles and squares are rectangles, so all squares have four right angles). - Use appropriate tools to determine between categories and subcategories.	T3