NMSD Grade 5 Report Card Standards: Math

Standard: Operations and Algebraic Thinking: Writes and interprets numerical expressions 5.OA.1; 5.OA.2		
4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	The student is able to write, evaluate, and interpret numerical expressions having any number of non-nested sets of parentheses, brackets, or braces.	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to write and evaluate numerical expressions having two non-nested sets of parentheses, brackets, or braces.	Partial understanding of concepts and skills Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to evaluate numerical expressions that have either parentheses, brackets, or braces. Student is making minimal or no progress toward meeting grade expectations. The student's work is typically at the 1 level.	
Standard: Operations and algebraic Thinking: Analyzes patterns and relationships 5.OA.3		
4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	The student is able to compare and analyze two related numerical patterns and explain the relationship within sequences of ordered pairs, and they should be able to graph the ordered pairs on the coordinate plane.	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to generate two numerical patterns using two given rules involving all operations. When working with two whole number numerical patterns, they should be able to graph the corresponding whole number ordered pairs on the coordinate plane.	Partial understanding of concepts and skills Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to generate two numerical patterns using two given rules involving addition, subtraction, or multiplication. Student is making minimal or no progress toward meeting grade expectations. The student's work is typically at the 1 level.	

NMSD Grade 5 Report Card Standards: Math

Standard: Numbers and Operations in Base Ten: Understands the place value system 5.NBT.1; 5.NBT.2; 5.NBT.3		
4.0	In addition to 3.0 performance, the student: Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	The student is able to use whole-number exponents to denote powers of 10; use repeated reasoning to understand and explain patterns in numbers of zeroes and/or placement of a decimal point when a number is multiplied or divided by powers of 10; read, write, and compare two decimals to the thousandths using base-ten numerals, number names, and expanded form, using the symbols >, =, and < to record the results of the comparison; and round decimals to any place.	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to use repeated reasoning to understand 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. They should be able to explain patterns in numbers of zeroes and/or placement of a decimal point when a number is multiplied or divided by 10.	Partial understanding of concepts and skills Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to read and write decimals to the thousandths using base-ten numerals, number names, and expanded form and round decimals to the hundredths.	
Standard: Numbers and Operations in Base Ten: Adds and subtracts with multi-digit whole numbers and with decimals to hundredths 5.NBT.B..7		
4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	The student is able to perform the operation on decimals to the hundredths using concrete models or drawings and strategies based on place value. They should be able to relate the strategy to a written method and explain the reasoning used.	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to add and subtract whole numbers and perform the operations on decimals to the tenths or on decimals to the hundredths and a whole number using concrete models.	Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to perform the operations on decimals to the tenths and a whole number using concrete models.	

NMSD Grade 5 Report Card Standards: Math

Standard: Numbers and Operations in Base Ten: Multiplies multi-digit whole numbers and with decimals to hundredths 5.NBT.B.7

4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	The student is able to fluently multiply multi-digit whole numbers using the standard algorithm, and perform the operation on decimals to the hundredths using concrete models or drawings and strategies based on place value, and properties of operations. They should be able to relate the strategy to a written method and explain the reasoning used.	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to multiply three- and four-digit whole numbers; and perform the operation on decimals to the tenths or on decimals to the hundredths and a whole number using concrete models.	Partial understanding of concepts and skills Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to multiply one- and two-digit whole numbers using arrays or area models. They should be able to perform the operation on decimals to the tenths and a whole number using concrete models, e.g., 1.3 × 7	

Standard: Numbers and Operations in Base Ten: Divides multi-digit whole numbers and with decimals to hundredths 5.NBT.B.7

4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	The student is able to fluently divide multi-digit whole numbers, 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. They should be able to perform the operation on decimals to the hundredths using concrete models or drawings and strategies based on place value, and properties of operations. They should be able to relate the strategy to a written method and explain the reasoning used.	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to find whole-number quotients of whole numbers with up to three-digit dividends and two-digit divisors; and perform the operation on decimals to the tenths or on decimals to the hundredths and a whole number using concrete models, e.g., 3.42 × 12.	Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 content, and major errors or omissions regarding score 3.0 content. Solve addition word problems within 5, using objects, drawings, and equations to represent the problem.	
1.0	The student is able to find whole-number quotients of whole numbers with up to three-digit dividends and one-digit divisors, using arrays or area models. They should be able to perform the operation on decimals to the tenths and a whole number with concrete models, e.g., 1.3 × 7.	

NMSD Grade 5 Report Card Standards: Math

Standard: Number and Operations-Fractions: Uses equivalent fractions as a strategy to add and subtract fractions 5.NF.1; 5.NF.2		
4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	The student is able to add and subtract fractions and mixed numbers with unlike denominators in word problems and use number sense of fractions to estimate mentally and assess the reasonableness of answers.	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to add fractions and mixed numbers with unlike denominators (denominators ≤12) in mathematical problems, subtract a mixed number from a whole number (denominators up to 4), and use benchmark fractions to estimate mentally and assess the reasonableness of answers (denominators ≤12).	Partial Understanding Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to add two fractions and mixed numbers with unlike denominators and subtract two fractions with unlike denominators when one denominator is a factor of the other in mathematical problems (denominators < 12). They should be able to use benchmark fractions (1/4s and 1/2s) and number sense with fractions to estimate mentally and assess the reasonableness of answers.	
Standard: Number and Operations-Fractions: Applies understandings of multiplication and division to multiply and divide fractions 5.NF.3; 5.NF.4; 5.NF.7		
4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	The student is able to multiply a mixed number by a mixed number; know the effect that a fraction has on another fraction when multiplied (proper and improper fractions); use or create visual models when multiplying two fractions, including when one fraction is larger than 1; and interpret and perform division of any unit fraction by a whole number.	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to multiply a whole number by a mixed number; know the effect that a fraction greater than or less than 1 has on a whole number when multiplied; use or create visual models when multiplying two fractions between 0 and 1; extend their previous understandings of division to divide a unit fraction by a whole number; and understand that division of whole numbers can result in fractions.	Partial understanding of concepts and skills Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to apply their previous understandings of multiplication to multiply a fraction by a fraction; know the effect that whole number multiplication has on fractions; use or create visual models when multiplying a whole number by a fraction between 0 and 1; and interpret and perform division of a whole number by 1/2 or 1/3.	

NMSD Grade 5 Report Card Standards: Math

	Standard: Measurement and Data: Converts like measurement units within a given measurement system 5.MD.1	
4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	*The student is able to convert like measurements within a system using whole numbers, fractions (standard system), and decimals (metric system).*	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to convert a metric measurement to the tenths place to a different metric measurement and convert a standard measurement given to the 1/4 unit (fractions/mixed numbers) from a larger measurement unit to a smaller one.	Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to convert a metric measurement to the tenths place to a different metric measurement and convert a standard measurement given to the 1/4 unit (fractions/mixed numbers) from a larger measurement unit to a smaller one.	

	Standard: Measurement and Data: Represents and interprets data 5.MD.2	
4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	*The student is able to interpret a line plot to display data sets in fractions of a unit (1/2, 1/4, 1/8) and solve problems using information from line plots that require addition, subtraction, and multiplication of fractions.*	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to make a line plot and display data sets in fractions of a unit (1/2, 1/4, 1/8).	Partial understanding of concepts and skills Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to make a line plot and represent data sets in whole units.	

NMSD Grade 5 Report Card Standards: Math

	Standard: Measurement and Data: Understands concepts of volume and relates volume to multiplication and to addition 5.MD.3; 5.MD.5	
4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	The student is able to use the formulas V = l × w × h and V = b × h to find the volume of rectangular prisms. They should be able to find the volume of two non-overlapping right rectangular prisms.	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to understand the concept that the volume of a rectangular prism packed with unit cubes is related to the edge lengths.	Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to use unit cubes to find the volume of rectangular prisms with whole number edge lengths.	
	Standard: Geometry: Graphs points on the coordinate plane to solve real-world and mathematical problems 5.G.1; 5.G.2	
4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Exemplary performance Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	*The student is able to graph coordinate pairs where one term is a whole number and one is a fraction on a coordinate plane with whole number axis increments.*	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to graph whole number coordinate pairs on a coordinate plane with whole number axis increments to solve problems.	Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	The student is able to graph whole number coordinate pairs in the first quadrant of a coordinate plane with unit axis increments.	

NMSD Grade 5 Report Card Standards: Math

Standard: Geometry: Classifies two-dimensional figures into categories based on their properties 5.G.3		
4.0	In addition to 3.0 performance, the student Demonstrates in-depth understanding of concepts. Applies knowledge into multiple contexts Demonstrates model work	Above and Beyond Articulates concept effectively and with sophistication
3.5	In addition to 3.0 performance, partial success at score 4.0 concepts and skills.	
3.0	*The student is able to classify two-dimensional figures into subcategories by their attributes or properties.*	(Examples)
2.5	No major errors or omissions regarding 2.0 performance, partial success at score 3.0 content.	(example)
2.0	The student is able to classify two-dimensional figures into categories by their attributes or properties.	Inconsistent Needs help Making some progress Approaching standard
1.5	Partial success at score 2.0 concepts and skills.	
1.0	Student is making minimal or no progress toward meeting grade expectations. The student's work is typically at the 1 level.	