## **Grade 4 Report Card Rubrics**

### **Mathematics**

## **Operations and Algebraic Thinking**

Marking	1	2	3	4
Period				
1	Not yet able to use the four operations with whole numbers to solve problems using mental computation and estimating including rounding and problems in which remainders need to be interpreted.	Requires teacher assistance to use the four operations with whole numbers to solve problems using mental computation and estimating including rounding and problems in which remainders need to be interpreted.	Consistently and independently uses the four operations with whole numbers to solve problems using mental computation and estimating including rounding and problems in which remainders need to be interpreted.	Meets criteria of a 3, explains reasoning, and is able to construct viable arguments to justify and communicate their reasoning.
2	Not yet able to:  *Use the four operations with whole numbers to solve problems using mental computation and estimating including rounding and problems in which remainders need to be interpreted;  *Solve problems in which symbols are used to represent the unknown number represented in the problem.	Requires teacher assistance to:  *Use the four operations with whole numbers to solve problems using mental computation and estimating including rounding and problems in which remainders need to be interpreted;  *Solve problems in which symbols are used to represent the unknown number represented in the problem.	Consistently and independently: *Uses the four operations with whole numbers to solve problems using mental computation and estimating including rounding and problems in which remainders need to be interpreted; *Solve problems in which symbols are used to represent the unknown number represented in the problem.	Meets criteria of a 3, explains reasoning, and is able to construct viable arguments to justify and communicate their reasoning.

Uses the f	Uses the four operations with whole numbers to solve problems. (4.OA.1, 4.OA.2, 4.O.3)				
Marking Period	1	2	3	4	
3	Not yet able to:  *Use the four operations with whole numbers to solve problems using mental computation and estimating including rounding and problems in which remainders need to be interpreted;  *Solve problems in which symbols are used to represent the unknown number represented in the problem;  *Solve multistep-word problems posed with whole numbers and having whole number answers using the four operations.;  *Represent equations with a letter standing for the unknown quantity in area and perimeter.	Requires teacher assistance to: *Use the four operations with whole numbers to solve problems using mental computation and estimating including rounding and problems in which remainders need to be interpreted; *Solve problems in which symbols are used to represent the unknown number represented in the problem; *Solve multistep-word problems posed with whole numbers and having whole number answers using the four operations.; *Represent equations with a letter standing for the unknown quantity in	Consistently and independently:  *Uses the four operations with whole numbers to solve problems using mental computation and estimating including rounding and problems in which remainders need to be interpreted;  *Solves problems in which symbols are used to represent the unknown number represented in the problem;  *Solves multistep-word problems posed with whole numbers and having whole number answers using the four operations.;  *Represents equations with a letter standing for the unknown quantity in	Meets criteria of a 3, explains reasoning, and is able to construct viable arguments to justify and communicate their reasoning.	
		area and perimeter.	area and perimeter.		

Gains famil	Gains familiarity with factors and multiples (4.OA.4)					
Marking Period	1	2	3	4		
1	Not yet able to determine factor pairs and multiples for a whole number in the range 1-100 and determine whether a number is prime or composite.	Requires teacher assistance to determine factor pairs and multiples for a whole number in the range 1-100 and determine whether a number is prime or composite.	Consistently and independently able to determine factor pairs and multiples for a whole number in the range 1-100 and determine whether a number is prime or composite.	Meets criteria of a 3, and explains patterns that exist between multiples and can describe these patterns using words and equations with unknowns.		
2	Reassess as needed					
3		Reassess as	needed			

Generate	Generate and analyze patterns (4.OA.5)				
Marking Period	1	2	3	4	
1	Not yet able to generate a number pattern that follows a given rule.	Requires teacher prompting and support to generate a number pattern that follows a given rule.	Consistently and independently able to generate a number pattern that follows a given rule.	Meets criteria of a 3, explains reasoning and is able to construct viable arguments to justify and communicate reasoning.	
2	Not yet able to generate a number pattern including decimals that follow a given rule.	Requires teacher prompting and support to generate a number pattern including decimals that follow a given rule.	Consistently and independently able to generate a number pattern including decimals that follow a given rule.	Meets criteria of a 3, explains reasoning and is able to construct viable arguments to justify and communicate reasoning.	
3		Reassess a	s needed		

## **Numbers and Operations in Base Ten**

Generalize	Generalizes place value understanding for multi-digit whole numbers (4.NBT.1, 4.NBT.2, 4.NBT.3)					
Marking Period	1	2	3	4		
1	Not yet able to use place-value understanding to read, write, compare, and round multi-digit whole numbers to any place.	Requires teacher assistance to use place-value understanding to read, write, compare, and round multi-digit whole numbers to any place.	Consistently and independently able to use place-value understanding to read, write, compare, and round multi-digit whole numbers to any place.	Consistently and independently able to use place-value understanding to read, write, compare, and round multi-digit whole numbers to any place.		
2	Reassess as needed					
3		Reassess as needed				

	Uses place value understanding and properties of operations to perform multi-digit arithmetic (4.NBT.4, 4.NBT.5, 4.NBT.6)				
Marking	1	2	3	4	
Period					
1	Not yet able to:	Requires teacher	Consistently and	Meets the	
	*Fluently add and	assistance to:	independently able to:	criteria for a 3	
	subtract multi-digit	* Fluently add and	* Fluently add and	and extends	
	whole numbers using	subtract multi-digit	subtract multi-digit whole	understanding to	
	the standard	whole numbers using	numbers using the	include a viable	
	algorithm;	the standard algorithm;	standard algorithm;	argument to	
	*Multiply a whole	* Multiply a whole	* Multiply a whole	explain answer.	
	number up to 4 digits	number up to 4 digits by	number up to 4 digits by a		
	by a one-digit whole	a one-digit whole	one-digit whole number,		
	number, and multiply	number, and multiply	and multiply two 2-digit		
	two 2-digit numbers,	two 2-digit numbers,	numbers, using strategies		
	using strategies	using strategies based	based on place value and		
	based on place value	on place value and the	the properties of		
	and the properties of	properties of	operations;		
	operations;	operations;	* Illustrate and explain the		
	*Illustrate and	* Illustrate and explain	calculations by using		
	explain the	the calculations by using	equations, rectangular		
	calculations by using	equations, rectangular	arrays, and/or area		
	equations,	arrays, and /or area	models.		
	rectangular arrays,	models.			
	and/or area models.				
2	Reassess as needed				
3		Reassess as	needed		

# Numbers and Operations – Fraction

Extend und	Extend understanding of fraction equivalence and ordering (4.NF.1, 4.NF.2)					
Marking Period	1	2	3	4		
1						
2	Not yet able to: *Express why two or more fractions are equivalent; *Compare two fractions with different numerators and denominators using models and drawings; *Express the comparison using equations with proper mathematical symbols.	Requires teacher assistance to: *Express why two or more fractions are equivalent; *Compare two fractions with different numerators and denominators using models and drawings; *Express the comparison using equations with proper mathematical symbols.	Consistently and independently able to:  *Express why two or more fractions are equivalent;  *Compare two fractions with different numerators and denominators using models and drawings;  *Express the comparison using equations with proper mathematical symbols.	Meets all the criteria for a 3 and is able to construct a viable argument.		
3		Reassess as	needed			

	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers (4.NF.3, 4.NF.4)				
Marking Period	1	2	3	4	
1					
2	Not yet able to:  * Solve problems with adding and subtracting fractions and mixed numbers with like denominators using visual models and equations to represent the problem;  * Solve problems with multiplication of a fraction by a whole number using models and equations to represent the problem;  * Solves word problems involving addition and subtraction of fractions.	Requires teacher assistance to:  * Solve problems with adding and subtracting fractions and mixed numbers with like denominators using visual models and equations to represent the problem;  * Solve problems with multiplication of a fraction by a whole number using models and equations to represent the problem;  *Solves word problems involving addition and subtraction of fractions.	Consistently and independently able to: * Solve problems with adding and subtracting fractions and mixed numbers with like denominators using visual models and equations to represent the problem; * Solve problems with multiplication of a fraction by a whole number using models and equations to represent the problem; * Solves word problems involving addition and subtraction of fractions.	Meets all the criteria for a 3 and constructs a viable argument.	
3		Reassess as	needed.	<u> </u>	

Understand decimal notation for fractions, and compare decimal fractions (4.NF.5. 4.NF.6, 4.NF.7)				
Marking	1	2	3	4
Period				
1				
2				
3	Not yet able to:	Requires teacher	Consistently and	Meets all the
	*Express a fraction with	assistance to :	independently able to:	criteria for a 3
	denominator 10 as an	*Express a fraction with	*Express a fraction with	and constructs a
	equivalent fraction with	denominator 10 as an	denominator 10 as an	viable argument.
	denominator 100, and	equivalent fraction with	equivalent fraction with	
	use this technique to add	denominator 100, and	denominator 100, and	
	two fractions with	use this technique to	use this technique to add	
	respective denominators	add two fractions with	two fractions with	
	10 and 100;	respective denominators	respective denominators	
	*Use decimal notation	10 and 100;	10 and 100;	
	for fractions with	*Use decimal notation	*Use decimal notation for	
	denominators 10 or 100;	for fractions with	fractions with	
	*Compare two decimals	denominators 10 or 100;	denominators 10 or 100;	
	to hundredths by	*Compare two decimals	*Compare two decimals	
	reasoning about their	to hundredths by	to hundredths by	
	size. Recognize that	reasoning about their	reasoning about their	
	comparisons are valid	size. Recognize that	size. Recognize that	
	only when the two	comparisons are valid	comparisons are valid	
	decimals refer to the	only when the two	only when the two	
	same whole;	decimals refer to the	decimals refer to the	
	*Record the results of	same whole;	same whole;	
	comparisons with the	* Record the results of	* Record the results of	
	symbols >, =, or <, and	comparisons with the	comparisons with the	
	justify the conclusions,	symbols >, =, or <, and	symbols >, =, or <, and	
	e.g., by using a visual	justify the conclusions,	justify the conclusions,	
	model.	e.g., by using a visual	e.g., by using a visual	
		model.	model.	

### **Measurement and Data**

Solves problems involving measurement and conversion of measurements from a larger unit to a smaller unit. (4.MD.1, 4.MD.2, 4.MD.3)				
Marking Period	1	2	3	4
1				
2				
3	Not yet able to:  *Measure attributes of objects in the customary and metric systems;  *Make measurement conversion within one system of measurement;  *Solve problems using the four operations involving measurable quantities (time, distance, and physical attributes of objects);  *Solve problems using the formulas for area and perimeter.	Requires teacher assistance to:  *Measure attributes of objects in the customary and metric systems;  *Make measurement conversion within one system of measurement;  *Solve problems using the four operations involving measurable quantities (time, distance, and physical attributes of objects);  *Solve problems using the formulas for area and perimeter.	Consistently and Independently able to:  *Measure attributes of objects in the customary and metric systems;  *Make measurement conversion within one system of measurement;  *Solve problems using the four operations involving measurable quantities (time, distance, and physical attributes of objects);  *Solve problems using the formulas for area and perimeter.	Meets all the criteria for a 3 and is able to construct a viable argument.

Represent a	Represent and interpret data (4.MD.4)					
Marking Period	1	2	3	4		
1						
2	Not yet able to: *Make a line plot to display a data set of measurements in fractions of a unit (1/2, ¼, 1/8); *Solve problems involving addition and subtraction of fractions by using information presented in line plots.	Requires teacher assistance to:  *Make a line plot to display a data set of measurements in fractions of a unit (1/2, ¼, 1/8);  *Solve problems involving addition and subtraction of fractions by using information presented in line plots.	Consistently and independently able to: *Make a line plot to display a data set of measurements in fractions of a unit (1/2, ¼, 1/8); *Solve problems involving addition and subtraction of fractions by using information presented in line plots.	Meets all the criteria for a 3 and constructs a viable argument		
3		Reassess as nee	ded.			

Geometric n	Geometric measurement: Understand concepts of angle and measure angles (4.MD.5, 4.MD.6, 4.MD.7)					
Marking Period	1	2	3	4		
1						
2	Not yet able to:  *Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement;  *Measure angles in whole-number degrees using a protractor;  * Recognize angle measure as additive, using addition and subtraction to find unknown angles on a diagram in mathematical problems.	Requires teacher assistance to:  *Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement;  *Measure angles in whole-number degrees using a protractor;  * Recognize angle measure as additive, using addition and subtraction to find unknown angles on a diagram in mathematical problems.	Consistently and independently able to: *Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement; *Measure angles in whole-number degrees using a protractor; * Recognize angle measure as additive, using addition and subtraction to find unknown angles on a diagram mathematical problems.	Meets all the criteria for a 3 and constructs a viable argument.		
3		Reassess as needed	I	<u> </u>		

## Geometry

Draw and identify lines and angles, and classify shapes by properties of their lines and angles (4.G.1, 4.G.2, 4.G.3,)				
Marking Period	1	2	3	4
1				
2	Not yet able to: *Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines; *Identify these in two-dimensional figures.	Requires teacher assistance to: *Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines; *Identify these in two-dimensional figures.	Consistently and Independently able to: *Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines; *Identify these in two- dimensional figures.	Meets all the criteria for a 3 and justifies these classifications using proper mathematical vocabulary.
3	Not yet able to:  * Classify two- dimensional figures including squares and rectangles based on angles and sides.  *Recognize and draw lines of symmetry for two- dimensional figures;  *Identify objects with line-symmetric figures.	Requires teacher assistance to:  * Classify two-dimensional figures including squares and rectangles based on angles and sides.  *Recognize and draw lines of symmetry for two-dimensional figures;  *Identify objects with line-symmetric figures.	Consistently and Independently able to: *Classify two- dimensional figures including squares and rectangles based on angles and sides. *Recognize and draw lines of symmetry for two-dimensional figures; *Identify objects with line-symmetric figures.	Meets all the criteria for a 3 and justifies these classifications using proper mathematical vocabulary.