

Grade 3 Report Card Rubrics Mathematics

Operations and Algebraic Thinking

Represents and solves problems involving multiplication and division (3.OA.1, 3.OA.2, 3.OA.3, 3.OA.4)				
Marking Period	1	2	3	4
1				
2	Not yet able to interpret, model and solve problems involving multiplication and division within 100.	Requires teacher prompting and support to interpret, model and solve problems involving multiplication and division within 100.	Consistently and independently interprets models and solves problems involving multiplication and division within 100.	Meets all the criteria for a 3 and selects multiple strategies to solve multiplication and division problems and is able to construct viable arguments to explain answers and critique the reasoning of others.
3	Not yet able to interpret, model and solve one- and two-step word problems related to measurement involving multiplication and division within 100.	Requires teacher prompting and support to interpret, model and solve one- and two-step word problems related to measurement involving multiplication and division within 100.	Consistently and independently interprets models and solves one- and two-step word problems related to measurement involving multiplication and division within 100.	Meets all the criteria for a 3 and selects multiple strategies to solve one- and two-step multiplication and division word problems related to measurement and is able to construct viable arguments to explain answers and critique the reasoning of others.

Understands properties of multiplication and the relationship between multiplication and division. (3.OA.5, 3.OA.6)				
Marking Period	1	2	3	4
1				
2	<p>Not yet able to do the following:</p> <ul style="list-style-type: none"> *Apply the properties of operations as strategies for multiplication and division; *Use the Commutative, Associative and Distributive properties of multiplication to solve problems; *Understand division as an unknown-factor problem; *Relates multiplication and division fact families for multiples within 100. 	<p>Requires teacher prompting and support to do the following:</p> <ul style="list-style-type: none"> *Apply the properties of operations as strategies for multiplication and division; *Use the Commutative, Associative and Distributive properties of multiplication to solve problems; *Understand division as an unknown-factor problem; *Relates multiplication and division fact families for multiples within 100. 	<p>Consistently and independently does the following:</p> <ul style="list-style-type: none"> *Applies the properties of operations as strategies for multiplication and division; *Uses the Commutative, Associative and Distributive properties of multiplication to solve problems; *Understands division as an unknown-factor problem; *Relates multiplication and division fact families for multiples within 100. 	<p>Extends criteria from a 3 to include fact families through 12.</p>
3	<p>Not yet able to do the following in real-world one- and two-step problems related to measurement::</p> <ul style="list-style-type: none"> *Apply the properties of operations as strategies for multiplication and division; *Use the Commutative, Associative and Distributive properties of multiplication to solve problems; *Understand division as an unknown-factor problem; *Relates multiplication and division fact families for multiples within 100. 	<p>Requires teacher prompting and support to do the following in real-world one- and two-step problems related to measurement:</p> <ul style="list-style-type: none"> *Apply the properties of operations as strategies for multiplication and division; *Use the Commutative, Associative and Distributive properties of multiplication to solve problems; *Understand division as an unknown-factor problem; *Relates multiplication and division fact families for multiples within 100. 	<p>Consistently and independently does the following in real-world one- and two-step problems related to measurement:</p> <ul style="list-style-type: none"> *Applies the properties of operations as strategies for multiplication and division; *Uses the Commutative, Associative and Distributive properties of multiplication to solve problems; *Understands division as an unknown-factor problem; *Relates multiplication and division fact families for multiples within 100. 	<p>Extends criteria from a 3 to include fact families through 12.</p>

Multiplies and divides within 100. (3.OA.7) *				
Marking Period	1	2	3	4
1	Not yet able to recall multiplication and division facts within 100 in a timely manner.	Requires teacher prompting and support, as well as manipulatives, to recall multiplication and division facts within 100 from memory, in a timely manner.	Consistently and independently able to recall multiplication and division facts within 100 from memory, in a timely manner.	With complete accuracy, able to fluently recall multiplication and division facts within 100 from memory.
2	Not yet able to recall multiplication and division facts within 100 in a timely manner.	Requires teacher prompting and support, as well as manipulatives, to recall multiplication and division facts within 100 from memory, in a timely manner.	Consistently and independently able to recall multiplication and division facts within 100 from memory, in a timely manner.	With complete accuracy, able to fluently recall multiplication and division facts within 100 from memory.
3	Not yet able to recall multiplication and division facts within 100 in a timely manner.	Requires teacher prompting and support, as well as manipulatives, to recall multiplication and division facts within 100 from memory, in a timely manner.	Consistently and independently able to recall multiplication and division facts within 100 from memory, in a timely manner.	With complete accuracy, able to fluently recall multiplication and division facts within 100 from memory.

*As measured by the benchmark fluency assessments

Solves problems involving the four operations and identifies and explains patterns in arithmetic (3.OA.8, 3.OA.9)				
Marking Period	1	2	3	4
1				
2	<p>Not yet able to:</p> <ul style="list-style-type: none"> *Represents one and two-step word problems with equations using letters for unknowns; *Solves one- and two-step word problems involving all four operations; *Assesses reasonableness of answers using estimation and mental math; *Identifies patterns (including those in addition and multiplication tables); * Explains the rule for generating a pattern. 	<p>Requires teacher prompting and support to do each of the following:</p> <ul style="list-style-type: none"> *Represents one- and two-step word problems with equations using letters for unknowns; *Solves one- and two-step word problems involving all four operations; *Assesses reasonableness of answers using estimation and mental math; *Identifies patterns (including those in addition and multiplication tables); * Explains the rule for generating a pattern. 	<p>Consistently and independently does each of the following:</p> <ul style="list-style-type: none"> *Represents one- and two-step word problems with equations using letters for unknowns; *Solves one- and two-step word problems involving all four operations; *Assesses reasonableness of answers using estimation and mental math; *Identifies patterns (including those in addition and multiplication tables); *Explains the rule for generating a pattern. 	<p>Meets the criteria for a 3, creates two-step word problems, explains why the order of steps is important in solving a two-step problem, and develops a function rule to represent a pattern.</p>
3	Reassess as needed			

Numbers and Operations in Base Ten

Uses place value understanding and properties of operations to perform multi-digit arithmetic. (3.NBT.1, 3.NBT.2, 3.NBT.3)				
Marking Period	1	2	3	4
1	Not yet able to : *Understand number value to round whole numbers; *Fluently add and subtract within ten thousand.	Requires teacher prompting and support to: *Understand number value to round whole numbers; *Fluently add and subtract within ten thousand.	Consistently and independently uses place value understanding to: *Understand number value to round whole numbers; *Fluently add and subtract within ten thousand.	Meets all the criteria for a 3 and can construct viable arguments to explain answers and critique the reasoning of others.
2	Not yet able to : *Fluently add and subtract within ten thousand involving real-world problems related to money; *Multiply one-digit whole numbers by multiples of ten.	Requires teacher prompting and support to: *Fluently add and subtract within ten thousand involving real-world problems related to money; *Multiply one-digit whole numbers by multiples of ten.	Consistently and independently uses place value understanding to: *Fluently add and subtract within ten thousand involving real-world problems related to money; *Multiply one-digit whole numbers by multiples of ten.	Meets all the criteria for a 3 and can construct viable arguments to explain answers and critique the reasoning of others.
3	Not yet able to : *Understand number value to round whole numbers; *Fluently add and subtract within ten thousand involving 2-step word problems related to money, area, perimeter, and measurement; *Multiply one-digit whole numbers by multiples of ten.	Requires teacher prompting and support to: *Understand number value to round whole numbers; *Fluently add and subtract within ten thousand involving 2-step word problems related to money, area, perimeter, and measurement; *Multiply one-digit whole numbers by multiples of ten.	Consistently and independently uses place value understanding to: *Understand number value to round whole numbers; *Fluently add and subtract within ten thousand involving 2-step word problems related to money, area, perimeter, and measurement; *Multiply one-digit whole numbers by multiples of ten.	Meets all the criteria for a 3 and can construct viable arguments to explain answers and critique the reasoning of others.

Numbers and Operations - Fractions

Develops understanding of fractions as numbers (3.NF.1, 3.NF.2, 3.NF.3)				
Marking Period	1	2	3	4
1				
2	<p>Not yet able to:</p> <ul style="list-style-type: none"> *Model and interprets unit fractions and uses unit fractions to understand fractions as parts of a whole; *Represent fractions on a number line. *Compare fractions by their size; *Explain equivalence of fractions. 	<p>Requires teacher prompting and support to:</p> <ul style="list-style-type: none"> *Model and interprets unit fractions and uses unit fractions to understand fractions as parts of a whole; *Represent fractions on a number line. *Compare fractions by their size; *Explain equivalence of fractions. 	<p>Consistently and independently:</p> <ul style="list-style-type: none"> *Models and interprets unit fractions and uses unit fractions to understand fractions as parts of a whole; *Represents fractions on a number line. *Compares fractions by their size; *Explains equivalence of fractions. 	<p>Exceeds all the criteria for a 3.</p>
3	<p>Not yet able to:</p> <ul style="list-style-type: none"> *Model and interpret unit fractions and use unit fractions to understand fractions as parts of a whole; *Represent fractions on a number line. 	<p>Requires teacher prompting and support to:</p> <ul style="list-style-type: none"> *Model and interpret unit fractions and use unit fractions to understand fractions as parts of a whole; *Represent fractions on a number line. 	<p>Consistently and independently:</p> <ul style="list-style-type: none"> *Models and interprets unit fractions and uses unit fractions to understand fractions as parts of a whole; *Represents fractions on a number line. 	<p>Meets all the criteria for a 3 and can use models to explain the relationship between improper fractions and mixed numbers.</p>

Measurement and Data

Solves problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. (3.MD.1, 3.MD.2)				
Marking Period	1	2	3	4
1				
2				
3	<p>Not yet able to do each of the following:</p> <ul style="list-style-type: none"> *Tell time to the nearest minute; *Measure and/or estimates time intervals in minutes, liquid volumes, and masses of objects; *Solve word problems involving addition and subtraction of time intervals in minutes, liquid volumes, and masses of objects. 	<p>Requires teacher prompting and support to do each of the following:</p> <ul style="list-style-type: none"> *Tell time to the nearest minute; *Measure and/or estimates time intervals in minutes, liquid volumes, and masses of objects; *Solve word problems involving addition and subtraction of time intervals in minutes, liquid volumes, and masses of objects. 	<p>Consistently and independently does each of the following:</p> <ul style="list-style-type: none"> *Tell time to the nearest minute; *Measure and/or estimates time intervals in minutes, liquid volumes, and masses of objects; *Solve word problems involving addition and subtraction of time intervals in minutes, liquid volumes, and masses of objects. 	<p>Selects multiple strategies to create and solve word problems involving time intervals, liquid volumes, and masses of objects, and justifies the strategy.</p>

Represents and interprets data. (3.MD.3, 3.MD.4)				
Marking Period	1	2	3	4
1				
2	<p>Not yet able to do each of the following:</p> <ul style="list-style-type: none"> *Draw scaled picture and bar graphs with several categories; *Solve one- and two-step “how many” questions based on graphed data; *Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch; *Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. 	<p>Requires teacher prompting and support to do each of the following:</p> <ul style="list-style-type: none"> *Draw scaled picture and bar graphs with several categories; *Solve one- and two-step “how many” questions based on graphed data; *Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch; *Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. 	<p>Consistently and independently does each of the following:</p> <ul style="list-style-type: none"> *Draw scaled picture and bar graphs with several categories; *Solve one- and two-step “how many” questions based on graphed data; *Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch; *Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. 	<p>Meets criteria of a 3 also can choose and justify the most appropriate method for displaying a set of data.</p>

3	<p>Not yet able to do each of the following:</p> <ul style="list-style-type: none"> *Draw scaled picture and bar graphs with several categories; *Solve one- and two-step “how many” questions based on graphed data; *Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch; *Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. 	<p>Requires teacher prompting and support to do each of the following:</p> <ul style="list-style-type: none"> *Draw scaled picture and bar graphs with several categories; *Solve one- and two-step “how many” questions based on graphed data; *Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch; *Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. 	<p>Consistently and independently does each of the following:</p> <ul style="list-style-type: none"> *Draw scaled picture and bar graphs with several categories; *Solve one- and two-step “how many” questions based on graphed data; *Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch; *Show the data by making a line plot, where the horizontal scale is marked off in appropriate units—whole numbers, halves, or quarters. 	<p>Meets criteria of a 3 also can choose and justify the most appropriate method for displaying a set of data.</p>
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Geometric Measurement: Understands concepts of area and relates area to multiplication and to addition. (3.MD.5, 3.MD.6, 3.MD.7)				
Marking Period	1	2	3	4
1				
2	<p>Not yet able to:</p> <ul style="list-style-type: none"> *Calculate the area as an attribute of rectangular arrays; *Determine area of rectangular arrays by counting unit squares and decomposing shapes; *Relate area of rectangular arrays to the operations of multiplication and addition. 	<p>Requires teacher prompting and support to do each of the following:</p> <ul style="list-style-type: none"> *Calculate the area as an attribute of rectangular arrays; *Determine area of rectangular arrays by counting unit squares and decomposing shapes; *Relate area of rectangular arrays to the operations of multiplication and addition. 	<p>Consistently and independently does each of the following:</p> <ul style="list-style-type: none"> *Calculate the area as an attribute of rectangular arrays; *Determine area of rectangular arrays by counting unit squares and decomposing shapes; *Relate area of rectangular arrays to the operations of multiplication and addition. 	<p>Meets criteria of a 3 using a variety of strategies and clearly communicates their mathematical thinking to solve problems.</p>
3	<p>Not yet able to:</p> <ul style="list-style-type: none"> *Measure area as an attribute of plane figures; *Calculate area by counting unit squares and decomposing regular and irregular shapes when the side lengths are whole or not whole units; *Relate area to the operations of multiplication and addition. 	<p>Requires teacher prompting and support to do each of the following:</p> <ul style="list-style-type: none"> *Measure area as an attribute of plane figures; *Calculate area by counting unit squares and decomposing regular and irregular shapes when the side lengths are whole or not whole units; *Relate area to the operations of multiplication and addition. 	<p>Consistently and independently does each of the following:</p> <ul style="list-style-type: none"> *Measure area as an attribute of plane figures; *Calculate area by counting unit squares and decomposing regular and irregular shapes when the side lengths are whole or not whole units; *Relate area to the operations of multiplication and addition. 	<p>Meets criteria of a 3 using a variety of strategies and clearly communicates their mathematical thinking to solve problems.</p>

Geometric Measurement: Recognizes perimeter as an attribute of plane figures and distinguishes between linear and area measures. (3.MD.8)				
Marking Period	1	2	3	4
1				
2				
3	<p>Not yet able to solve real-world problems involving each of the following:</p> <ul style="list-style-type: none"> *Finding perimeters of polygons; *Finding missing side lengths when given the perimeter; *Creating plain figures with the same area and different perimeters and vice versa. 	<p>Requires teacher prompting and support to solve real-world problems involving each of the following:</p> <ul style="list-style-type: none"> *Finding perimeters of polygons; *Finding missing side lengths when given the perimeter; *Creating plain figures with the same area and different perimeters and vice versa. 	<p>Consistently and independently solves real-world problems involving each of the following:</p> <ul style="list-style-type: none"> *Finding perimeters of polygons; *Finding missing side lengths when given the perimeter; *Creating plain figures with the same area and different perimeters and vice versa. 	<p>Meets criteria of a 3 and when given the perimeter of a plain figure can consistently and independently determine the side lengths that will produce the maximum and minimum area and justifies their conclusions with viable arguments.</p>

Geometry

Reasons with shapes and their attributes. (3.G.1, 3.G.2)				
Marking Period	1	2	3	4
1				
2	Not yet able to: *Partition shapes into different areas and associate each part with a unit fraction of a whole.	Requires teacher prompting and support to: *Partition shapes into different areas and associate each part with a unit fraction of a whole.	Consistently and independently: *Partition shapes into different areas and associate each part with a unit fraction of a whole.	Meets criteria for a 3 and can solve real-world problems involving partitioning shapes into different areas and associating each part with a unit fraction of a whole.
3	Not yet able to: *Classify shapes according to a variety of attributes, name different quadrilaterals and explain why some shapes are quadrilaterals and some are not.	Requires teacher prompting and support to: *Classify shapes according to a variety of attributes, name different quadrilaterals and explain why some shapes are quadrilaterals and some are not.	Consistently and independently: *Classify shapes according to a variety of attributes, name different quadrilaterals and explain why some shapes are quadrilaterals and some are not.	Meets criteria for a 3 and can compare and contrast shapes using proper mathematical vocabulary.