## **3rd Grade Math**

## **Operations and Algebraic Thinking**

			Proficiency	/ Indicators	
Trimester	Standard	1 Below Grade Level Expectations	<b>2</b> Approaching Grade Level Expectations	<b>3</b> Meets Grade Level Expectations	<b>4</b> Exceeds Grade Level Expectations
1, 2	Solves problems involving the four operations.	The student is seldom able to solve problems involving the four operations.	The student sometimes solves problems involving the four operations.	The student usually solves problems involving the four operations.	The student is able to solve problems involving the four operations.
3	Solves problems involving the four operations.	The student is seldom able to solve two step word problems, including problems involving money, using the four operations; representing these problems using equations with a letter standing for the unknown quantity; and assess the reasonableness of answers using mental computation and estimation strategies including rounding.	The student sometimes solves two step word problems, including problems involving money, using the four operations; representing these problems using equations with a letter standing for the unknown quantity; and assess the reasonableness of answers using mental computation and estimation strategies including rounding.	The student usually solves two step word problems, including problems involving money, using the four operations; representing these problems using equations with a letter standing for the unknown quantity; and assess the reasonableness of answers using mental computation and estimation strategies including rounding.	The student is able to solve two step word problems, including problems involving money, using the four operations; representing these problems using equations with a letter standing for the unknown quantity; and assess the reasonableness of answers using mental computation and estimation strategies including rounding.
1, 2	Computes with Accuracy and Efficiency: Multiplication	The student is seldom able to compute with accuracy and efficiency with multiplication facts 0-5.	The student sometimes computes with accuracy and efficiency with multiplication facts 0-5.	The student usually computes with accuracy and efficiency with multiplication facts 0-5.	The student is able to compute with accuracy and efficiency with multiplication facts 0-5.
3	Computes with Accuracy and Efficiency: Multiplication	The student is seldom able to compute with accuracy and efficiency with multiplication facts 0-10.	The student sometimes computes with accuracy and efficiency with multiplication facts 0-10.	The student usually computes with accuracy and efficiency with multiplication facts 0-10.	The student is able to compute with accuracy and efficiency with multiplication facts 0-10 and above.
2	Computes with Accuracy and Efficiency:	The student is seldom able to compute with accuracy and efficiency	The student sometimes computes with accuracy and efficiency with division	The student usually computes with accuracy and efficiency with division	The student is able to compute with accuracy and efficiency with division facts

	Division	with division facts 0-5.	facts 0-5.	facts 0-5.	0-5.
3	Computes with	The student is seldom	The student sometimes	The student usually	The student is able to
	Accuracy and	able to compute with	computes with accuracy	computes with accuracy	compute with accuracy and
	Efficiency:	accuracy and efficiency	and efficiency with division	and efficiency with division	efficiency with division facts
	Division	with division facts 0-10.	facts 0-10.	facts 0-10.	0-10 and above.

	Numbers and Operations in Base Ten				
Trimerator		Proficiency Indicators			
Irimester	Standard	1 Below Grade Level Expectations	<b>2</b> Approaching Grade Level Expectations	<b>3</b> Meets Grade Level Expectations	4 Exceeds Grade Level Expectations
1, 2	Uses place value understanding and properties of operations to perform multi-digit arithmetic.	The student is seldom able to use place value understanding to round numbers to the nearest 10 or 100; add and subtract within 1,000 accurately and efficiently, using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction; multiples one-digit whole numbers by multiples of 10 in the range of 10-90 using strategies based on place-value and properties of operations.	The student sometimes uses place value understanding to round numbers to the nearest 10 or 100; adds and subtracts within 1,000 accurately and efficiently, using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction; multiples one-digit whole numbers by multiples of 10 in the range of 10-90 using strategies based on place-value and properties of operations.	The student usually uses place value understanding to round numbers to the nearest 10 or 100; adds and subtracts within 1,000 accurately and efficiently, using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction; multiples one-digit whole numbers by multiples of 10 in the range of 10-90 using strategies based on place-value and properties of operations.	The student is able to use place value understanding to round numbers to the nearest 10 or 100; adds and subtracts within 1,000 accurately and efficiently, using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction; multiples one-digit whole numbers by multiples of 10 in the range of 10-90 using strategies based on place-value and properties of operations.
3	Uses place value understanding and properties of operations to perform multi-digit arithmetic.	The student is seldom able to use place value understanding to round numbers to the nearest 10 or 100; add and subtract within 1,000 accurately and efficiently, using strategies and algorithms based on place value, properties of operations,	The student sometimes uses place value understanding to round numbers to the nearest 10 or 100; adds and subtracts within 1,000 accurately and efficiently, using strategies and algorithms based on place value, properties of operations,	The student usually uses uses place value understanding to round numbers to the nearest 10 or 100; adds and subtracts within 1,000 accurately and efficiently, using strategies and algorithms based on place value, properties of operations,	The student is beginning to demonstrate above grade level place value understanding; adds and subtracts within and above 1,000 accurately and efficiently, using strategies and algorithms based on place value, properties of operations, and/or the

	and/or the relationship between addition and subtraction; multiples one-digit whole numbers by multiples of 10 in the range of 10-90 using strategies based on place-value and properties of operations.	and/or the relationship between addition and subtraction; multiples one-digit whole numbers by multiples of 10 in the range of 10-90 using strategies based on place-value and properties of operations.	and/or the relationship between addition and subtraction; multiples one-digit whole numbers by multiples of 10 in the range of 10-90 using strategies based on place-value and properties of operations.	relationship between addition and subtraction; multiples one-digit and <b>two</b> <b>digit</b> whole numbers using strategies based on place-value and properties of operations.
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Numbers and Operations in Fractions					
Trimeration	Otandard		Proficiency	/ Indicators	
Irimester	Standard	1 Below Grade Level Expectations	<b>2</b> Approaching Grade Level Expectations	<b>3</b> Meets Grade Level Expectations	<b>4</b> Exceeds Grade Level Expectations
2	Understands fractions as parts of a whole and as numbers on a number line.	The student is seldom able to recognize fractions as equal parts of a whole; recognize fractions as a number on a numberline; represent fractions on a numberline; recognize the resulting interval.	The student sometimes recognizes fractions as equal parts of a whole; recognizes fractions as a number on a numberline; represents fractions on a numberline; and recognizes the resulting interval.	The student usually recognizes fractions as equal parts of a whole; recognizes fractions as a number on a numberline; represents fractions on a numberline; and recognizes the resulting interval.	The student is able to recognize fractions as equal parts of a whole; recognizes fractions as a number on a numberline; represents fractions on a numberline; and recognizes the resulting interval.
2	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	The student is seldom able to understand two fractions as equivalent; recognize and generate simple equivalent fractions $(\frac{1}{2}=2/4)$ ; express whole numbers as fractions; and compare two fractions with the same numerator or denominator by reasoning about their size.	<b>The student sometimes</b> understands two fractions as equivalent; recognizes and generates simple equivalent fractions (½=2/4); expresses whole numbers as fractions; and compares two fractions with the same numerator or denominator by reasoning about their size.	The student usually understands two fractions as equivalent; recognizes and generates simple equivalent fractions (½=2/4); expresses whole numbers as fractions; and compares two fractions with the same numerator or denominator by reasoning about their size	The student understands two fractions as equivalent; recognizes and generates simple equivalent fractions $(\frac{1}{2}=2/4)$ ; expresses whole numbers as fractions; and compares two fractions with the same numerator or denominator by reasoning about their size.

Measurement and Data						
Trimester	Standard	Proficiency Indicators				

		1 Below Grade Level Expectations	<b>2</b> Approaching Grade Level Expectations	<b>3</b> Meets Grade Level Expectations	<b>4</b> Exceeds Grade Level Expectations
2 or 3	Solves problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	The student is seldom able to tell and write time to the nearest minute and measure time intervals in minutes; solve word problems involving addition and subtraction of time intervals by representing the problem on a numberline.	The student sometimes tells and writes time to the nearest minute and measure time intervals in minutes; solves word problems involving addition and subtraction of time intervals by representing the problem on a numberline.	The student usually tells and writes time to the nearest minute and measure time intervals in minutes; solves word problems involving addition and subtraction of time intervals by representing the problem on a numberline	The student is able to tell and write time to the nearest minute and measure time intervals in minutes; solves word problems involving addition and subtraction of time intervals by representing the problem on a numberline
1	Describes and compares measurable attributes: Geometric Measurement: Understand concepts of area and relate area to multiplication and addition.	The student is seldom able to recognize area as an attribute of plane figures, measured in square units without gaps; measure area by counting unit squares; Relate area to multiplication and addition; Find area by tiling and relate it to multiplication of the side lengths; Use tiles to show the distributive property; Recognize area as additive for rectilinear shapes.	The student sometimes recognizes area as an attribute of plane figures, measured in square units without gaps; measures area by counting unit squares; Relates area to multiplication and addition; Finds area by tiling and relate it to multiplication of the side lengths; Uses tiles to show the distributive property; Recognizes area as additive for rectilinear shapes.	The student usually recognizes area as an attribute of plane figures, measured in square units without gaps; measures area by counting unit squares; Relates area to multiplication and addition; Finds area by tiling and relate it to multiplication of the side lengths; Uses tiles to show the distributive property; Recognizes area as additive for rectilinear shapes.	The student is able to recognize area as an attribute of plane figures, measured in square units without gaps; measures area by counting unit squares; Relates area to multiplication and addition; Finds area by tiling and relate it to multiplication of the side lengths; Uses tiles to show the distributive property; Recognizes area as additive for rectilinear shapes.
3	Describes and compares measurable attributes: Recognize perimeter as an attribute of plane figures and	The student is seldom able to solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the sided lengths, finding an unknown side length, and exhibiting rectangles with	The student sometimes solves real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the sided lengths, finding an unknown side length, and exhibiting rectangles with	The student usually solves real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the sided lengths, finding an unknown side length, and exhibiting rectangles with	The student is able to solve real world and mathematical problems involving perimeters of polygons, including finding the perimeter given the sided lengths, finding an unknown side length, and exhibiting rectangles with

	distinguish	the same perimeter and	the same perimeter and	the same perimeter and	the same perimeter and
	between linear	different areas or with the	different areas or with the	different areas or with the	different areas or with the
	and area	same area and different	same area and different	same area and different	same area and different
	measures.	perimeters.	perimeters.	perimeters	perimeters
1, 2, 3	Represent and Interpret Data.	The student is seldom able to draw a scaled picture and bar graph with several data sets and solve one and two step problems using information presented; generate measurement data by measuring lengths to halves and fourths of an inch and show data by making a line plot where horizontal scale is marked off in whole numbers, halves, or quarters.	The student sometimes draws a scaled picture and bar graph with several data sets and solve one and two step problems using information presented; generates measurement data by measuring lengths to halves and fourths of an inch and show data by making a line plot where horizontal scale is marked off in whole numbers, halves, or quarters.	The student usually draws a scaled picture and bar graph with several data sets and solve one and two step problems using information presented; generates measurement data by measuring lengths to halves and fourths of an inch and show data by making a line plot where horizontal scale is marked off in whole numbers, halves, or quarters.	The student is able to draw a scaled picture and bar graph with several data sets and solve one and two step problems using information presented; generates measurement data by measuring lengths to halves and fourths of an inch and show data by making a line plot where horizontal scale is marked off in whole numbers, halves, or quarters.

Geometry							
Trimeration	Otandard		Proficiency Indicators				
Trimester	Standard	1 Below Grade Level Expectations	<b>2</b> Approaching Grade Level Expectations	<b>3</b> Meets Grade Level Expectations	<b>4</b> Exceeds Grade Level Expectations		
2	Identifies and reasons with shapes and their attributes	The student is seldom able to partition shapes into parts with equal areas and express the area of each part as a unit fraction of the whole.	The student sometimes partitions shapes into parts with equal areas and expresses the area of each part as a unit fraction of the whole.	The student usually partitions shapes into parts with equal areas and expresses the area of each part as a unit fraction of the whole.	The student is able to partition shapes into parts with equal areas and expresses the area of each part as a unit fraction of the whole.		
3	Identifies and reasons with shapes and their attributes	The student is seldom able to understand that shapes in different categories (rhombuses, rectangles, and others) may share attributes (having four sides) and that the shared attributes can define a larger category	The student sometimes understands that shapes in different categories (rhombuses, rectangles, and others) may share attributes (having four sides) and that the shared attributes can define a larger category	The student usually understands that shapes in different categories (rhombuses, rectangles, and others) may share attributes (having four sides) and that the shared attributes can define a larger category	The student understands that shapes in different categories (rhombuses, rectangles, and others) may share attributes (having four sides) and that the shared attributes can define a larger category (quadrilaterals);		

(quadrilaterals); re rhombuses, rectar and squares are e of quadrilaterals, a examples of quadr that do not belong these subcategorie	ecognize ngles, examples(quadrilaterals); recognizes rhombuses, rectangles, and squares are examples of quadrilaterals, and draw examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	(quadrilaterals); recognizes rhombuses, rectangles, and squares are examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	recognizes rhombuses, rectangles, and squares are examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.
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