Mathematics Report Card Companion
Third Grade

Mathematics

Operations and Algebraic Thinking

Domain: Operations and Algebraic Thinking Standard 3.OA.A.1 Represent and solve problems using multiplication and division			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Interpret products of whole numbers as the total number of objects in groups - Describe and/or represent a context when a total number of objects can be expressed as, eg. 5 ✕ 7	Student **attempts** to: - Interpret products of whole numbers as the total number of objects in groups - Describe and/or represent a context when a total number of objects can be expressed as, eg: 5 ✕ 7	Student: - Interprets products of whole numbers as the total number of objects in groups - Describe and/or represent a context when a total number of objects can be expressed as, eg: 5 ✕ 7	Student **consistently and independently:** - Interprets products of whole numbers as the total number of objects in groups - Describe and/or represent a context when a total number of objects can be expressed as, eg: 5 ✕ 7

Domain: Operations and Algebraic Thinking Standard 3.OA.A.2 Represent and solve problems using multiplication and division			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Interpret whole number quotients as the number of objects in each share. - Describe and/or represent a context when a number of shares or number of groups can be expressed as, eg: 56 ÷8	Student **attempts** to: - Interpret whole number quotients as the number of objects in each share. - Describe and/or represent a context when a number of shares or number of groups can be expressed as, eg: 56 ÷8	Student: - Interprets whole number quotients as the number of objects in each share. - Describe and/or represent a context when a number of shares or number of groups can be expressed as, eg: 56 ÷8	Student **consistently and independently:** - Interprets whole number quotients as the number of objects in each share. - Describe and/or represent a context when a number of shares or number of groups can be expressed as, eg: 56 ÷8

Domain: Operations and Algebraic Thinking Standard 3.OA.A.3 Represent and solve problems using multiplication and division			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Use multiplication and division within 100 to solve world problem situations using arrays, equal groups, and measurement quantities. - Represent a problem using drawings and equations, with a symbol to represent the unknown factor or product	Student **attempts** to: - Use multiplication and division within 100 to solve world problem situations using arrays, equal groups, and measurement quantities. - Represent a problem using drawings and equations, with a symbol to represent the unknown factor or product	Student: - Uses multiplication and division within 100 to solve world problem situations using arrays, equal groups, and measurement quantities. - Represent a problem using drawings and equations, with a symbol to represent the unknown factor or product	Student **consistently and independently:** - Uses multiplication and division within 100 to solve world problem situations using arrays, equal groups, and measurement quantities. - Represent a problem using drawings and equations, with a symbol to represent the unknown factor or product

Domain: Operations and Algebraic Thinking Standard 3.OA.A.4 Represent and solve problems using multiplication and division			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Determine the unknown whole number in a multiplication or division equation, to make the equation true	Student **attempts** to: - Determine the unknown whole number in a multiplication or division equation, to make the equation true	Student: - Determines the unknown whole number in a multiplication or division equation, to make the equation true	Student **consistently and independently:** - Determines the unknown whole number in a multiplication or division equation, to make the equation true

Domain: Operations and Algebraic Thinking Standard 3.OA.B.5 Understand properties of multiplication and the relationship between multiplication division			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Apply properties of operations to multiply and divide using the: - *Commutative Property of multiplication* - *Associative Property of multiplication*	Student **attempts** to: - Apply properties of operations to multiply and divide using the: - *Commutative Property of multiplication* - *Associative Property of multiplication*	Student: - Applies properties of operations to multiply and divide by understanding, using the: - *Commutative Property of multiplication* - *Associative Property of multiplication*	Student **consistently and independently:** - Applies properties of operations to multiply and divide by understanding, using the: - *Commutative Property of multiplication* - *Associative Property of multiplication*

Domain: Operations and Algebraic Thinking Standard 3.OA.B.6 Understand properties of multiplication and the relationship between multiplication division			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Understand division as an unknown factor problem	Student **attempts** to: - Understand division as an unknown factor problem	Student: - Understands division as an unknown factor problem	Student **consistently and independently:** - Understands division as an unknown factor problem

Domain: Operations and Algebraic Thinking Standard 3.OA.C.7 Multiply and divide within 100			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - With accuracy and efficiency, multiply and divide within 100, using strategies such as: - The relationship between multiplication & division, - Properties of operations **With prompts and support**, student **does not yet** - Know from memory all products of two, one digit numbers	Student **attempts** to: - With accuracy and efficiency, multiply and divide within 100, using strategies such as: - The relationship between multiplication & division, - Properties of operations **With prompts and support**, student **attempts** to: - Know from memory all products of two, one digit numbers	Student: - With accuracy and efficiency, multiply and divide within 100, using strategies such as: - The relationship between multiplication & division, - Properties of operations - Knows from memory all products of two, one digit numbers	Student **consistently and independently:** - With accuracy and efficiency, multiply and divide within 100, using strategies such as: - The relationship between multiplication & division, - Properties of operations - Knows from memory all products of two, one digit numbers

Domain: Operations and Algebraic Thinking

Standard 3.OA.D.8
Solve problems involving the four operations (+, —, ✕, ÷), and identify and explain patterns in arithmetic

1 Does not meet grade level expectations of learning standards	2 Partially meeting grade level expectations of learning standards	3 Meeting grade level expectations of learning standards	4 Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Solve two step word problems, using the four operations including problems involving money - Represent problems using equations, with a letter to represent the unknown quantity - Assess the reasonableness of an answer using mental computation and/or estimation strategies	Student **attempts** to: - Solve two step word problems, using the four operations including problems involving money - Represent problems using equations, with a letter to represent the unknown quantity - Assess the reasonableness of an answer using mental computation and/or estimation strategies	Student: - Solves two step word problems, using the four operations including problems involving money - Represents problems using equations, with a letter to represent the unknown quantity - Assesses the reasonableness of an answer using mental computation and/or estimation strategies	Student **consistently and independently:** - Solves two step word problems, using the four operations including problems involving money - Represents problems using equations, with a letter to represent the unknown quantity - Assesses the reasonableness of an answer using mental computation and/or estimation strategies

including rounding - Perform operations in the proper order when there are no parenthesis*	including rounding - Perform operations in the proper order when there are no parenthesis*	including rounding - Performs operations in the proper order when there are no parenthesis*	including rounding - Performs operations in the proper order when there are no parenthesis*

* Multiplication then Division, then Addition and Subtraction; unless the expression only has addition and subtraction, compute from left to write. When the expression only has multiplication and division, compute from left to right.

MD (multiplication and division)

→

AS (addition and subtraction)

→

Domain: Operations and Algebraic Thinking Standard 3.OA.D.9 Solve problems involving the four operations (+, —, ✕, ÷), and identify and explain patterns in arithmetic			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Identify arithmetic patterns, including addition and multiplication tables - Explain them using properties of operations	Student **attempts** to: - Identify arithmetic patterns, including addition and multiplication tables - Explain them using properties of operations	Student: - Identifies arithmetic patterns, including addition and multiplication tables - Explains them using properties of operations	Student **consistently and independently:** - Identifies arithmetic patterns, including addition and multiplication tables - Explains them using properties of operations

Numbers and Operations in Base Ten

Domain: Numbers and Operations in Base Ten Standard 3.NBT.A.1 Use place value understanding and properties of operations to perform multi-digit arithmetic			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Use place value understanding to round place to the nearest 10 or 100	Student **attempts** to: - Use place value understanding to round place to the nearest 10 or 100	Student: - Uses place value understanding to round place to the nearest 10 or 100	Student **consistently and independently:** - Uses place value understanding to round place to the nearest 10 or 100

Domain: Numbers and Operations in Base Ten Standard 3.NBT.A.2 Use place value understanding and properties of operations to perform multi-digit arithmetic			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - With accuracy and efficiency, add and subtract within 1000 using strategies and algorithms, based on place value, properties of operations, and/or the relationship between addition and subtraction	Student **attempts** to: - With accuracy and efficiency, add and subtract within 1000 using strategies and algorithms, based on place value, properties of operations, and/or the relationship between addition and subtraction	Student: - With accuracy and efficiency, add and subtract within 1000 using strategies and algorithms, based on place value, properties of operations, and/or the relationship between addition and subtraction	Student **consistently and independently:** - With accuracy and efficiency, add and subtract within 1000 using strategies and algorithms, based on place value, properties of operations, and/or the relationship between addition and subtraction

Domain: Numbers and Operations in Base Ten Standard 3.NBT.A.3 Use place value understanding and properties of operations to perform multi-digit arithmetic			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Multiply one digit whole number by multiples of 10 (eg: 9 x 80), using strategies based on place value and properties operations	Student **attempts** to: - Multiply one digit whole number by multiples of 10 (eg: 9 x 80), using strategies based on place value and properties operations	Student: - Multiplies one digit whole number by multiples of 10 (eg: 9 x 80), using strategies based on place value and properties operations	Student **consistently and independently:** - Multiplies one digit whole number by multiples of 10 (eg: 9 x 80), using strategies based on place value and properties operations

Numbers and Operations- Fractions

Domain: Numbers and Operations-Fractions **

Standard 3.NF.A.1
Develop understanding of fractions as numbers

1 Does not meet grade level expectations of learning standards	2 Partially meeting grade level expectations of learning standards	3 Meeting grade level expectations of learning standards	4 Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into *b* equal parts.	Student **attempts** to: - Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into *b* equal parts.	Student: - Understands a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into *b* equal parts.	Student **consistently and independently:** - Understands a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into *b* equal parts.

Domain: Numbers and Operations-Fractions ** Standard 3.NF.A.2 Develop understanding of fractions as numbers			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student does not yet attempt to: - Understand a fraction as a number on the number line; represent fractions on a number line diagram. a.Represent a fraction on a number line diagram from 0 to 1, and partition it into equal parts. - Recognize each size and location on the number line. b. Represent a fraction on a number line diagram by marking off lengths from 0.	Student attempts to: - Understand a fraction as a number on the number line; represent fractions on a number line diagram. a.Represent a fraction on a number line diagram from 0 to 1, and partition it into equal parts. - Recognize each size and location on the number line. b. Represent a fraction on a number line diagram by marking off lengths from 0.	Student: - Understands a fraction as a number on the number line; represent fractions on a number line diagram. a. Represent a fraction on a number line diagram from 0 to 1, and partition it into equal parts. - Recognize each size and the location on the number line. b. Represent a fraction on a number line diagram by marking off lengths from 0.	Student consistently and independently: - Understands a fraction as a number on the number line; represent fractions on a number line diagram. a.Represent a fraction on a number line from 0 to 1, and partition it into equal parts. - Recognize each size and the location on the number line. b. Represent a fraction on a number line diagram by marking off lengths from 0. - Recognize the interval size, and the

- Recognize the interval size, and the endpoint's location on the number line.	- Recognize the interval size, and the endpoint's location on the number line.	- Recognize the interval size, and the endpoint's location on the number line.	endpoint's location on the number line.

Domain: Numbers and Operations-Fractions ** Develop understanding of fractions as numbers Standard 3.NF.A.3			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Explain equivalence of fractions, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size. - Understand two fractions as equivalent if they are located at the	Student **attempts** to: - Explain equivalence of fractions, and compare fractions by reasoning about their size. a. Understand two fractions as equivalent (equal) if they are the same size. - Understand two fractions as equivalent if they are located at the	Student: - Explains equivalence of fractions, and compares fractions by reasoning about their size. a. Understands two fractions as equivalent (equal) if they are the same size. - Understands two fractions as equivalent if they are located at the	Student **consistently and independently:** - Explains equivalence of fractions, and compares fractions by reasoning about their size. a. Understands two fractions as equivalent (equal) if they are the same size. - Understands two fractions as equivalent if they are located at the

same point on a number line. b. Recognize and generate simple equivalent fractions by reasoning about their size - Explain why the fractions are equivalent with the support of a visual fraction model. c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. - Recognize that comparisons are valid only when the two fractions refer to the same whole.	same point on a number line. b. Recognize and generate simple equivalent fractions by reasoning about their size - Explain why the fractions are equivalent with the support of a visual fraction model. c. Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers. d. Compare two fractions with the same numerator or the same denominator by reasoning about their size. - Recognize that comparisons are valid only when the two fractions refer to the same whole.	same point on a number line. b. Recognizes and generates simple equivalent fractions by reasoning about their size - Explains why the fractions are equivalent with the support of a visual fraction model. c. Expresses whole numbers as fractions, and recognizes fractions that are equivalent to whole numbers. d. Compares two fractions with the same numerator or the same denominator by reasoning about their size. - Recognizes that comparisons are valid only when the two fractions refer to the same whole.	same point on a number line. b. Recognizes and generates simple equivalent fractions by reasoning about their size - Explains why the fractions are equivalent with the support of a visual fraction model. c. Expresses whole numbers as fractions, and recognizes fractions that are equivalent to whole numbers. d. Compares two fractions with the same numerator or the same denominator by reasoning about their size. - Recognizes that comparisons are valid only when the two fractions refer to the same whole.

- Record the results of comparisons with the symbols >, =, or <, and with a visual fraction model.	- Record the results of comparisons with the symbols >, =, or <, and with a visual fraction model.	- Records the results of comparisons with the symbols >, =, or <, and with a visual fraction model.	- Records the results of comparisons with the symbols >, =, or <, and with a visual fraction model.

** Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8. Visual fraction models include tape diagrams, number lines, and area models. Set models, including those defined as the whole, are excluded at this grade.

Measurement

Domain: Measurement

Standard 3.M.A.1
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects

1 Does not meet grade level expectations of learning standards	2 Partially meeting grade level expectations of learning standards	3 Meeting grade level expectations of learning standards	4 Exceeding grade level expectations of learning standards
Student **does not yet attempt** 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 in minutes, e.g., by representing the problem on a number line diagram.	Student **attempts** 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 in minutes, e.g., by representing the problem on a number line diagram.	Student: - Tells and writes time to the nearest minute and measures time intervals in minutes. - Solves word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	Student **consistently and independently:** - Tells and writes time to the nearest minute and measures time intervals in minutes. - Solves word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.

Domain: Measurement

Standard 3.M.A.2
Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects

1 Does not meet grade level expectations of learning standards	2 Partially meeting grade level expectations of learning standards	3 Meeting grade level expectations of learning standards	4 Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). - Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes in the same units ****	Student **attempts** to: - Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). - Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes in the same units ****	Student: - Measures and estimates liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). - Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes in the same units ****	Student **consistently and independently:** - Measures and estimates liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). - Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes in the same units ****

**** Standard requires solving problems, with visuals, using liquid volume. It does not require students to find volume.

Domain: Measurement

Standards 3.M.B.3
Geometric measurement: understand concepts of area and relate area to multiplication and addition

1 Does not meet grade level expectations of learning standards	2 Partially meeting grade level expectations of learning standards	3 Meeting grade level expectations of learning standards	4 Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Recognize area and understand concepts of area measurement. a. A square with side length 1 unit, is “one square unit”, and can be used to measure area. b. A plane figure which can be covered without gaps or overlaps.	Student **attempts** to: - Recognize area and understand concepts of area measurement. a. A square with side length 1 unit, is “one square unit”, and can be used to measure area. b. A plane figure which can be covered without gaps or overlaps.	Student: - Recognizes area and understands concepts of area measurement. a. A square with side length 1 unit, is “one square unit”, and can be used to measure area. b. A plane figure which can be covered without gaps or overlaps.	Student **consistently and independently:** - Recognizes area and understands concepts of area measurement. a. A square with side length 1 unit, is “one square unit”, and can be used to measure area. b. A plane figure which can be covered without gaps or overlaps.

Domain: Measurement Standards 3.M.B.4 Geometric measurement: understand concepts of area and relate area to multiplication and addition			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Measure areas by counting unit squares	Student **attempts** to: - Measure areas by counting unit squares	Student: - Measures areas by counting unit squares	Student **consistently and independently:** - Measures areas by counting unit squares

Domain: Measurement Standards 3.M.B.5 Relate area to the operations of multiplication and division			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: a. Find the area of a rectangle by tiling it and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of rectangles to solve real world and mathematical problems.	Student **attempts** to: a. Find the area of a rectangle by tiling it and show that the area is the same as would be found by multiplying the side lengths. b. Multiply side lengths to find areas of rectangles to solve real world and mathematical problems.	Student: a. Finds the area of a rectangle by tiling it and shows that the area is the same as would be found by multiplying the side lengths. b. Multiplies side lengths to find areas of rectangles to solve real world and mathematical problems.	Student **consistently and independently:** a. Finds the area of a rectangle by tiling it and shows that the area is the same as would be found by multiplying the side lengths. b. Multiplies side lengths to find areas of rectangles to solve real world and mathematical problems.

c. Use tiling to show that the area of a rectangle can be solved by addition or multiplication. -Use area models to represent the distributive property. d. Recognize area as additive. - Find areas of rectilinear figures by decomposing; adding the areas to solve real world problems.	c. Use tiling to show that the area of a rectangle can be solved by addition or multiplication. -Use area models to represent the distributive property. d. Recognize area as additive. - Find areas of rectilinear figures by decomposing; adding the areas to solve real world problems.	c. Uses tiling to show that the area of a rectangle can be solved by addition or multiplication. -Uses area models to represent the distributive property. d. Recognizes area as additive. - Finds areas of rectilinear figures by decomposing; adding the areas to solve real world problems.	c. Uses tiling to show that the area of a rectangle can be solved by addition or multiplication. -Uses area models to represent the distributive property. d. Recognizes area as additive. - Finds areas of rectilinear figures by decomposing; adding the areas to solve real world problems.

Domain: Measurement

Standards 3.M.C.6
Geometric measurement: Recognize perimeter as an attribute of plane figures and distinguish between linear and area measures

1 Does not meet grade level expectations of learning standards	2 Partially meeting grade level expectations of learning standards	3 Meeting grade level expectations of learning standards	4 Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Solve real world and mathematical problems involving perimeters of polygons: - finding the perimeter if given the side lengths, - finding an unknown side length, including: same perimeter and different areas or with the same area and different perimeters	Student **attempts** to: - Solve real world and mathematical problems involving perimeters of polygons: - finding the perimeter if given the side lengths, - finding an unknown side length, including: same perimeter and different areas or with the same area and different perimeters.	Student: - Solves real world and mathematical problems involving perimeters of polygons: - finds the perimeter if given the side lengths, - finds an unknown side length, including: rectangles with the and different areas or with the same area and different perimeters.	Student **consistently and independently:** - Solves real world and mathematical problems involving perimeters of polygons: - finds the perimeter if given the side lengths, - finds an unknown side length, including: same perimeter and different areas or with the same area and different perimeters.

Data Literacy

Domain: Data Literacy Standards 3.DL.A.1 Understand data based questions and data collection			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Develop data-based questions and decide what data will answer the question.	Student **attempts** to: - Develop data-based questions and decide what data will answer the question.	Student: - Develops data-based questions and decides what data will answer the question.	Student **consistently and independently:** - Develops data-based questions and decides what data will answer the question.

Domain: Data Literacy Standards 3.DL.A.2 Understand data based questions and data collection			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Collect student-centered data or use existing data to answer data-based questions	Student **attempts** to: - Collect student-centered data or use existing data to answer data-based questions	Student: - Collects student-centered data or uses existing data to answer data-based questions	Student **consistently and independently:** - Collects student-centered data or uses existing data to answer data-based questions

Domain: Data Literacy

Standards 3.DL.B.3 Represent and interpret data			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. - Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.	Student **attempts** to: - Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. - Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.	Student: - Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. - Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.	Student **consistently and independently:** - Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. - Solve one- and two-step “how many more” and “how many less” problems using information presented in scaled bar graphs.

Domain: Data Literacy

Standards 3.DL.B.4 Represent and interpret data			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. - Show the data by making a line plot and using appropriate units—whole numbers, halves, or quarters.	Student **attempts** to: - Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. - Show the data by making a line plot and using appropriate units—whole numbers, halves, or quarters.	Student: - Generates measurement data by measuring lengths using rulers marked with halves and fourths of an inch. - Shows the data by making a line plot, and using appropriate units—whole numbers, halves, or quarters.	Student **consistently and independently:** - Generates measurement data by measuring lengths using rulers marked with halves and fourths of an inch. - Shows the data by making a line plot and using appropriate units—whole numbers, halves, or quarters.

Geometry

Domain: Geometry Standards 3.G.A.1 Reason with shapes and their attributes			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Understand that shapes in different categories may share attributes - Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong.	Student **attempts** to: - Understand that shapes in different categories may share attributes - Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong.	Student: - Understand that shapes in different categories may share attributes - Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong.	Student **consistently and independently:** - Understand that shapes in different categories may share attributes - Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong.

Domain: Geometry Standards 3.G.A.2 Reason with shapes and their attributes			
1 Does not meet grade level expectations of learning standards	**2** Partially meeting grade level expectations of learning standards	**3** Meeting grade level expectations of learning standards	**4** Exceeding grade level expectations of learning standards
Student **does not yet attempt** to: - Partition shapes into parts with equal areas. - Express the area of each part as a unit fraction of the whole.	Student **attempts** to: - Partition shapes into parts with equal areas. - Express the area of each part as a unit fraction of the whole.	Student: - Partition shapes into parts with equal areas. - Express the area of each part as a unit fraction of the whole.	Student **consistently and independently:** - Partition shapes into parts with equal areas. - Express the area of each part as a unit fraction of the whole.

Companion Glossary

(courtesy of Graniteschools.org)

Accuracy: the ability to produce mathematically precise answers *(J. Bay-Williams & G. Kling, 2019, Math Fact Fluency)*

Algorithm: A step-by-step method for computing.

Array: An arrangement of objects in equal rows.

Area: The measure, in square units, of the inside of a plane figure.

Associative Property of multiplication: Changing the grouping of three or more factors does not change the product: a x b) x c = a x (b x c)

Bar graph: A model that uses bars to represent known and unknown quantities and the relationship between these quantities.

Commutative Property of multiplication: Changing the order of the factors does not change the product (a x b = b x a)

Data: A collection of information gathered for a purpose. Data may be in the form of either words or numbers.

Decomposing/ Decomposition: To separate a number into 2 or more parts, using place value.

Endpoint: A point at either end of a line segment, or a point at one end of a ray

Efficiency: the ability to produce answers relatively quickly and easily *(J. Bay-Williams, G. Kling, 2019, Math Fact Fluency)*

Estimate: A number close to an exact amount. An estimate tells about how much or about how many.

Expanded form: A way to write numbers that shows the place value of each digit

Factor: The whole numbers that are multiplied to get a product.

Fraction: A way to describe a part of a whole or a part of a group by using equal parts.

Line plot: A diagram showing frequency of data on a number line.

Order of Operations: A set of rules that tells the order in which to compute.

Partition: An action to divide shapes into smaller parts.

Perimeter: The distance around a figure.

Picture graph: A graph that uses pictures or symbols to show data.

Place Value: The value a digit has because of its place in a number.

Plane figure: A shape that is two dimensional and is formed by curves, line segments, or both.

Product: The answer to a multiplication problem.

Quadrilateral: A polygon (closed plane shape made from line segments) with 4 sides.

Quotient: The answer to a division problem.

Rectilinear figure: A polygon where all angles are right angles.

Rhombus: A quadrilateral with all 4 sides equal in length.

Scale: A series of numbers at regular intervals that help label a graph.

Square unit: A unit, such as square centimeter or square inch, used to measure area.

Tiling/ Tile: A pattern of shapes repeated to fill a plane. The shapes do not overlap and there are no gaps.

Unit fraction: A fraction that has 1 as its numerator. A unit fraction names 1 equal part of a whole.

Unit square: A square with side lengths of 1 unit each. It has an area of 1 square unit.