Assessment Blueprint – Form 3

Grade 5 Math

Grade/Course:	Grade 5
Content Area:	Math

Standard Number	Standard Text	Number of Items	DOK 1	DOK 2	DOK 3
5.OA.B.3	**Analyze patterns and relationships.** Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. *For example, given the rule "Add 3" and the starting number 0, and given the rule "Add 6" and the starting number 0, generate terms in the resulting sequences, and observe that the terms in one sequence are twice the corresponding terms in the other sequence. Explain informally why this is so.*	1	0	1	0
5.NBT.B.6	**Perform operations with multi-digit whole numbers and with decimals to hundredths.** Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, the properties of operations, and/or the relationship between multiplication and division. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	1	0	1	0

Code	Standard				
5.NBT.B.7	**Perform operations with multi-digit whole numbers and with decimals to hundredths.** Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	2	2	0	0
5.NF.B.4.a	**Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. a. Interpret the product $(a/b) \times q$ as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations $a \times q \div b$. *For example, use a visual fraction model to show (2/3) × 4 = 8/3, and create a story context for this equation. Do the same with (2/3) × (4/5) = 8/15. (In general, (a/b) × (c/d) = ac/bd.)*	2	2	0	0
5.NF.B.4.b	**Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.** Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. b. Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.	3	1	2	0
5.NF.B.5.a	**Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.** Interpret multiplication as scaling (resizing), by: a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication.	1	0	0	1

Standard	Description				
5.NF.B.5.b	**Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.** Interpret multiplication as scaling (resizing), by: b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case); explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number; and relating the principle of fraction equivalence $a/b = (n \times a)/(n \times b)$ to the effect of multiplying a/b by 1.	1	0	1	0
5.MD.A.1	**Convert like measurement units within a given measurement system.** Convert among different-sized standard measurement units within a given measurement system (e.g., convert 5 cm to 0.05 m), and use these conversions in solving multi-step, real world problems.	2	0	2	0
5.G.A.1	**Graph points on the coordinate plane to solve real-world and mathematical problems.** Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond (e.g., x-axis and x-coordinate, y-axis and y-coordinate).	1	1	0	0
5.G.A.2	**Graph points on the coordinate plane to solve real-world and mathematical problems.** Represent real world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation.	2	1	1	0