Pacing Guides for Acuity Readiness Form B Grade 5- Mathematics

Grade	Domain	Cluster	Cluster	Standard	DOK
Grade 04	4.G Geometry	Draw and identify lines and angles, and classify shapes by properties of their lines and angles	Draw and identify lines and angles, and classify shapes by properties of their lines and angles	4.G.3 Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	Level 1 - Recognizing and Recalling
Grade 04	4.MD Measurement and Data	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit	Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit	4.MD.2 Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.	Level 2 - Using Fundamental Concepts and Procedures
Grade 04	4.MD Measurement and Data	Represent and interpret data	Represent and interpret data	4.MD.4 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. For example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.	Level 2 - Using Fundamental Concepts and Procedures
Grade 04	4.NBT Number and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.	Use place value understanding and properties of operations to perform multi-digit arithmetic.	4.NBT.6 Find whole-number quotients and remainders with up to four-digit dividends and one-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.	Level 2 - Using Fundamental Concepts and Procedures
Grade 04	4.NF Number and Operations - Fractions	Extend understanding of fraction equivalence and ordering	Extend understanding of fraction equivalence and ordering	4.NF.2 Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	Level 2 - Using Fundamental Concepts and Procedures
Grade 04	4.NF Number and Operations - Fractions	Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers	4.NF.3 Understand a fraction a/b with a > 1 as a sum of fractions 1/b.	4.NF.3.c Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtraction.	Level 2 - Using Fundamental Concepts and Procedures

Grade 04	4.NF Number and Operations - Fractions	Understand decimal notation for fractions, and compare decimal fractions	Understand decimal notation for fractions, and compare decimal fractions	4.NF.7 Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.	Level 2 - Using Fundamental Concepts and Procedures
Grade 04	4.OA Operations and Algebraic Thinking	Use the four operations with whole numbers to solve problems	Use the four operations with whole numbers to solve problems	4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations.	Level 3 - Concluding and Explaining
Grade 05	5.G Geometry	Graph points on the coordinate plane to solve real-world and mathematical problems	Graph points on the coordinate plane to solve real-world and mathematical problems	5.G.1 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).	Level 1 - Recall
Grade 05	5.G Geometry	Graph points on the coordinate plane to solve real-world and mathematical problems	Graph points on the coordinate plane to solve real-world and mathematical problems	5.G.2 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.	Level 1 - Recall
Grade 05	5.G Geometry	Graph points on the coordinate plane to solve real-world and mathematical problems	Graph points on the coordinate plane to solve real-world and mathematical problems	5.G.2 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.	Level 1 - Recall
Grade 05	5.MD Measurement and Data	Convert like measurement units within a given measurement system	Convert like measurement units within a given measurement system	5.MD.1 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.	~
Grade 05	5.MD Measurement and Data	Represent and interpret data	Represent and interpret data	5.MD.2 Make a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. For example, given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.MD Measurement and Data	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition	5.MD.4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft, and improvised units.	Level 2 - Using Fundamental Concepts and Procedures

Grade 05	5.MD Measurement and Data	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition	5.MD.5 Relate volume to the operations of multiplication and addition and solve real world and mathematical problems involving volume.	5.MD.5.b Apply the formulas V = l x w x h and V = b x h for rectangular prisms to find volumes of right rectangular prisms with whole-number edge lengths in the context of solving real world and mathematical problems.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NBT Number and Operations in Base Ten	Understand the place value system	5.NBT.3 Read, write, and compare decimals to thousandths.	5.NBT.3.a Read and write decimals to thousandths using base-ten numerals, number names, and expanded form, e.g., 347.392 = 3 x 100 + 4 x 10 + 7 x 1 + 3 x (1/10) + 9 x (1/100) + 2 x (1/1000).	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NBT Number and Operations in Base Ten	Understand the place value system	5.NBT.3 Read, write, and compare decimals to thousandths.	5.NBT.3.b Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NBT Number and Operations in Base Ten	Perform operations with multi-digit whole numbers and with decimals to hundredths	Perform operations with multi-digit whole numbers and with decimals to hundredths	5.NBT.5 Fluently multiply multi-digit whole numbers using the standard algorithm.	Level 1 - Recall
Grade 05	5.NF Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	5.NF.4.a Interpret the product (a/b) x q as a parts of a partition of q into b equal parts; equivalently, as the result of a sequence of operations a x q / b. For example, use a visual fraction model to show (2/3) x 4 = 8/3, and create a story context for this equation. Do the same with (2/3) x (4/5) = 8/15. (In general, (a/b) x (c/d) = ac/bd.)	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NF Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	5.NF.4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction.	5.NF.4.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.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NF Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	5.NF.5 Interpret multiplication as scaling (resizing), by:	5.NF.5.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.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NF Number and Operations - Fractions	Apply and extend previous understandings of multiplication and division to multiply and divide fractions	5.NF.5 Interpret multiplication as scaling (resizing), by:	5.NF.5.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 = (nxa)/(nxb) to the effect of multiplying a/b by 1.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.OA Operations and Algebraic Thinking	Write and interpret numerical expressions	Write and interpret numerical expressions	5.OA.1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	Level 2 - Using Fundamental Concepts and Procedures