Pacing Guide for Acuity Readiness Form A Grade 5 - Math

Grade	Domain	Cluster	Cluster	Standard Skills	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.1 Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	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.1 Know relative sizes of measurement units within one system of units including km, m, cm; kg, g; lb, oz.; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. For example, know that 1 ft is 12 times as long as 1 in. Express the length of a 4 ft snake as 48 in. Generate a conversion table for feet and inches listing the number pairs (1, 12), (2, 24), (3, 36), ...	Level 2 - Using Fundamental Concepts and Procedures
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.3 Apply the area and perimeter formulas for rectangles in real world and mathematical problems. For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.	Level 2 - Using Fundamental Concepts and Procedures
Grade 04	4.MD Measurement and Data	Geometric measurement: understand concepts of angle and measure angles	Geometric measurement: understand concepts of angle and measure angles	4.MD.6 Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.	Level 1 - Recognizing and Recalling
Grade 04	4.MD Measurement and Data	Geometric measurement: understand concepts of angle and measure angles	Geometric measurement: understand concepts of angle and measure angles	4.MD.7 Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.	Level 2 - Using Fundamental Concepts and Procedures

Grade	Domain	Cluster	Cluster	Standard Skills	DOK
Grade 04	4.NBT Number and Operations in Base Ten	Generalize place value understanding for multi-digit whole numbers	Generalize place value understanding for multi-digit whole numbers	4.NBT.2 Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers 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 04	4.NBT Number and Operations in Base Ten	Generalize place value understanding for multi-digit whole numbers	Generalize place value understanding for multi-digit whole numbers	4.NBT.3 Use place value understanding to round multi-digit whole numbers to any place.	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.4 Fluently add and subtract multi-digit whole numbers using the standard algorithm.	Level 1 - Recall
Grade 04	4.NF Number and Operations - Fractions	Extend understanding of fraction equivalence and ordering	Extend understanding of fraction equivalence and ordering	4.NF.1 Explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.	Level 3 - Concluding and Explaining
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 1/2 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 3 - Concluding and Explaining
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.b Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. Examples: 3/8 = 1/8 + 1/8 + 1/8 ; 3/8 = 1/8 + 2/8 ; 2 1/8 = 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8.	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.4 Apply and extend previous understandings of multiplication to multiply a fraction by a whole number.	4.NF.4.a Understand a fraction a/b as a multiple of 1/b. For example, use a visual fraction model to represent 5/4 as the product 5 x (1/4), recording the conclusion by the equation 5/4 = 5 x (1/4).	Level 3 - Concluding and Explaining

Grade	Domain	Cluster	Cluster	Standard Skills	DOK
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.3 Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.	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 - Recognizing and Recalling
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	Classify two-dimensional figures into categories based on their properties	Classify two-dimensional figures into categories based on their properties	5.G.3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. For example, all rectangles have four right angles and squares are rectangles, so all squares have four right angles.	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.G Geometry	Classify two-dimensional figures into categories based on their properties	Classify two-dimensional figures into categories based on their properties	5.G.4 Classify two-dimensional figures in a hierarchy based on properties.	Level 1 - Recognizing and Recalling
Grade 05	5.MD Measurement and Data	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition	5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.	5.MD.3.a A cube with side length 1 unit, called a unit cube, is said to have one cubic unit of volume, and can be used to measure volume.	Level 2 - Using Fundamental Concepts and Procedures

Grade	Domain	Cluster	Cluster	Standard Skills	DOK
Grade 05	5.MD Measurement and Data	Geometric measurement: understand concepts of volume and relate volume to multiplication and to addition	5.MD.3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement.	5.MD.3.b A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic 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	Understand the place value system	5.NBT.1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	Level 1 - Recognizing and Recalling
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	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.6 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.	Level 1 - Recognizing and Recalling
Grade 05	5.NF Number and Operations - Fractions	Use equivalent fractions as a strategy to add and subtract fractions	Use equivalent fractions as a strategy to add and subtract fractions	5.NF.1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. For example, 2/3 + 5/4 = 8/12 + 15/12 = 23/12. (In general, a/b + c/d = (ad + bc)/bd.)	Level 2 - Using Fundamental Concepts and Procedures
Grade 05	5.NF Number and Operations - Fractions	Use equivalent fractions as a strategy to add and subtract fractions	Use equivalent fractions as a strategy to add and subtract fractions	5.NF.2 Solve word problems involving addition and subtraction of fractions referring to the same whole, including cases of unlike denominators, e.g., by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result 2/5 + 1/2 = 3/7, by observing that 3/7 < 1/2.	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.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.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
Grade 05	5.OA Operations and Algebraic Thinking	Analyze patterns and relationships	Analyze patterns and relationships	5.OA.3 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.	Level 2 - Using Fundamental Concepts and Procedures