

Pacing Guide for Acuity Readiness Form A Grade 4 - Math

Grade	Domain	Cluster	Standard Skills	DOK
Grade 03	3.G Geometry	Reason with shapes and their attributes	3.G.1 Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	Level 2 - Using Fundamental Concepts and Procedures/ Level 1- Recognizing and Recalling
Grade 03	3.G Geometry	Reason with shapes and their attributes	3.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. For example, partition a shape into 4 parts with equal area, and describe the area of each part as $\frac{1}{4}$ of the area of the shape.	Level 2 - Using Fundamental Concepts and Procedures
Grade 03	3.MD Measurement and Data	Represent and interpret data	3.MD.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units - whole numbers, halves, or quarters.	Level 2 - Using Fundamental Concepts and Procedures
Grade 03	3.NBT Number and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic	3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.	Level 1 - Recall
Grade 03	3.NBT Number and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic	3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10 - 90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.	Level 1 - Recognizing and Recalling
Grade 03	3.NF Number and Operations - Fractions	Develop understanding of fractions as numbers	3.NF.1 Understand a fraction $\frac{1}{b}$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction $\frac{a}{b}$ as the quantity formed by a parts of size $\frac{1}{b}$.	Level 1 - Recognizing and Recalling

Grade	Domain	Cluster	Standard Skills	DOK
Grade 03	3.NF Number and Operations - Fractions	Develop understanding of fractions as numbers	3.NF.1 Understand a fraction $1/b$ as the quantity formed by 1 part when a whole is partitioned into b equal parts; understand a fraction a/b as the quantity formed by a parts of size $1/b$.	Level 1 - Recognizing and Recalling
Grade 03	3.NF Number and Operations - Fractions	3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	3.NF.3.b Recognize and generate simple equivalent fractions, e.g., $1/2 = 2/4$, $4/6 = 2/3$. Explain why the fractions are equivalent, e.g., by using a visual fraction model.	Level 1 - Recall
Grade 03	3.NF Number and Operations - Fractions	3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	3.NF.3.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. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.	Level 2 - Using Fundamental Concepts and Procedures
Grade 03	3.OA Operations and Algebraic Thinking	Represent and solve problems involving multiplication and division	3.OA.3 Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	Level 2 - Using Fundamental Concepts and Procedures
Grade 03	3.OA Operations and Algebraic Thinking	Multiply and divide within 100	3.OA.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5 = 8$) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	Level 1 - Recall

Grade	Domain	Cluster	Standard Skills	DOK
Grade 03	3.OA Operations and Algebraic Thinking	Solve problems involving the four operations, and identify and explain patterns in arithmetic	3.OA.8 Solve two-step word problems using the four operations. 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 2 - Using Fundamental Concepts and Procedures
Grade 03	3.OA Operations and Algebraic Thinking	Solve problems involving the four operations, and identify and explain patterns in arithmetic	3.OA.9 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.	Level 1 - Recognizing and Recalling
Grade 04	4.G Geometry	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 - Recall
Grade 04	4.MD Measurement and Data	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.NBT Number and Operations in Base Ten	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 1 - Recognizing and Recalling
Grade 04	4.NBT Number and Operations in Base Ten	Use place value understanding and properties of operations to perform multi-digit arithmetic.	4.NBT.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	Level 2 - Using Fundamental Concepts and Procedures

Grade	Domain	Cluster	Standard Skills	DOK
Grade 04	4.NBT Number and Operations in Base Ten	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	4.NF.1 Explain why a fraction a/b is equivalent to a fraction $(n \times a)/(n \times b)$ 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 2 - Using Fundamental Concepts and Procedures
Grade 04	4.NF Number and Operations - Fractions	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 2 - Using Fundamental Concepts and Procedures
Grade 04	4.NF Number and Operations - Fractions	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 $5 \times (1/4)$, recording the conclusion by the equation $5/4 = 5 \times (1/4)$.	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	4.OA.1 Interpret a multiplication equation as a comparison, e.g., interpret $35 = 5 \times 7$ 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 2 - Using Fundamental Concepts and Procedures
Grade 04	4.OA Operations and Algebraic Thinking	Use the four operations with whole numbers to solve problems	4.OA.2 Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.	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	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 2 - Using Fundamental Concepts and Procedures