Grade 4/5 Compacted Mathematics Concepts and Topics

Week	Marking Period 1	Marking Period 2
1	• Place value (to one million): relationships among places in the base ten system • Reading & writing numbers to one million: numerals, number names, expanded form • Comparison: multi-digit numbers (<,>,=)	• Factor pairs & multiples (1-100) • Prime & composite • Word problems involving measurement: converting from larger units of time to smaller units
2	• Comparison: multi-digit numbers (<,>,=) • Rounding (within one million): to any place	• Fractions equivalent to ½: relate visual models to multiplicative reasoning • Comparison of fractions to benchmarks (0, ½, 1)
3	• • Addition & subtraction fluency within one million: standard algorithm	• Fractions equivalent beyond ½: relate visual models to multiplicative reasoning • Comparison of fractions (Grade 4 limited to denominators of 2,3,4,5,6,8,10,12,100): different numerator or denominator
4	• Multi-step word problems: addition & subtraction, assess reasonableness • Multiplication & division word problems: comparison (1-digit factors) • Distinguishing multiplicative comparison from additive comparison	• Fractions: decomposing • Addition & subtraction of fractions (like denominators, including mixed numbers) • 1-step word problems: addition & subtraction of fractions with like denominators • Measurement data: line plots (halves, fourths, eighths)
5	• Multiplication (up to 4-digit × 1-digit): equations, area models, place value strategies, properties of operations	• Multiplication of a fraction by a whole number, including word problems
6	• Multiplication (up to 4-digit × 1-digit): equations, area models, place value strategies, properties of operations • Area & perimeter formulas (rectangles): word problems, including missing side lengths • Multiplicative reasoning: converting measurement units (larger to smaller)	• Multiplication of a fraction by a whole number, including word problems • Word problems involving measurement (fractions): addition, subtraction, & multiplication involving distances, intervals of time, masses of objects
7	• Division with & without remainders (up to 4-digit ÷ 1-digit): equations, rectangular arrays, area models, place value strategies, properties of operations	• Lines, line segments, perpendicular & parallel lines: drawings, identify in 2-D figures • Lines of symmetry • Geometric measurement: angle concepts & measurement
8	• Division with & without remainders (up to 4-digit ÷ 1-digit): equations, place value strategies, properties of operations	• Geometric measurement: angle concepts & measurement
9	• Four operation word problems (whole numbers): multi-step • Word problems involving measurement (whole numbers): four operations involving distances, intervals of time, masses of objects, money • Area & perimeter formulas (rectangles): word problems, including missing side lengths	• Classification of 2-dimensional shapes: parallel lines, perpendicular lines, angles of specified size • Classification of triangles: sides and angles • Geometric measurement: angle concepts & measurement

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Grade 4/5 Compacted Mathematics Concepts and Topics

Week	Marking Period 3	Marking Period 4
1	• Fraction with denominator 10 as equivalent fraction with denominator 100 • Addition of fractions with unlike denominators (10 & 100) • Decimal notation (fractions with denominators 10 or 100) • Word problems involving measurement (including decimals as fractions): distances, liquid volumes, intervals of time	• Division (up to 4-digit ÷ 2-digit multiple of ten): equations, rectangular arrays, area models, place value strategies, properties of operations
2	• Decimal notation (fractions with denominators 10 or 100): meter stick, number line • Comparison of decimals (to hundredths) • Multiplication (2-digit × 2-digit multiples of 10): equations, rectangular arrays, area models, place value strategies, properties of operations	• Division (up to 4-digit ÷ 2-digit): equations, place value strategies, properties of operations
3	• Multiplication (4-digit × 1-digit, 2-digit × 2-digit) & division (4-digit ÷ 1-digit): equations, rectangular arrays, area models, place value strategies, properties of operations	• Addition & subtraction of fractions (related denominators, including 2, 4, & 8; 3 & 6): equivalent fractions as a strategy, word problems, estimation & reasonableness of answers
4	• Addition & subtraction fluency within one million: standard algorithm • Four operation word problems (whole numbers): multi-step • Number & shape patterns ***************************END OF GRADE 4 CONTENT*******************************	• Addition & subtraction of fractions (denominators with a common factor, including 6 & 9): equivalent fractions as a strategy, word problems, estimation & reasonableness of answers
5	• Multiplication: standard algorithm (multi-digit whole numbers)	• Addition & subtraction of fractions (1-digit denominators with no common factors, including 3 & 4): equivalent fractions as a strategy, word problems, estimations & reasonableness of answers
6	• Volume (right rectangular prisms): counting unit cubes (cubic cm, cubic in, cubic ft, & improvised units), relationship to multiplication, problem solving	• Addition & subtraction of fractions: equivalent fractions as a strategy, word problems, estimation & reasonableness of answers
7	• Volume (right rectangular prisms): formulas for rectangular prisms, additive properties, problem solving • Numerical expressions with parentheses, brackets, braces	• Ordered pairs on a coordinate plane • Numerical patterns using two given rules: relationships between corresponding terms
8	• Place value relationships among places in the base ten system • Place value patterns: multiplication or division by powers of 10, whole number exponents • Decimals (thousandths): read, write, compare, & round	• Classification of two-dimensional figures: properties
9	• Addition & subtraction of decimals (tenths & hundredths as addends): concrete models, drawings, written method, place value strategies, properties of operations, relationship between addition & subtraction	• Classification of two-dimensional figures: properties

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