

GRADE 5

NUMBER SENSE AND OPERATIONS

Standards

6.N.1	Demonstrate an understanding of place value to thousandths.
6.N.2	Demonstrate an understanding of place value to billions and thousandths.
6.N.3	Represent and compare very large (billions) and very small (thousandths) positive numbers in various forms such as expanded notation without exponents. E.g., $9724 = 9 \times 1000 + 7 \times 100 = 2 \times 10 + 4$
6.N.4	Demonstrate an understanding of fractions as a ratio of whole numbers, as parts of unit wholes, as parts of a collection, and as locations on the number line.
6.N.5	Identify and determine common equivalent fractions, mixed numbers, decimals and percents
6.N.6	Find and position integers, fractions, mixed numbers and decimals (positive), on the number line.
6.N.7	Compare and order integers, positive fractions, mixed numbers, decimals and percents.
6.N.8	Introduce prime and composite numbers greatest common factor, least common multiple and divisibility rules for 2, 3, 4, 5, 6, 9 and 10.
6.N.9	Select and use an appropriate operation(s) to solve problems involving addition, subtraction, multiplication, and division, with positive fractions, mixed numbers, decimals and percents

Standards

6.N.10	Use the number line to model addition and subtraction of integers.
6.N.11	Apply the Order of Operations for expressions involving addition, subtraction, multiplication and division with grouping symbols (+, -, X, /)
6.N.12	Demonstrate an understanding of the inverse relationships of addition and subtraction, and use that understanding to simplify computation and solve problems.
6.N.13	Introduce adding, subtracting, multiplying and dividing whole numbers and positive numbers.
6.N.14	Accurately and efficiently add, subtract and multiply fractions and mixed numbers. Simplify fractions.
6.N.16	Estimate results of computations with whole numbers and with positive fractions, mixed numbers, decimals and percents. Describe reasonableness of estimates.

GRADE 5

PATTERNS, RELATIONS AND ALGEBRA

Standards

6.P.1	Analyze and determine the rules for extending symbols. e.g., ABCC; 1, 5, 9, 13...;3, 9, 37
6.P.3	Use the property of equality to solve problems, e.g., if $\square + 7 = 13$, then $\square = 13 - 7$.
6.P.4	Represent real situations and mathematical relationships with concrete models, tables, graphs, and rules in words and with symbols.
6.P.7	Identify and describe relationships between two variables with a constant rate of change. Contrast these with relationships where the rate of change is not constant.

GRADE 5

MEASUREMENT

Standards

6.M.1	Apply the concepts of perimeter and area to the solution of problems. Apply formulas where appropriate.
6.M.2	Identify, measure, describe, classify and construct various angles, triangles, and quadrilaterals.
6.M.3	Solve problems involving proportional relationships and units of measurement, e.g., same system unit conversions, scale models, maps and speed.
6.M.4	Find areas of triangles and parallelograms. Recognize that shapes with the same number of sides but different appearances can have the same area. Develop strategies to find the area of more complex shapes.
6.M.7	Find the sum of the angles in simple polygons (up to eight sides) with and without measuring the angles.

GRADE 5

DATA ANALYSIS, STATISTICS, AND PROBABILITY

Standards

6.D.1	Describe and compare data sets using the concepts of median, mean, mode, maximum and minimum and range.
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GRADE 5

GEOMETRY

Standards

6.G.1	Identify polygons based on their properties, including types of interior angles, perpendicular sides and congruence of sides.
6.G.2	Identify three-dimensional shapes (e.g. cubes, prisms, spheres, cones, and pyramids) based on their properties such as edges and faces.
6.G.3	Identify relationships among points, and lines (e.g. intersecting, parallel, perpendicular).
6.G.4	Graph points and identify coordinates of points on the Cartesian coordinate plane (all four quadrants)
6.G.6	Predict, describe and perform transformations on two-dimensional shapes, e.g., translations, rotations and reflections.
6.G.7	Identify types of symmetry, including line and rotational.

6.G.8	Determine if 2 shapes are congruent by measuring sides or a combination of sides, as necessary; or by motions or series of motions, e.g., translations, rotations, and reflections.
6.G.9	Match three-dimensional objects and their two-dimensional representations, e.g., nets, projections, and perspective drawings.