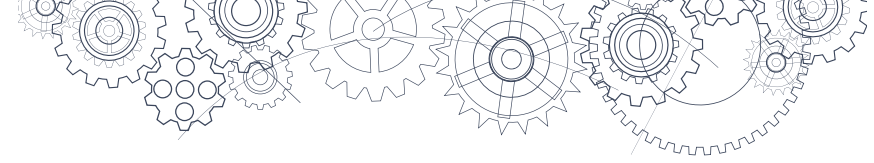


Math K-9 – Content

Grade	Number	Computational fluency	Patterning	Geometry and measurement	Data and probability
K	<ul style="list-style-type: none"> number concepts to 10 ways to make 5 decomposition of numbers to 10 	<ul style="list-style-type: none"> change in quantity to 10, using concrete materials equality as a balance and inequality as an imbalance 	<ul style="list-style-type: none"> repeating patterns with two or three elements 	<ul style="list-style-type: none"> direct comparative measurement (e.g., linear, mass, capacity) single attributes of 2D shapes and 3D objects concrete or pictorial graphs as a visual tool 	<ul style="list-style-type: none"> likelihood of familiar life events financial literacy – attributes of coins, and financial role-play
1	<ul style="list-style-type: none"> number concepts to 20 ways to make 10 	<ul style="list-style-type: none"> addition and subtraction to 20 (understanding of operation and process) change in quantity to 20, concretely and verbally meaning of equality and inequality 	<ul style="list-style-type: none"> repeating patterns with multiple elements and attributes 	<ul style="list-style-type: none"> direct measurement with non-standard units (non-uniform and uniform) comparison of 2D shapes and 3D objects concrete graphs, using one-to-one correspondence 	<ul style="list-style-type: none"> likelihood of familiar life events, using comparative language financial literacy – values of coins, and monetary exchanges
2	<ul style="list-style-type: none"> number concepts to 100 benchmarks of 25, 50, and 100 and personal referents 	<ul style="list-style-type: none"> addition and subtraction facts to 20 (introduction of computational strategies) addition and subtraction to 100 change in quantity, using pictorial and symbolic representation symbolic representation of equality and inequality 	<ul style="list-style-type: none"> repeating and increasing patterns 	<ul style="list-style-type: none"> direct linear measurement, introducing standard metric units multiple attributes of 2D shapes and 3D objects pictorial representation of concrete graphs, using one-to-one correspondence 	<ul style="list-style-type: none"> likelihood of familiar life events, using comparative language financial literacy – coin combinations to 100 cents, and spending and saving
3	<ul style="list-style-type: none"> number concepts to 1000 fraction concepts 	<ul style="list-style-type: none"> addition and subtraction to 1000 addition and subtraction facts to 20 (emerging computational fluency) multiplication and division concepts one-step addition and subtraction equations with an unknown number 	<ul style="list-style-type: none"> increasing and decreasing patterns pattern rules using words and numbers, based on concrete experiences 	<ul style="list-style-type: none"> measurement, using standard units (linear, mass, and capacity) time concepts construction of 3D objects one-to-one correspondence with bar graphs, pictographs, charts, and tables 	<ul style="list-style-type: none"> likelihood of simulated events, using comparative language financial literacy – fluency with coins and bills to 100 dollars, and earning and payment

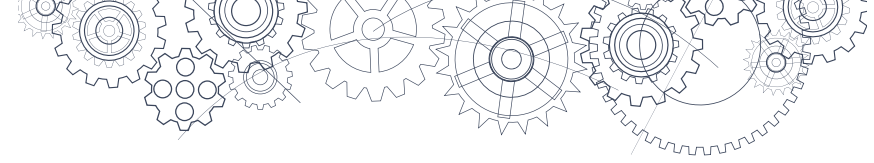




Math K-9 – Content – continued

Grade	Number	Computational fluency	Patterning	Geometry and measurement	Data and probability
4	<ul style="list-style-type: none"> number concepts to 10 000 decimals to hundredths ordering and comparing fractions 	<ul style="list-style-type: none"> addition and subtraction to 10 000 multiplication and division of two- or three-digit numbers by one-digit numbers addition and subtraction of decimals to hundredths addition and subtraction facts to 20 (developing computational fluency) multiplication and division facts to 100 (introductory computational strategies) algebraic relationships among quantities one-step equations with an unknown number, using all operations 	<ul style="list-style-type: none"> increasing and decreasing patterns, using tables and charts 	<ul style="list-style-type: none"> how to tell time with analog and digital clocks, using 12- and 24-hour clocks regular and irregular polygons perimeter of regular and irregular shapes line symmetry one-to-one correspondence and many-to-one correspondence, using bar graphs and pictographs 	<ul style="list-style-type: none"> probability experiments financial literacy – monetary calculations, including making change with amounts to 100 dollars and making simple financial decisions
5	<ul style="list-style-type: none"> number concepts to 1 000 000 decimals to thousandths equivalent fractions whole-number, fraction, and decimal benchmarks 	<ul style="list-style-type: none"> addition and subtraction of whole numbers to 1 000 000 multiplication and division to three digits, including division with remainders addition and subtraction of decimals to thousandths addition and subtraction facts to 20 (extending computational fluency) multiplication and division facts to 100 (emerging computational fluency) one-step equations with variables 	<ul style="list-style-type: none"> rules for increasing and decreasing patterns with words, numbers, symbols, and variables 	<ul style="list-style-type: none"> area measurement of squares and rectangles relationships between area and perimeter duration, using measurement of time classification of prisms and pyramids single transformations one-to-one correspondence and many-to-one correspondence, using double bar graphs 	<ul style="list-style-type: none"> probability experiments, single events or outcomes financial literacy – monetary calculations, including making change with amounts to 1000 dollars and developing simple financial plans

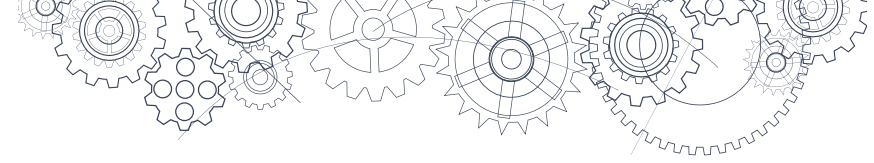




Math K-9 – Content – continued

Grade	Number	Computational fluency	Patterning	Geometry and measurement	Data and probability
6	<ul style="list-style-type: none"> • small to large numbers (thousandths to billions) • factors and multiples – greatest common factor and least common multiple • improper fractions and mixed numbers • introduction to ratios • whole-number percents and percentage discounts 	<ul style="list-style-type: none"> • multiplication and division facts to 100 (developing computational fluency) • order of operations with whole numbers • multiplication and division of decimals • one-step equations with whole-number coefficients and solutions 	<ul style="list-style-type: none"> • increasing and decreasing patterns, using expressions, tables, and graphs as functional relationships 	<ul style="list-style-type: none"> • perimeter of complex shapes • area of triangles, parallelograms, and trapezoids • angle measurement and classification • volume and capacity • triangles • combinations of transformations • line graphs 	<ul style="list-style-type: none"> • single-outcome probability, both theoretical and experimental • financial literacy – simple budgeting and consumer math
7	<ul style="list-style-type: none"> • relationships between decimals, fractions, ratios, and percents 	<ul style="list-style-type: none"> • multiplication and division facts to 100 (extending computational fluency) • operations with integers (addition, subtraction, multiplication, division, and order of operations) • operations with decimals (addition, subtraction, multiplication, division, and order of operations) • two-step equations with whole-number coefficients, constants, and solutions 	<ul style="list-style-type: none"> • discrete linear relations, using expressions, tables, and graphs 	<ul style="list-style-type: none"> • circumference and area of circles • volume of rectangular prisms and cylinders • Cartesian coordinates and graphing • combinations of transformations • circle graphs 	<ul style="list-style-type: none"> • experimental probability with two independent events • financial literacy – financial percentage
8	<ul style="list-style-type: none"> • perfect squares and cubes • square and cube roots • percents less than 1 and greater than 100 (decimal and fractional percents) • numerical proportional reasoning (rates, ratio, proportions, and percent) 	<ul style="list-style-type: none"> • operations with fractions (addition, subtraction, multiplication, division, and order of operations) • expressions – writing and evaluating using substitution • two-step equations with integer coefficients, constants, and solutions 	<ul style="list-style-type: none"> • discrete linear relations (extended to larger numbers, limited to integers) 	<ul style="list-style-type: none"> • surface area and volume of regular solids, including triangular and other right prisms and cylinders • Pythagorean theorem • construction, views, and nets of 3D objects 	<ul style="list-style-type: none"> • central tendency • theoretical probability with two independent events • financial literacy – best buys





Math K-9 – Content – *continued*

Grade	Number	Computational fluency	Patterning	Geometry and measurement	Data and probability
9	<ul style="list-style-type: none">exponents and exponent laws with whole-number exponents	<ul style="list-style-type: none">operations with rational numbers (addition, subtraction, multiplication, division, and order of operations)operations with polynomials, of degree less than or equal to 2multi-step one-variable linear equations	<ul style="list-style-type: none">two-variable linear relations, using graphing, interpolation, and extrapolation	<ul style="list-style-type: none">spatial proportional reasoning	<ul style="list-style-type: none">statistics in societyfinancial literacy – simple budgets and transactions

