

Academy of MATH® Scope and Sequence

	NUMERATION	ADDITION	SUBTRACTION	MULTIPLICATION	DIVISION	FRACTIONS	EQUATIONS	MEASUREMENT	GEOMETRY	GRAPHING	
LEVEL 1	<ul style="list-style-type: none"> Numeration key words and symbols Place values of ones and tens Comparing numbers Identifying patterns in sets Number patterns 	<ul style="list-style-type: none"> Addition related key words and symbols Adding groups together Special addition facts Addition patterns 	<ul style="list-style-type: none"> Subtraction key words Subtraction patterns Using addition to check your work Solving subtraction word problems 	<ul style="list-style-type: none"> Multiplication key terms Multiplication patterns Solving simple multiplication word problems The multiplication table 	<ul style="list-style-type: none"> Division key words Dividing into groups Solving division word problems 	<ul style="list-style-type: none"> Fraction related key words Naming fractions Solving simple fraction word problems 	<ul style="list-style-type: none"> Equation key words and symbols Finding the missing number Solving equation word problems 	<ul style="list-style-type: none"> Measurement key words Temperature Capacity Weight Area 	<ul style="list-style-type: none"> Geometry key words Identifying and recognizing the faces of a solid Patterns Transformations (slides) 	<ul style="list-style-type: none"> Graphing key words Bar graphs Picture graphs or pictographs 	
LEVEL 2	<ul style="list-style-type: none"> Numeration key words and symbols Place values (of ones, tens, and hundreds) Regrouping ones as tens Ordering least to greatest Odd and even numbers Patterns Ordinal numbers Sorting and classifying numbers 	<ul style="list-style-type: none"> Addition related key words and symbols Regrouping ones as tens Solving simple addition word problems 	<ul style="list-style-type: none"> Subtraction key words and symbols Subtracting two-digit numbers Solving simple subtraction word problems 	<ul style="list-style-type: none"> Multiplication key words and symbols Multiplication: repeated addition Solving simple multiplication word problems The multiplication table 	<ul style="list-style-type: none"> Division key words Performing simple division Division – repetitive subtraction Checking division with multiplication Solving division word problems 	<ul style="list-style-type: none"> Fraction related key words Simple fractions Naming fractions Comparing and ordering fractions Solving simple fraction word problems 	<ul style="list-style-type: none"> Equation key words Finding an unknown number Solving equation word problems 	<ul style="list-style-type: none"> Measurement key words Length Temperature Capacity Weight Time Money 	<ul style="list-style-type: none"> Geometry key words Special polygons Patterns Similar and identical figures 	<ul style="list-style-type: none"> Graph related keywords Reading graphs Bar graphs Picture graphs or pictographs Solving graphing word problems 	
LEVEL 3	<ul style="list-style-type: none"> Numeration key words and symbols Place values (of ones, tens, hundreds and thousands) Regrouping (ones as tens and tens as hundreds) Comparing and ordering numbers Ordinal numbers Roman numerals Solving numeration word problems 	<ul style="list-style-type: none"> Addition key words and symbols Adding and regrouping 3-digit numbers Solving addition word problems 	<ul style="list-style-type: none"> Subtraction key words and symbols Subtracting three-digit numbers Solving subtraction word problems 	<ul style="list-style-type: none"> Multiplication key words and symbols Multiplication – repeated addition Multiplication facts Solving multiplication word problems The multiplication table 	<ul style="list-style-type: none"> Division key words and symbols Division operation Division – repeating subtraction Division – multiplication relations Solving division word problems 	<ul style="list-style-type: none"> Fraction related key words and symbols Fractions Comparing and ordering fractions Mixed numbers Decimal tenths Comparing and ordering decimals Adding and subtracting decimals Solving fraction word problems 	<ul style="list-style-type: none"> Equation key words and symbols Finding an unknown number Solving equation word problems 	<ul style="list-style-type: none"> Measurement key words and symbols Length Perimeter Temperature Capacity Weight 	<ul style="list-style-type: none"> Telling time Using money Solving measurement word problems 	<ul style="list-style-type: none"> Geometry key words Angles Congruency Symmetry Solids Polygons Circles 	<ul style="list-style-type: none"> Graph related key words Tallied data Co-ordinate graphs or grids Creating and reading graphs
LEVEL 4	<ul style="list-style-type: none"> Numeration key words and symbols Place values Expanded and standard forms of numerals Rounding Commutative and associative properties of addition and multiplication Roman numerals Solving numeration word problems 	<ul style="list-style-type: none"> Addition key words and symbols Rounding Adding and regrouping 5-digit numbers Solving addition word problems 	<ul style="list-style-type: none"> Subtraction key words and symbols Subtraction and regrouping Subtracting five-digit numbers Solving subtraction word problems 	<ul style="list-style-type: none"> Multiplication key words and symbols Multiplication by 2-digit numbers Multiplying by multiples of 100 Solving multiplication word problems The multiplication table 	<ul style="list-style-type: none"> Division related terms and symbols Dividing Dividing by multiples of tens Solving division word problems 	<ul style="list-style-type: none"> Fraction related key words and symbols Getting to know fractions Decimal tenths Adding decimals Subtracting decimals Solving fraction word problems 	<ul style="list-style-type: none"> Expressions Equations Commutative and associative properties of addition and multiplication Solving equation word problems 	<ul style="list-style-type: none"> Measurement key words and symbols Length and distance Perimeter Area Time Weight Capacity 	<ul style="list-style-type: none"> Temperature Money Comparing and estimating measurement Solving measurement word problems 	<ul style="list-style-type: none"> Geometry key words and symbols Lines Images or transformations (slides, flips and turns) Types of quadrilaterals Types of angles 	<ul style="list-style-type: none"> Graph related key words Creating and reading graphs Solving word problems using graphs
LEVEL 5	<ul style="list-style-type: none"> Numeration key words and symbols Place values Expanded and ordering numbers Rounding Commutative and associative properties of addition and multiplication Solving word problems 	<ul style="list-style-type: none"> Addition related key words and symbols Rounding Adding and regrouping 6-digit numbers Estimating sums Solving addition word problems 	<ul style="list-style-type: none"> Subtraction key words and symbols Subtracting six-digit numbers Solving word problems 	<ul style="list-style-type: none"> Multiplication key words and symbols Multiplication properties Multiplication by 3-digit numbers Multiplying by multiples of 1,000 Distributive properties of multiplication Prime and composite numbers Solving word problems The multiplication table 	<ul style="list-style-type: none"> Division key words and symbols Dividing Finding averages Solving word problems 	<ul style="list-style-type: none"> Fraction related key words Learning to work with fractions Adding mixed numbers Subtracting mixed numbers Comparing and ordering fractions Adding and subtracting decimal hundredths Multiplying decimal fraction Solving fraction word problems 	<ul style="list-style-type: none"> Keywords and symbols Order of operations Expressions Variables Solving equation word problems 	<ul style="list-style-type: none"> Measurement key words and symbols Length units Perimeter Area Capacity Volume Weight The 24-hour clock 	<ul style="list-style-type: none"> Scale drawings Estimates Solving measurement word problems 	<ul style="list-style-type: none"> Geometry key words Lines Angle Solids – pyramids and prisms Types of polygons Types of triangles Types of quadrilaterals Circles Estimates Solving geometry word problems 	<ul style="list-style-type: none"> Graph related key words Grids or co-ordinate graphs Line graphs Constructing line graphs Reading and constructing circle graphs
LEVEL 6	<ul style="list-style-type: none"> Numeration key words and symbols Place values Rounding Solving numeration word problems 	<ul style="list-style-type: none"> Addition key words and symbols Adding and regrouping 7-digit numbers Estimating sums Solving addition word problems 	<ul style="list-style-type: none"> Subtraction key words and symbols Subtracting 7-digit numbers Estimates Solving subtraction word problems 	<ul style="list-style-type: none"> Multiplication related key words and symbols Multiplication by 3-digit numbers Distributive properties of multiplication Multiples and LCM Factors and GCF Prime numbers Solving multiplication word problems The multiplication table 	<ul style="list-style-type: none"> Division related terms and symbols Division Dividing by multiples of 100 Short division Solving division word problems 	<ul style="list-style-type: none"> Fraction related key words Getting to know fractions Operations with fractions Operations with decimals Percent Solving fractions word problems 	<ul style="list-style-type: none"> Equation key words and symbols Expressions Variables Solving equations Substituting for variables Solving equation word problems 	<ul style="list-style-type: none"> Measurement key words and symbols Units for measuring length Perimeter Circumference Area Volume 	<ul style="list-style-type: none"> Capacity Weight Time Comparing and estimating measurements Solving measurement word problems 	<ul style="list-style-type: none"> Geometry key words Lines Angles Shapes in geometry Polygons Triangles Quadrilaterals Tiling and tessellation 	<ul style="list-style-type: none"> Graph related key words Grids or co-ordinate graphs Reading line graphs Pictographs and tally sheets Constructing line graphs Constructing circle graphs
LEVEL 7	<ul style="list-style-type: none"> Numeration key words and symbols Integers Adding integers Place values and expanded form Rounding and estimating Braces and parenthesis Exponential numbers Square roots 	<ul style="list-style-type: none"> Addition key words and symbols Estimating sums Adding integers Adding with millions, ten millions and hundred millions Grouping and ordering Solving addition word problems 	<ul style="list-style-type: none"> Subtraction key words Estimating differences Grouping and ordering Subtracting with millions, ten millions and hundred millions Solving subtraction word problems 	<ul style="list-style-type: none"> Multiplication key words Factors Multiples Relationship between multiples and factors Multiplication by powers of ten Solving word problems The multiplication table 	<ul style="list-style-type: none"> Division terms and symbols Estimate Dividing by powers of 10 Calculating averages Factors Finding the greatest common factor Solving division word problems 	<ul style="list-style-type: none"> Fraction related key words Fractions Equivalent fractions Comparing and ordering fractions Improper and mixed fractions Multiplying fractions Reciprocals Dividing fractions Fractions and decimals Terminating and repeating decimals Percents 	<ul style="list-style-type: none"> Equation key words and symbols Order of operations Expressions, variables and equations Using expressions with a variable Using equations with a variable Terms Translating expressions Solving equations Solving equation word problems 	<ul style="list-style-type: none"> Measurement key words and symbols Calculating perimeter Calculating area Calculating volume Estimating measurement Capacity Length, capacity, weight and area conversions Imperial and Metric conversions 	<ul style="list-style-type: none"> Geometry key words Types of angles Intersecting, perpendicular and parallel lines Polygons Triangles and quadrilaterals Congruent figures Motion geometry Rotational symmetry Tiling patterns 	<ul style="list-style-type: none"> Graph related key words Tally charts Line graphs Pictographs Bar graphs Broken-line graphs Histograms 	
LEVEL 8	<ul style="list-style-type: none"> Numeration key words and symbols Integers Adding integers Place values of decimal numbers Rounding a decimal number Ratios and proportions Exponential numbers Square root 	<ul style="list-style-type: none"> Addition key words and symbols Adding with millions, ten millions, and hundred millions Adding integers Solving addition word problems 	<ul style="list-style-type: none"> Subtraction key words and symbols Subtracting nine-digit numbers Inverse operations Subtracting integers Grouping and ordering 	<ul style="list-style-type: none"> Multiplication key words Prime factorization of composite numbers Multiplying integers Dividing fractions Divisibility test for five Divisibility test for nine Divisibility test for ten Other divisibility tests Estimating quotients Calculating averages Dividing integers 	<ul style="list-style-type: none"> Division related terms and symbols Divisibility test for two Divisibility test for three Divisibility test for five Divisibility test for nine Divisibility test for ten Other divisibility tests Estimating quotients Calculating averages Dividing integers 	<ul style="list-style-type: none"> Fraction related key words Expressing fractions in lowest terms Multiplying fractions Dividing fractions Expressing common fractions as decimal fractions Terminating and repeating decimals Converting decimal fractions to common fractions Converting decimal fractions and common fractions to percent Dividing decimals Solving problems with percent 	<ul style="list-style-type: none"> Equation key words and symbols Order of operations Variables, expressions and equations Using expressions with a variable Using equations with a variable Terms Translating expressions Solving equations Formulas Solving equation word problems 	<ul style="list-style-type: none"> Measurement key words and symbols Calculating perimeter Calculating area Calculating surface area Calculating volume Measuring capacity Units of length Units of volume and capacity Units of mass Conversion between the Imperial and Metric system 	<ul style="list-style-type: none"> Geometry key words Intersecting, perpendicular and parallel lines Angles Triangles Congruence Transformations Rotational symmetry 	<ul style="list-style-type: none"> Graph related keywords Interpreting circle graphs The coordinate system Statistical analysis of data 	