Birchwood Junior School

Whole-School Mathematics Vocabulary Progression

Years 1 to 6

Year groups are shown in columns. Each row tracks related mathematical vocabulary horizontally, showing how language is introduced, retained and extended as mathematical understanding becomes more sophisticated.

Place Value

Vocabulary strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Core place value	number, count, digit, ones, ten	digit, ones, tens, place value, value	digit, ones, tens, hundreds, place value, value	digit, ones, tens, hundreds, thousands, place value, value	one, ten, one hundred, one thousand, ten thousand, one hundred thousand, one million, place value	ones, tens, hundreds, thousands, ten thousands, hundred thousands, millions, tenths, hundredths, thousandths, place value
Represent and partition	represent, group, tens, ones	represent, partition, part, whole, tens, ones	represent, partition, recombine, part-whole, equivalent	represent, partition, recombine, equivalent	represent, partition, part-whole model, powers of 10	compose, decompose, partition, equivalent, powers of 10
Number lines and estimation	number line, before, after, more, less	number line, start value, end value, interval, estimate	number line, interval, increase, decrease, midpoint, estimate	number line, interval, midpoint, estimate, scale	number line, position, end value, midpoint, increments, scale	number line, interval, midpoint, estimate, scale, integer, decimal
Compare and order	more, less, equal	compare, order, greater than, less than, equal to	compare, order, greater than, less than, equal to, inequality	compare, order, ascending, descending, inequality	less than, greater than, equal to, compare, order	compare, order, ascending, descending, inequality, integer, decimal
Rounding				round, rounding, multiple, nearest, midpoint	rounding, multiple, nearest, midpoint, estimate	round, rounding, approximate, degree of accuracy, significant figures, decimal place
Negative numbers					positive, negative, minus, zero	positive, negative, integer, interval, zero
Roman numerals				Roman numeral, numeral, I, V, X, L, C	Roman numeral, numeral, I, V, X, L, C, D, M	Roman numeral, numeral

Addition and Subtraction

Vocabulary strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition language	add, plus, total, altogether, more, part, whole	add, addition, plus, sum, total, altogether, part, whole	add, addition, addend, sum, total, whole, part	add, addition, addend, sum, total	addend, sum, column addition, exchange	addend, sum, column addition, exchange, operation
Subtraction language	subtract, take away, less, difference, part, whole	subtract, subtraction, take away, difference, fewer, less	subtract, subtraction, minuend, subtrahend, difference	subtract, minuend, subtrahend, difference, exchange	minuend, subtrahend, difference, column subtraction, exchange	minuend, subtrahend, difference, column subtraction, exchange, operation
Place value and exchange	ones, tens, number bond	ones, tens, place value, exchange	ones, tens, hundreds, place value, exchange, regroup, partition	ones, tens, hundreds, thousands, place value, exchange	place value, exchange, placeholder, regroup	place value, exchange, placeholder, integer, decimal
Relationships and checking	number bond, related fact	number bond, related fact, inverse	related fact, inverse, estimate	inverse, estimate, reasonable, efficient	inverse, inequality, round, estimate, sum, difference	inverse, estimate, approximate, reasonable, efficient, inequality
Problem solving	part, whole, total, difference	part, whole, operation, bar model	operation, method, bar model, part, whole	operation, method, one-step, two-step, bar model	multi-step, part, addend, sum, minuend, subtrahend, difference	multi-step, operation, method, efficient, unknown, expression

Perimeter

Vocabulary strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Length and measure	long, short, longer, shorter, length, height	length, height, centimetre, metre, measure	length, side, centimetre, metre, measure	length, side, millimetre, centimetre, metre, convert	length, edge, millimetre, centimetre, metre, measure	length, side, edge, metric, convert, unit
Perimeter concepts			perimeter, distance, around, side, 2D shape	perimeter, rectilinear, rectangle, side, edge	perimeter, edge, rectangle, rectilinear, polygon	perimeter, polygon, rectilinear, compound, boundary
Reasoning and missing lengths			total, add	opposite, equal, missing length	opposite sides, equal, missing length, mixed measures	unknown, missing length, relationship, formula

Multiplication and Division

Vocabulary strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication structures	equal groups, double, count in	multiply, multiplication, equal groups, repeated addition, array	multiply, multiplication, equal groups, array, factor, product	multiply, factor, product, array, commutative	multiply, factor, product, commutative, column multiplication	multiply, factor, product, commutative, long multiplication
Division structures	share, sharing, half, equal	divide, division, share, sharing, group, grouping	divide, sharing, grouping, inverse, fact family	divide, division, inverse, remainder	divide, dividend, divisor, quotient, remainder, fact family	divide, dividend, divisor, quotient, remainder, short division, long division
Times tables and multiples	twos, fives, tens	times table, multiple, 2 times table, 5 times table, 10 times table	multiple, 3 times table, 4 times table, 8 times table	times table, multiple, factor, factor pair, 12 times table	times table, multiple, common multiple, factor, product	multiple, common multiple, lowest common multiple, factor, divisibility
Powers of 10 and scaling			multiple of 10, place value	multiply by 10, divide by 10, multiply by 100, divide by 100	multiply, divide, ten, one hundred, one thousand, 10 times, 100 times, 1,000 times	powers of 10, scale, factor, integer, decimal, 10 times, 100 times, 1,000 times
Factors and number properties			factor	factor, factor pair, multiple	factor, factor pair, common factor, common multiple, prime, square, cube	factor, common factor, highest common factor, prime, composite, square, cube
Written methods			partition, related fact	partition, place value, exchange, formal method	column multiplication, grid method, place holder, short division, division bracket	long multiplication, short division, long division, partial product, quotient

Vocabulary strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Problem solving	double, half, equal groups	equal groups, sharing, grouping	factor, product, quotient, bar model	operation, factor, product, quotient, remainder	factor, product, dividend, divisor, quotient, remainder, bar model	operation, factor, product, dividend, divisor, quotient, remainder, ratio

Area

Vocabulary strand	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Area concept	space, inside, cover	space, inside, cover, square	area, space, inside, square	area, surface, square unit, rectangle	area, rectangle, squared, square unit	area, square unit, formula, dimension
Units and measures				square centimetre, square metre	millimetre, centimetre, metre, squared, unit of measurement	square millimetre, square centimetre, square metre, square kilometre, conversion
Rectangle and compound area				length, width, rectangle, multiply	base, height, rectangle, rectilinear, compound	base, height, perpendicular height, rectangle, compound, decompose
Extended area					partition, rectilinear, compound	triangle, parallelogram, perpendicular, formula, base, height