Uplands Junior School
Maths Vocabulary Progression
National Curriculum 2014

"The national curriculum for mathematics reflects the importance of spoken language in pupils' development across the whole curriculum – cognitively, socially and linguistically. The quality and variety of language that pupils hear and speak are key factors in developing their mathematical vocabulary and presenting a mathematical justification, argument or proof. They must be assisted in making their thinking clear to themselves as well as others, and teachers should ensure that pupils build secure foundations by using discussion to probe and remedy their misconceptions." **National Curriculum in England, Department for Education, 2013**

This document outlines vocabulary expectation for children when they join us at the end of KS1 and the progression of vocabulary across each year group in KS2. This document identifies **new vocabulary** that will be taught.

Maths vocabulary introduced at KS1 – Years 1 and 2

Number and place value	Addition and subtraction	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions	General/problem solving	Data and statistics
Number Zero, one, two, three to twenty, and beyond None Count (on/up/to/from/down) Before, after More, less, many, few, fewer, least, fewest, smallest, greater, lesser Equal to, the same as Odd, even Pair Units, ones, tens Ten more/less Digit Numeral Figure(s) Compare (In) order/a different order Size Value Between, halfway between Above, below **Year 2:**	Number bonds, number line Add, more, plus, make, sum, total, altogether Inverse Double, near double Half, halve Equals, is the same as (including equals sign) Difference between How many more to make..?, how many more is…than..?, how much more is..? Subtract, take away, minus How many fewer is…than..?, how much less is..?	Odd, even Count in twos, threes, fives Count in tens (forwards from/backwards from) How many times? Lots of, groups of Once, twice, three times, five times Multiple of, times, multiply, multiply by Repeated addition Array, row, column Double, halve Share, share equally Group in pairs, threes, etc. Equal groups of Divide, divided by, left, left over	Full, half full, empty Holds Container Weigh, weighs, balances Heavy, heavier, heaviest, light, lighter, lightest Scales Time Days of the week: Monday, Tuesday, etc. Seasons: spring, summer, autumn, winter Day, week, month, year, weekend Birthday, holiday Morning, afternoon, evening, night, midnight Bedtime, dinnertime, playtime Today, yesterday, tomorrow Before, after Next, last Now, soon, early, late Quick, quicker, quickest, quickly , fast, faster, fastest, slow, slower, slowest, slowly Old, older, oldest, new, newer, newest. Takes longer, takes less time Hour, o'clock, half past	Position Over, under, underneath, above, below, top, bottom, side on, in, outside, inside around, in front, behind Front, back Before, after Beside, next to, Opposite Apart Between, middle, edge, centre Corner, Direction Journey Left, right, up, down, forwards, backwards, sideways Across Close, far, near Along, through To, from, towards, away from Movement	Group, sort Cube, cuboid, pyramid, sphere, cone, cylinder, circle, triangle, square Shape Flat, curved, straight, round Hollow, solid Corner (point, pointed) Face, side, edge Make, build, draw Year 2: Size Bigger, larger, smaller Symmetrical, line of symmetry Fold Match Mirror line, reflection Pattern, repeating	Whole Equal parts, four equal parts One half, two halves A quarter, two quarters **Year 2:** Three quarters, one third, a third Equivalence, equivalent	Listen, join in Say, think, imagine, remember Start from, start with, start at Look at, point to Put, place, fit Arrange, rearrange Change, change over Split, separate Carry on, continue, repeat, what comes next? Find, choose, collect, use, make, build Tell me, describe, pick out, talk about, explain, show me Read, write, record, trace, copy, complete, finish, end Fill in, shade, colour, tick, cross, draw, draw a line between, join (up), ring, arrow Cost	**Year 2:** Count, tally, sort Vote Graph, block graph, pictogram, Represent Group, set, list, table Label, title Most popular, most common, least popular, least common

Numbers to one hundred Hundreds Partition, recombine Hundred more/less			Clock, watch, hands How long ago?, how long will it be to…?, how long will it take to…?, how often? Always, never, often, sometimes, usually Once, twice First, second, third, etc. Estimate, close to, about the same as, just over, just under Too many, too few, not enough, enough Length, width, height, depth Long, longer, longest, short, shorter shortest, tall, taller, tallest, high, higher, highest Low, wide, narrow, deep, shallow, thick, thin Far, near, close Metre, ruler, metre stick Money, coin, penny, pence, pound, price, cost, buy, sell, spend, spent, pay, change, dear(er), costs more, costs less, cheaper, costs the same as How much?, how many? **Year 2:** Quarter past/to m/km, g/kg, ml/l Temperature (degrees)	Slide, roll, turn, whole turn, half turn Stretch, bend **Year 2:** Rotation Clockwise, anticlockwise Straight line Ninety degree turn, right angle			Count, work out, answer, check same number(s)/different number(s)/missing number(s) Number facts, number line, number track, number square, number cards Abacus, counters, cubes, blocks, rods, die, dice, dominoes, pegs, peg board Same way, different way, best way, another way In order, in a different order Not all, every, each **Year 2:** Predict Describe the pattern, describe the rule Find, find all, find different Investigate	

New maths vocabulary for year 3							
Number and place value	Addition and subtraction	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions	Data/statistics
Numbers to one thousand eights, fifties hundreds factor of relationship Roman Numerals one hundred more one hundred less approximately /approximate round, nearest, round to the nearest ten, hundred round up, round down greatest value, least value	Column addition and subtraction add, more, and make, sum, total altogether difference between equals is the same as number bonds/pairs/facts missing number tens boundary, hundreds boundary hundreds boundary	multiple, factor groups of times product Multiples of four, eight, fifty and one hundred Scale up grouping remainder	Leap year Twelve-hour/twenty-four-hour clock a.m., p.m. Roman numerals I to XIII millimetre, kilometre, mile distance apart … between … to … from perimeter centigrade century calendar earliest/latest	Greater/less than ninety degrees angle … is a greater/smaller angle than Orientation (same orientation, different orientation) compass point north, south, east, west, N, S, E, W horizontal, vertical, diagonal	Horizontal, vertical, perpendicular and parallel lines perimeter pentagonal hexagon, hexagonal octagon, octagonal quadrilateral right-angled parallel, perpendicular prism, triangular prism hemisphere	Numerator, denominator Unit fraction, non-unit fraction Compare and order Tenths sixths, sevenths, eighths, tenths …	Chart, bar chart, frequency table, Carroll diagram, Venn diagram Axis, axes Diagram most popular,

New maths vocabulary for year 4

Number and place value	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions and decimals	Data/statistics
ten thousand, hundred thousand, million Tenths, hundredths Decimal (places) Round (to nearest) Thousand more/less than integer, positive, negative above/below zero, minus negative numbers Count through zero Roman numerals (I to C)	Multiplication facts (up to 12x12) Division facts Inverse factors square, squared	unit, standard unit metric unit Convert area, covers square centimetre (cm2) mass: big, bigger, small, smaller weight: heavy/light, heavier/lighter, heaviest/lightest measuring cylinder noon, millennium, leap year	Coordinates Translation Quadrant x-axis, y-axis Perimeter and area north-east, north-west, south-east, south-west, NE, NW, SE, SW rotate, rotation reflection	Quadrilaterals Triangles Right angle, acute and obtuse angles construct sketch right-angled reflect/reflection regular/irregular rectilinear heptagon 2 Dimensional 3 Dimensional spherical symmetry polygon	tenths, hundredths decimal, decimal fraction, decimal point, decimal place, decimal equivalent proportion	Continuous data Line graph survey, questionnaire

New maths vocabulary for year 5

Number and place value	Addition and subtraction	Multiplication and division	Measure	Geometry (position and direction)	Geometry (properties of shape)	Fractions, decimals and percentages	Data/statistics
ten thousand Powers of 10 factor pair formula divisibility square number prime number ascending/descending order interpret negative numbers	Efficient written method ones boundary, tenths boundary	Factor pairs Composite numbers, prime number, prime factors, square number, cubed number Formal written method Long multiplication	Volume Imperial units, pint, gallon metric units square metre (m2), square millimetre (mm2)	Reflex angle Dimensions ruler, set square, protractor angle measurer, coordinate x-axis, y-axis, quadrant straight line angles at a point four quadrants	Regular and irregular polygons equilateral triangle, isosceles triangle, scalene triangle parallelogram, rhombus, trapezium polygon acute angle, obtuse angle degrees	Proper fractions, improper fractions, mixed numbers equivalent to, cancel, Thousandths Percentage % Half, quarter, fifth, two fifths, four fifths Ratio, proportion	line graph bar chart maximum/minimum value outcome

New maths vocabulary for year 6

Number and place value	Addition and subtraction	Multiplication and division	Geometry (position and direction)	Geometry (properties of shape)	Fractions, decimals and percentages	Algebra	Data/statistics
Numbers to ten million round to required degree of accuracy	Order of operations BODMAS	Order of operations Common factors, common multiples Long division decimal remainder	Four quadrants (for coordinates)	Vertically opposite (angles) reflex angle net, open, closed Circumference, radius, diameter parallelogram, rhombus, trapezium polygon	Degree of accuracy Simplify Ratio Scale factor	Linear number sequence Substitute Variables Symbol Known values formulae equation unknown variable	Mean Pie chart Construct