

Mathematical Vocabulary Progression Document

This document is designed to assist with the teaching of vocabulary across EYFS, KS1 and KS2 and is aligned with the White Rose schemes of learning. This document identifies in which year group vocabulary should be explicitly taught and introduced. However, language should be revisited in subsequent year groups, retrieved regularly and quizzed often to ensure children are consolidating their understanding. Some vocabulary might be introduced earlier (shapes for instance) if necessary or as part of an activity, however this document ensures coverage is progressive.

<u>Nursery vocabulary</u>		
<u>Number</u>	<u>Numerical patterns and reasoning</u>	<u>Pattern, shape, measures and spatial reasoning</u>
one, two, three, four, five, how many? How many altogether?	more than, less/fewer than, fair, sharing	first, then, next, sides, corners, straight, flat, round taller, shorter, longer, bigger, smaller, fuller, emptier, heavier, lighter

	Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number and place value	count subitise order/ordinal compare forwards backwards numerals digit one more one less equal to more than less than (fewer)	sort represent multiples partitioning ones tens	count in steps count in multiples place value estimate compare	ascending descending 10 or 100 more 10 or 100 less hundreds	negative numbers roman numerals 1000 more 1000 less thousands round	ten thousands one hundred thousands powers of integer	millions ten millions
Addition and subtraction	add plus altogether total take away/minus number bonds part whole digit	addition/add subtraction difference equals facts problems missing number problems 2-digit number inverse	sum 3-digit number commutative	column addition column subtraction exchange estimate	4-digit number operations methods		

<p>Multiplication and division</p>	<p>double half twice as many equal unequal share group odd even</p>	<p>multiplication division arrays</p>	<p>commutative repeated addition times tables</p>	<p>exchange mathematical statements missing number problems integer scaling problems correspondence problems derived facts</p>	<p>factor pairs formal written layout distributive law remainders</p>	<p>multiples factors prime numbers square numbers cube numbers short division product dividend divisor quotient operations</p>	<p>multi-digit numbers long division</p>
<p>Fractions/ decimals/ percentages</p>		<p>whole half quarter equal parts</p>	<p>three quarters third equivalent fractions unit fractions non unit fractions numerator denominator one whole</p>	<p>tenths</p>	<p>decimal equivalence hundredths convert proper fractions improper fractions decimal point</p>	<p>fifth thousandths mixed numbers percent factors integer complements</p>	

Measurement (measure and length)	measure wide(er) narrow(er) compare long(er)(est) short(er)(est) length	compare	standard units estimate order record results centimetre cm metre m	millimetre mm perimeter	kilometres km rectilinear figure area	decimal notation scaling metric units imperial units inches compound shape irregular shape square centimetres square metres	conversion miles formulae parallelograms triangles feet
Measurement (height, weight and capacity)	height long(er)/short(er) tall(er)/short(er) weight capacity heavy/light heavier than lighter than big/bigger/biggest full/empty more than less than half/half full	mass volume	kilogram kg gram g quarter full three quarters full liters l millilitres ml temperature celsius			cubic centimetre pounds pints	cubic metre cubic millimetre cubic kilometre gallons stones ounces

<p>Geometry - properties of shape</p>	<p>2-d shapes rectangle square circle triangle characteristics 3-d shapes cuboids cubes cone spheres curved straight flat</p>	<p>sides corners properties pyramids faces</p>	<p>pentagon hexagon line of symmetry properties cylinder edges vertices vertex</p>	<p>right-angle triangle heptagon octagon polygon properties prism orientations angles acute angle obtuse angle turn right angles half turn $\frac{3}{4}$ of a turn greater than right angle less than right angle horizontal lines vertical lines perpendicular lines parallel lines</p>	<p>isosceles equilateral scalene trapezium rhombus parallelogram kite geometric shapes quadrilaterals</p>	<p>regular polygon irregular polygon reflex angles degrees one whole turn angles on straight line angles around a point vertically opposite missing angles</p>	<p>radius diameter circumference dimensions</p>
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Position and direction	over under between around through on into next to behind beneath order repeat patterns on top of	position direction movement whole turn quarter turn half turn three-quarter turn	clockwise anti-clockwise straight line rotation arrange sequences		co-ordinates first quadrant grid translation plot polygon axis	reflection	four quadrants co-ordinate plane
Statistics			pictograms tally chart block diagram category sorting totalling comparing horizontal vertical	table bar chart one-step problem two-step problem	time graph discrete data continuous data line graph comparison problem sum problem difference problem calculate interpret	timetable two-way tables	pie chart mean

Ratio and proportion							relative size missing values integer multiplication percentages scale factor unequal sharing and grouping
Algebra							formulae linear number sequences algebraically equation unknowns combinations variables
