

Mathematics Vocabulary Progression document (YR-Y6)

This document is designed to assist with the teaching of mathematical vocabulary across EYFS, KS1 and KS2 and is aligned with the White Rose schemes of learning.

Having adopted a vocabulary centred curriculum with CUSP, we wanted to maintain the high-quality vocabulary acquisition and use in maths too. Maths has its own language that needs to be understood to be truly fluent and adept in the subject. This document identifies in which year group vocabulary should be explicitly taught and introduced – with previous years vocabulary needing to be displayed and used accordingly.

Key vocabulary will be displayed on working walls and understanding of key vocabulary for the unit and block will be checked by teachers and teaching staff through key questioning.

Number – Number and Place Value

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
count	sort	count in steps	ascending	negative numbers	ten thousands	millions
subitise	represent	count in multiples	descending	roman numerals	one hundred thousands	ten millions
order/ordinal	multiples	place value	10 or 100 more	1000 more	powers of	
compare	partitioning	estimate	10 or 100 less	1000 less	integer	
forwards	ones	compare	hundreds	thousands		
backwards	tens			round		
numerals						
digit						
one more						
one less						
equal to						
more than						
less than (fewer)						

Number – Addition and Subtraction

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
add	addition/add	sum	column addition	4-digit number	No new vocabulary – use a mixture of all that has come before to ensure consolidation and to give a mixed diet.	
plus	subtraction	3-digit number	column subtraction	operations		
altogether	difference	commutative	exchange	methods		
total	equals		estimate			
take away /minus	facts					
number bonds	problems					

part	missing number problems			
whole	2-digit number			
digit	inverse			

Number – Multiplication and Division

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
double	multiplication	multiplication tables	exchange	factor pairs	multiples	multi-digit numbers
half	division	commutative	mathematical statements	formal written layout	factors	long division
twice as many	arrays	repeated addition	missing number problems	distributive law	prime numbers	
equal			integer scaling problems	remainders	square numbers	
unequal			correspondence problems		cube numbers	
share			derived facts		short division	
group					product	
odd					dividend	
even					divisor	
					quotient	
					operations	

Number – Fractions, Decimals and Percentages

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	whole	three quarters	tenths	decimal equivalence	fifth	
	half	third		hundredths	thousandths	
	quarter	equivalent fractions		convert	mixed numbers	
	equal parts	unit fractions		proper fractions	per cent %	
		non unit fractions		improper fractions	factors	
		numerator		decimal point	integer	
		denominator			complements	
		one whole				

Number – Ratio An explicitly taught Year 6 topic.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
						relative size
						missing values
						integer multiplication
						percentages
						scale factor
						unequal sharing & grouping

Number – Algebra

Algebra appears in other year groups in the form of missing numbers/amounts and trying to find what the missing number/amount is.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
						formulae
						linear number sequences
						algebraically
						equation
						unknowns
						combinations
						variables

Measurement – Measure and Length

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
measure	compare	standard units	millimetre mm	kilometres km	decimal notation	conversion
wide(er)		estimate	perimeter	rectilinear figure	scaling	miles
narrow(er)		order		area	metric units	formulae
compare		record results			imperial units	parallelograms
long(er)(est)		centimetre cm			inches	triangles
short(er)(est)		metre m			compound shape	feet
length					irregular shapes	
					square centimetres	
					square metres	

Measurement – height, weight and capacity

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
height	mass	kilogram kg			cubic centimetre	cubic metre
long(er)/short(er)	volume	gram g			pounds	cubic millimetre
tall(er)/short(er)		quarter full			pints	cubic kilometre
weight		three quarters full				gallons
capacity		litres l				stones
heavy/light		millilitres ml				ounces
heavier than		temperature				
lighter than		Celsius				
big/bigger/biggest						
full/empty						
more than						
less than						
half/half full						

Measurement – Money

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	money	value				
	coins	change				
	notes					
	pounds £					
	pence p					

Measurement – Time

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
time	chronological order	intervals of time	analogue clock	convert		
quicker	<i>days of the week</i>	quarter past/to	roman numerals			
slower	<i>months of the year</i>	duration	12-hour clock			
earlier	month		24-hour clock			
later	year		a.m./p.m.			
before	o'clock		noon			
after	half past		midnight			
first	second		leap year			
next			digital			
today						
yesterday						
tomorrow						
morning						
afternoon						
evening						
day						
week						
hour						
minutes						

Geometry – Properties of Shape

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
2-d shapes	sides	pentagon	right-angle triangle	isosceles	regular polygon	radius
rectangle	corners	hexagon	heptagon	equilateral	irregular polygon	diameter
square	properties	line of symmetry	octagon	scalene		circumference
circle	pyramids	properties	polygon	trapezium		dimensions
triangle	faces	cylinder	properties	rhombus		
characteristics		edges	prism	parallelogram		
3-d shapes		vertices		kite		
cuboids		vertex		geometric shapes		
cubes				quadrilaterals		
cone						
spheres						
curved						
straight						
flat						

Geometry – Angles

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
			orientations		reflex angles	
			angles		degrees	
			acute angle		one whole turn	
			obtuse angle		angles on straight line	

			turn		angles around a point	
			right angles		vertically opposite	
			half turn		missing angles	
			three quarters of a turn			
			greater than right angle			
			less than right angle			
			horizontal lines			
			vertical lines			
			perpendicular lines			
			parallel lines			

Geometry – Position and Direction

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
over	position	clockwise/anti-clockwise		co-ordinates	reflection	four quadrants
under	direction	straight line		first quadrant		co-ordinate plane
between	movement	rotation		grid		
around	whole turn	arrange		translation		
through	quarter turn	sequences		plot		
on	half turn			polygon		
into	three-quarter turn			axis		
next to						
behind						
beneath						
order						
repeat						
patterns						

on top of						
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Statistics

The previous year's vocabulary will be used and will need consolidating and revisiting as appropriate.

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		pictograms	table	time graph	timetable	pie chart
		tally chart	bar chart	discrete data	two-way tables	mean
		block diagram	one-step problem	continuous data		
		category	two-step problem	line graph		
		sorting		comparison problem		
		totalling		sum problem		
		comparing		difference problem		
		horizontal		calculate		
		vertical		interpret		

