



Progression Ladder: Mathematical Vocabulary

This document details the teaching of vocabulary across EYFS, KS1 and KS2 and is aligned with the White Rose schemes of learning. The teaching of new mathematical vocabulary is threaded throughout lessons and units of work and is a fundamental part of learning and understanding of mathematical concepts. This document identifies in which year group vocabulary should be explicitly taught and introduced. However, language should be revisited in subsequent year groups to ensure children are consolidating their understanding.

Number - Number and place value						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
count	sort	count in steps	ascending	negative numbers	ten thousands	millions
subsidise	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	factorise
compare	partitioning	estimate	10 or 100 less	1000 less	integer	prime factor
forwards	ones	compare	hundreds	thousands	factor pair	digit total
backwards	tens	value	fours	partition	<	
numerals	estimate	part	eights	sixes	>	
digit	digit	represent	fifties	sevens	one million	
one more	greater	base 10	estimate	nines		
one less	fewer	bonds	factor of	twenty five		
equal to	equal	hundred	round	positive		
more than	order	threes				
less than (fewer)	whole	exchange				
zero	sequence	digit				
count	compare	one thousand				
odd	twos	sequence				
even	fives	continue				
pair	number	predict				
first	equal					
second	more/most					
third	less/least					
	greater than					
	less than					
	consecutive					

Addition and subtraction						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
add	addition	sum	column addition	4-digit number	tenths boundary	

plus	subtraction	3-digit number	column subtraction	operations	ones boundary	
altogether	equals	commutative	exchange	methods		
total	facts	inverse	estimate	inverse		
take away /minus	problems	operation				
number bonds	missing number problems	symbol				
part	2-digit number	number sentence				
whole	inverse	one hundred less				
digit	total	one hundred more				
more	altogether	tens boundary				
and	left					
one more	difference					
difference	fact families					
between	double					

half	equal parts	third	sixths	hundredths	thousandths	
quarter	fraction	equivalent fractions	sevenths	convert	mixed numbers	
		unit fractions	eighths	decimal point	per cent %	
		non unit fractions		proportion	factors	
		numerator			integer	
		denominator			complements	
		one whole			proper fractions	
		mixed number			improper fractions	
		halves				

Ratio and proportion						
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
						ratio
						proportion

Algebra						
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)						
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)	longer	estimate	perimeter	rectilinear figure	scaling	miles
narrow(er)	Centimetre (cm)	order	division	area	imperial units	formulae
compare	ruler	record results	kilometre (km)	unit	inches	parallelograms
long(er)(est)	metre stick	metre (m)	mile	metric units	compound shape	triangles
short(er)(est)		non standard			irregular shapes	feet
length		scale			square centimetres	yard
size		further			square metres	foot
guess						inch/inches
						circumference

Measurement (Height, Weight and Capacity)						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
height	mass	kilogram kg	centregrade	mass	cubic centimetre	cubic metre
long(er)/short(er)	volume	gram g		measuring cylinder	pounds	cubic millimetre
tall(er)/short(er)	heavier	quarter full			pints	cubic kilometre
weight	lighter	three quarters full			gallon	gallons
capacity	full	litres (l)				stones
heavy/light	empty	millilitres (ml)				ounces
heavier than	half full	temperature				tonne
lighter than	balance	celsius				centilitre
big/bigger/biggest	weigh	volume				
full/empty	kilogram (kg)	capacity				
more than		mass				
less than		weight				

half/half full						
thick/thin						
metre						
length						
wide						
narrow						

Measurement (Time)						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
time	chronological order	intervals of time	analogue clock	convert		Greenwich mean time
quicker	days of the week	duration	roman numerals	date of birth		British summer time
slower	months of the year	time past	12-hour clock	timetable		International date line
clock	month	5 minute intervals	24-hour clock	noon		
before	year	temperature	a.m./p.m.	arrive		
after	o'clock	degree	midnight	depart		
first	half past	fortnight	leap year			
next	second	digital	calendar			
today	seasons	analogue	earliest			
yesterday	weekend		latest			
tomorrow	earlier					
morning	later					
afternoon	midnight					
evening	clock face					
day	hour hand					
week	minute hand					

hour	quarter past/to					
minutes						

Measurement (Money)						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
penny	money	value			discount	profit
price	coins	worth			currency	loss
cost	notes	order				
buy	pounds (£)	compare				
sell	pence (p)					
	value					
	change					
	total					

Geometry – Properties of Shape						
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	axis of symmetry	circumference
circle	pyramids	properties	polygon	trapezium	reflective symmetry	dimensions
triangle	faces	edges	properties	rhombus		net
curved	characteristics	vertices	triangular prism	parallelogram		concentric
3-d shapes	symmetry	vertex	hemisphere	kite		intersecting
cuboids		irregular		geometric shapes		dodecahedron
cubes		regular		quadrilaterals		
cone		prism		polygon		
spheres		surface		hexagon		
flat		rectangular		oblong		
straight		circular				
		triangular				

Geometry – Properties of shape (2)						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	point		orientations	rotate	reflex angles	
	cuboid		angles	reflection	degrees	
	cylinder		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						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
over	position	clockwise/anti-clockwise	compass	co-ordinates	reflection	four quadrants
under	direction	straight line	north	first quadrant	protractor	co-ordinate plane
between	movement	rotation	south	grid		reflex angle
around	whole turn	arrange	east	translation		
through	quarter turn	sequences	west	plot		
on	half turn	right angle	diagonal	polygon		
into	three-quarter turn	rotate		axis		
next to	anti-clockwise	right angle				
behind	clockwise					
beneath	forwards					
order	backwards					
repeat	underneath					
patterns	centre					
on top of						

Statistics						
Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
count	sorting	pictograms	table	time graph	timetable	pie chart
sort	vote	tally chart	bar chart	discrete data	two-way tables	mean
group	table	block diagram	one-step problem	continuous data	Line graph	mode
list		category	two-step problem	line graph	maximum value	median
		sorting	venn	comparison problem	minimum value	range
		totalling	axis/axes	sum problem		dual bar charts
		comparing		difference problem		horizontal axis
		horizontal		calculate		vertical axis
		vertical		interpret		
		axis		survey		

		rows				
		columns				
		block graph				
		most popular				