



Whole School Maths Vocabulary Progression

The mathematics National Curriculum explicitly states that we must teach children to, “reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language.” To enable our pupils to do this we must teach the correct vocabulary for them to understand and use. Only by giving them the correct language will our pupils be able to develop their mastery of the subject.

The explicit defining of the maths vocabulary and the modelling of its use is paramount to our quality first maths teaching. Staff (both teachers and those supporting) should be familiar with the specific vocabulary for each mathematical concept and should be using it clearly and concisely in lessons. To aid stickability to long term memory and active their prior knowledge, the key vocabulary should be displayed on maths working walls as and when relevant during the teaching of a concept. Pupils should build on prior year group vocabulary and be encouraged to use the correct terms during mathematical discussions in the classrooms with peers and adults alike.

Number	Geometry	Measure	Statistics	Algebra	Ratio and Proportion
EYFS	EYFS	Year 1	Year 2	Year 6	Year 6
Year 1	Year 1	Year 2	Year 3		
Year 2	Year 2	Year 3	Year 4		
Year 3	Year 3	Year 4	Year 5		
Year 4	Year 4	Year 5	Year 6		
Year 5	Year 5	Year 6			
Year 6	Year 6				

Place Value

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
number	one more	ones	ones	ones	ones	ones
one, two, three to twenty and beyond	one less	tens	tens	tens	tens	tens
none	equal to	represents	hundreds	hundreds	hundreds	hundreds
count on/up/to/from/down	more than	greater than >	compare	thousands	thousands	thousands
before	less than	less than <	greater than >	increase	ten thousands	ten thousands
after	most	more than	less than <	decrease	hundred thousands	hundred thousands
more	least	fewer	numeral	rounding	increase	millions
less	total	most	place value	nearest	decrease	ten million
many	count	least	digit	negative number	greater than >	increase
few	number line	equal to	(count in) fifties	compare	less than <	decrease
fewer	number track	place value	represent	order	equal to	greater than >
fewest	part-whole model		increase	digit	rounding	less than <
smaller	tens frame		decrease	sequence	nearest	equal to
smallest	fewer than			place value	negative number	rounding
equal to	numeral				partitioning	nearest
the same as	multiple				place value	negative number
odd						compare
even						order
digit						partitioning
compare						place value
order						part
value						part whole
between						
five frame						
tens frame						

Addition & Subtraction

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
number line	symbol	add	add	add	add	add
add	add	addition	addition	addition	addition	addition
more	more	more	subtract	subtract	subtract	subtract
plus	plus	plus	subtraction	subtraction	subtraction	subtraction
make	make	make	calculate	calculate	calculate	calculate
sum	altogether	sum	calculation	calculation	calculation	calculation
total	subtract	altogether	mental calculation	mental calculation	mental calculation	mental calculation
altogether	take away	total	written method	written method	written method	written method
double	less	equals	operation	operation	operation	operation
half	equals	calculation	total	total	total	total
equals	number bonds	tens	amount	amount	amount	amount
subtract	number line	ones	exchange	exchange	exchange	exchange
take away	the same as*	number line	regroup	regroup	regroup	regroup
minus		subtract			inverse	inverse
		subtraction			estimate	estimate
		take away				
		leave				
		minus				
		less				
		difference				
		difference between				

**Explicit teaching to ensure pupils understand equals as 'the same as'*

Multiplication & Division

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
odd	equal groups	equal groups	multiply	multiply	factor	multiply
even	equal rows	grouping	times	multiplication	multiple	times
double	grouping	sharing	groups of	divide	common	lots of
halve	sharing	count in (2s, 5s and 10s)	lots of	division	prime number	groups of
share	doubles	repeated addition	array	calculate	square number	product
group in pairs	halves	lots of	divide	calculation	squared	divide
equal	count in (2s, 5s and 10s)	groups of	share	mental calculation	cube number	share
groups of	lots of	array	divide	written method	cubed	equal
	groups of	divide	commutativity	operation		factor
	array	divide by		remainder	<u>Written Method</u>	multiple
		multiply		factor	<i>multiply</i>	
		multiple		factor pairs	<i>divide</i>	
				efficient	<i>product</i>	
				exchange	<i>method</i>	
				commutative law	<i>partition</i>	
					<i>exchange</i>	
					<i>placeholder</i>	

Fractions

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
whole equal half	equal whole parts half halve quarter share	equal whole parts half halve quarter third divided unit fraction non-unit fraction equivalent	fraction numerator denominator equivalent unit fraction tenths	fraction numerator denominator equivalent unit fraction tenths hundredths	numerator denominator equivalent mixed number improper fraction	numerator denominator equivalent mixed number improper fraction proper fractions simplify factors multiples

Decimals & Percentages

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
				tenths hundredths decimal decimal place round compare	tenths hundredths thousandths decimal fraction numerator denominator round equivalent percentage	tenths hundredths thousandths decimal fraction equivalent convert value digit integer round percentage

Geometry

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
circle	circle	pentagon	angle	acute	2D	2D
square	square	hexagon	acute	right	3D	3D
rectangle	rectangle	sides	right	obtuse	regular	nets
triangle	triangle	curved	obtuse	polygon	irregular	acute
cube	cube	straight	horizontal	triangle	acute	obtuse
cuboid	cuboid	edges	vertical	equilateral	obtuse	reflex
pyramid	pyramid	vertex	parallel	scalene	reflex	vertically opposite angle
sphere	sphere	vertices	perpendicular	isosceles	degrees	protractor
cylinder	cylinder	corners	symmetry	right-angled	protractor	compass
cone	cone	faces	faces	quadrilateral	inside scales	triangle
flat	2D shape	cuboid	edges	parallelogram	outside scales	quadrilateral
curved	3D shape	cone	vertices	rhombus		polygon
shape	flat	prism		trapezium		
straight	curved	quadrilateral		regular		<u>Circles</u>
round	shape	polygon		irregular		<i>circle</i>
	straight	symmetry		parallel		<i>radius</i>
	round	vertical		perpendicular		<i>diameter</i>
	sort			symmetry		<i>circumference</i>
				symmetric		
				symmetrical		

Position & Direction

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
forwards / backwards over / under above / below top / bottom side on / in outside / inside in front / behind front / back before / after beside / next to up / down close / far	forwards / backwards left / right up / down top middle bottom on top of in front of above below under between around near close far inside outside turn whole half quarter three quarters clockwise anti-clockwise position direction motion	forwards / backwards left / right up / down top middle bottom on top of in front of above below under between around near close far inside outside turn whole half quarter three quarters clockwise anti-clockwise position direction motion	forwards / backwards left / right up / down top middle bottom on top of in front of above below under between around near close far inside outside turn whole half quarter three quarters clockwise anti-clockwise position direction motion	position direction coordinates axis axes x-axis y-axis quadrant scale plot movement transition left right up down	position direction coordinates axis axes origin x-axis y-axis quadrant scale plot movement transition left right up down reflection mirror line	position direction coordinates axis axes quadrants shapes translate units plane reflect

Statistics

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
		pictogram tally chart block diagram table total compare scale record data most least popular fewer more	data bar chart pictogram table axis axes	discrete data continuous data bar chart pictogram time line graph comparison sum difference scale axis axes	discrete data continuous data line graph timetable comparison sum difference scale axis axes	discrete data continuous data line graph timetable comparison sum difference scale axis axes

Money

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	pence pound coin note value worth greater than less than the same as	pounds pence penny equal coins notes value equivalent change	pounds pence penny equal coins notes value equivalent change add subtract amount	pounds pence coins notes value amount total change estimate convert compare order	pounds pence coins notes value amount total change estimate convert compare order	

Length, Mass & Capacity

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
full	length	metres	length	convert	volume	volume
empty	height	centimetres	metres	kilometre	capacity	cube
long / longer	centimetres	grams	centimetres	length	cubic measure	cuboid
short / shorter	mass	kilograms	millimetres	measure	cm ²	cubic units
tall / taller	weight	litres	mass	metres	m ²	formula
heavy / heavier	capacity	millilitres	grams		millilitres	formulae
light / lighter	volume	degrees	kilograms		estimate	rectilinear
equal / the same as	long / longer	Celsius	volume			approximate
	short / shorter	more than	capacity			estimate
	tall / taller	less than	litres			
	heavy / heavier	taller / tallest	millilitres			
	light / lighter	longer / longest	convert			
	equal	shorter / shortest	equivalent			
		heavier / heaviest				
		lighter / lightest				
		warm				
		cold				
		warmer				
		colder				

Time

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
days of the week	hour	time	seconds	analogue	hour	
months of the year	minutes	o'clock	minutes	digital	minute	
days	seconds	half past	hours	convert	second	
weeks	before	quarter to	o'clock	duration	day	
months	after	quarter past	am	duration	week	
year	first	minutes	pm	12-hour	month	
birthday	next	hours	noon	24-hour	year	
holiday	earlier	days	midday	hour	convert	
morning	later	minute hand	midnight	minute	units	
afternoon	quicker	hour hand	day	second	difference	
evening	slower	interval	month	day	timetable	
night	yesterday	duration	year	week		
	today	longer	leap year	month		
	tomorrow	shorter	Roman numerals	year		
	morning		duration			
	afternoon					
	evening					
	days of the week					
	months of the year					
	o'clock					
	half past					

Converting Units

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
					metric imperial length mass volume capacity millimetres centimetres metres kilometres inches grams kilograms pounds litres millilitres pints estimate approximate convert	metric imperial length mass volume capacity millimetres centimetres metres kilometres inches foot grams kilograms tonnes litres millilitres gallons pints estimate approximate convert

Algebra

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
						algebra formulae express equation rule function input output substitute integer value variable

Ratio

EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
						ratio proportion quantity value symbol colon scale factor enlargement fraction numerator denominator