

The following document lists mathematical vocabulary and phrases that children are required to understand and use as they move through the school. It is based on the published 2014 national curriculum and lists the new vocabulary in the year in which it should be explicitly used and taught.

Mathematical Vocabulary Progression

Year 1 – Year 6



Introduction

The following document lists mathematical vocabulary and phrases that children are required to understand and use as they move through the school.

It is based on the published 2014 national curriculum and lists the **new vocabulary** in the year in which it should be explicitly used and taught. Vocabulary from previous years should be referred to in addition to that for each year group.

Whilst the majority of vocabulary will be in here, it is not an exhaustive list. It includes words from the mathematics curriculum, as opposed to the original 2000 booklet (DFE published Mathematical vocabulary) which tried to be very comprehensive.

Why is it needed?

Children who do not answer questions in lessons, cannot do tasks set in class or do poorly in tests may :

- Not understand the spoken or written instructions
- Not be familiar with the mathematical terms used
- Be confused about the mathematical terms used
- Be confused about words used that are used in everyday English but have a different or more precise meaning in mathematics.

Crucially, mathematical language is crucial to the development of their thinking. If they do not have the vocabulary to talk about a concept, they cannot make progress in developing their understanding of that area of mathematical knowledge.

Who is it for?

- Teachers
- Support staff – supporting children with EAL
- Classroom assistants

YEAR 1: this includes words that are new in Year 1 and includes some Reception words too. **Red words** are not statutory but are desirable.

Number and Calculation		Fractions	Measurement		Geometry
same	place value	(one) half	TIME	today	LENGTH
different	first	(one/two/three)	year	tomorrow	length
count(ing)	second	quarters	month	before	long (er) (est)
forwards	third	share	week	after	short (er) (est)
backwards	fourth	sharing	weekend	old(er)	ruler
share	(and so on up to)	groups	day	new(er)	centimetre(cm)
left over	nineteenth	grouping	Monday	clock (face)	metre (m)
more (than)	twentieth		Tuesday)o'clock	far
less (than)	order	part	Wednesday	half past	distance
total	number	whole	Thursday	birthday	measure
fewer (than)	amount	equal parts	Friday	watch	
equal (to)	value	same size	Saturday	hour (hand)	CAPACITY/ VOLUME
most	size	bar	Sunday	minute (hand)	full
least			January	minutes past/to	empty
sum	odd even		February	quarter past/to	more than
difference	numberline		March	half past/to	less than
distance between	double		April	fast(er)	half full
total	halve		May	quick(er)	
first	pair		June	slow(er)	MONEY
plus	how much		July	early	coin note amount
add(ition)	how many		August	earlier	penny/ppound/£
subtract(ion)	larger		September	late	coin values:
minus	smaller		October	later	one pence
ones	estimate		November		two pence
adding (addend/sum)	compare		December	MASS	five pence
subtraction	together		night	weigh	ten pence
(minuend/subtrahend/ difference)	altogether		hour	weight	twenty pence
tens	bonds		minute	heavy	fifty pence
column(s)	zero		second	heavier (than)	
multiples	between		morning	heaviest	
twenty- one	above		afternoon	light	
twenty-two	below		evening	lighter (than)	
twenty -three			yesterday	lightest balance	
(and so on up to 99)				(weighing) scales	
one hundred				gram (g)	
				Kilogram (kg)	
					SHAPE PROPERTIES
					Pattern
					2-D
					Rectangle/oblong
					circle
					square
					triangle
					3-D
					cube
					cuboid
					pyramid
					sphere
					side(s)
					right
					top
					middle
					bottom
					in front of
					behind
					between
					above
					below
					around
					near
					close
					far
					up
					down
					forwards
					backwards
					inside
					outside
					clockwise

YEAR 2: new words. Red words are not statutory but are desirable.

Number and Calculation	Fractions	Measurement	Geometry	Statistics
digit numeral twenty-one twenty-two twenty-three twenty-four (and so on up to) ninety-nine one hundred multiple commutative place value step counting > as 'greater than' < as 'less than' partition place holder place value estimate estimation inverse array calculate multiplication multiplicand multiplier product division dividen times tables	third (one) (two) third(s) sharing grouping two quarters equivalent one and a quarter' one and 2 quarters one and a half one and 3 quarters half as much twice as much numerator denominator fraction bar/ vinculum	<p>TIME analogue five/ten/ 1/4 past/to clockwise anticlockwise</p> <p>MASS gram kilogra m</p> <p>LENGTH height width metre centimetr e millimetre</p> <p>CAPACITY/ VOLUME litre millilitre</p> <p>TEMPERATURE degrees celcius thermometer</p> <p>MONEY price cost amoun t change</p>	<p>SHAPE PROPERTIES vertical horizontal vertices edges faces quadrilateral polygon prism cone symmetry</p> <p>POSITION AND DIRECTION Straight curved rotate rotation angle right angle</p>	pictogram tally chart block diagram table data category(ies)

YEAR 3: new words. Red words are not statutory but are desirable.

Number and Calculation	Fractions	Measurement	Geometry	Statistics
<p>hundreds one hundred and one one hundred and two one hundred and three <i>(and so on up to)</i> one thousand partition exchange multiple(s) inverse operations factor product multiplicand multiplier dividend divisor quotient</p> <p>integer decimal remainder</p>	<p>fifths sixths sevenths eighths ninths tenths numerator denominator fraction bar/vinculum order unit-fraction non-unit fraction like fraction</p>	<p>Convert</p> <p>LENGTH millimetre perimeter kilometre (km)</p> <p>TIME roman numerals to XII am/pm duration noon midnight analogue clock digital clock 12-hour clock 24-hour clock</p>	<p>SHAPE PROPERTIES orientation degree(s) right angle acute obtuse clockwise anti-clockwise reflex perpendicular parallel horizontal vertical reflection quadrilateral polygon polyhedron polyhedra</p>	<p>interpret data category scale key</p>

YEAR 4: new words. Red words are not statutory but are desirable.

Number and Calculation	Fractions	Measurement	Geometry		Statistics
thousand round rounding negative Roman numerals to 100 (C) operation factor factor pairs distributive e associative derive remainder	hundredth(s) decimal equivalents decimal places proportion	Convert Conversion area rectilinear dimensions kilometer 24-hour clock	orientation degree(s) right angle perpendicular parallel horizontal vertical quadrilateral classify polygon pentagon hexagon heptagon octagon nonagon decagon polyhedron polyhedra acute obtuse isosceles scalene equilateral parallelogram rhombus trapezium protractor regular irregular reflex coordinates gird quadrant	Plot translate translation axis axes scale	label graph

YEAR 5: new words. Red words are not statutory but are desirable.

Number and Calculation	Fractions	Measurement	Geometry	Statistics
Million(s) Roman numerals to one million (M) linear sequence power (s) prime complement associative derivative	mixed number(s) thousandths percent percentages proportion	composite metric imperial inch foot yard mile cm ² cm ³ m ² m ³ pound pint	orientation degree(s) right angle perpendicular parallel diagonal horizontal vertical quadrilateral polygon polyhedron polyhedra acute obtuse reflex point reflection 180° 360° x-axis y-axis	Interpret data categories scale

YEAR 6: new words. Red words are not statutory but are desirable.

Number and Calculation	Fractions	Ratio and Proportion	Algebra	Measurement	Geometry	Statistics
interval long division multi-step common factors common multiples	simplify degrees of accuracy	relative size scale factor proportion ratio as a:b	symbol letter formula(e) sequence algebraic(ally) equation unknown variable constant generalise	mm ³ km ³ spee d mph m/s km/h	quadrant(s)dissect(ion) net(s) radius diameter circumference vertically opposite complementary angles Pi	pie chart mean average data set