



Mathematical Vocabulary



At Castlefields Primary School we know how important it is to use the correct mathematical vocabulary. It is crucial to allow children to communicate mathematically. The National Curriculum for mathematics “reflects the importance of spoken language in pupils’ development across the whole curriculum – cognitively, socially and linguistically. The quality and variety of language that pupils hear and speak are key factors in developing their mathematical vocabulary and presenting a mathematical justification, argument or proof.”

This document states where new mathematical vocabulary should be introduced in order for children to embed their knowledge and understanding.

Mathematical Vocabulary

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number and Place Value							
Number	zero number one, two, three ... to twenty and beyond teens numbers, eleven, twelve ... twenty none how many ...? count, count (up) to, count on (from, to), count back (from, to) count in ones, twos, fives, tens is the same as more, less odd, even few pattern pair	All EYFS and: numeral twenty-one, twenty- two ... one hundred forwards backwards equal to equivalent to most, least many multiple of	All EYFS, Y1 and: two hundred ... one thousand threes, fours and so on tally sequence continue predict rule > greater than < less than	All EYFS, Y1, Y2 and: eights, fifties hundreds factor of relationship Roman numerals	All EYFS, Y1, Y2, Y3 and: ten thousand, hundred thousand, million sixes, sevens, nines, twenty-fives next, consecutive integer, positive, negative above/below zero, minus negative numbers	All EYFS, Y1, Y2, Y3, Y4 and: factor pair ≥ greater than or equal to ≤ less than or equal to formula divisibility square number prime number ascending/ descending order	All EYFS, Y1, Y2, Y3, Y4, Y5 and: factorise prime factor digit total
Place Value	ones, tens, digit same number as as many as more, larger, bigger, greater fewer, smaller, less fewest, smallest, least most, biggest, largest, greatest one more, ten more one less ten less compare order size first, second, third... twentieth last, last but one before, after next between	All EYFS and: equal to half-way between above, below	All EYFS, Y1 and: hundreds one-, two- or three- digit number place, place value stands for, represents exchange twenty-first, twenty- second ...	All EYFS, Y1, Y2 and: one hundred more one hundred less	All EYFS, Y1, Y2, Y3 and: one thousand more one thousand less	All EYFS, Y1, Y2, Y3, Y4	All EYFS, Y1, Y2, Y3, Y4, Y5

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Estimating	guess how many ...? estimate nearly close to about the same as just over just under too many too few enough, not enough	All EYFS and: roughly	All EYFS, Y1 and: exact, exactly	All EYFS, Y1, Y2 and: approximate approximately round nearest round to the nearest ten, hundred round up round down	All EYFS, Y1, Y2, Y3 and: thousand	All EYFS, Y1, Y2, Y3, Y4 and: ten thousand	All EYFS, Y1, Y2, Y3, Y4, Y5
Addition and Subtraction	add more and make sum total altogether double one more, two more ... ten more how many more to make ...? how many more is ... than ...? how much more is ...? take away how many are left/left over? how many have gone? one less, two less, ten less ... how many fewer is ... than ...? how much less is ...? difference between	All EYFS and: addition near double half, halve subtract equals is the same as number bonds/pairs missing number	All EYFS, Y1 and: one hundred more one hundred less facts tens boundary	All EYFS, Y1, Y2 and: hundreds boundary	All EYFS, Y1, Y2, Y3 and: inverse	All EYFS, Y1, Y2, Y3, Y4 and: ones boundary tenths boundary	All EYFS, Y1, Y2, Y3, Y4, Y5

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Multiplication and Division	sharing doubling halving number patterns	All EYFS and: multiplication multiply by multiple division dividing grouping array	All EYFS, Y1 and: groups of times once, twice, three times ... ten times repeated addition divide divided by divided into share share equally left left over one each, two each, three each ... ten each group in pairs threes ... tens equal groups of row column multiplication table multiplication fact division fact	All EYFS, Y1, Y2 and: factor product remainder	All EYFS, Y1, Y2, Y3 and: inverse square, squared cube cubed	All EYFS, Y1, Y2, Y3, Y4	All EYFS, Y1, Y2, Y3, Y4, Y5
Fractions (including decimals and percentages)	parts of a whole half quarter	All EYFS and: fraction equal part equal grouping equal sharing one of two equal parts one of four equal parts	All EYFS, Y1 and: equivalent fraction mixed number numerator, denominator two halves two quarters, three quarters one third, two thirds one of three equal parts	All EYFS, Y1, Y2 and: sixths, sevenths, eighths, tenths ...	All EYFS, Y1, Y2, Y3 and: hundredths decimal decimal fraction decimal point decimal place decimal equivalent proportion	All EYFS, Y1, Y2, Y3, Y4 and: proper/improper fraction equivalent reduced to cancel thousandths in every for every percentage per cent %	All EYFS, Y1, Y2, Y3, Y4, Y5 and: ratio
Algebra							formula, formulae equation unknown variable

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Measurement							
Measurement	measure size compare guess estimate enough, not enough too much, too little too many, too few nearly close to about the same as just over just under	All EYFS and: measurement roughly	All EYFS, Y1 and: measuring scale	All EYFS, Y1, Y2 and: division approximately	All EYFS, Y1, Y2, Y3 and: unit, standard unit metric unit	All EYFS, Y1, Y2, Y3, Y4 and: imperial unit	All EYFS, Y1, Y2, Y3, Y4, Y5
Length	metre length height width, depth long, short, tall high, low wide, narrow thick, thin longer, shorter, taller, higher ... longest, shortest, tallest, highest ... and so on far, near close	All EYFS and: centimetre ruler metre stick	All EYFS, Y1 and: further, furthest tape measure	All EYFS, Y1, Y2 and: millimetre kilometre mile distance apart ... between ... to ... from perimeter	All EYFS, Y1, Y2, Y3 and: breadth edge, area covers square centimetre (cm ²)	All EYFS, Y1, Y2, Y3, Y4 and: square metre (m ²) square millimetre (mm ²)	All EYFS, Y1, Y2, Y3, Y4, Y5 and: yard foot feet inch inches circumference
Weight	weigh, weighs, balances heavy, light heavier than, lighter than heaviest, lightest scales	All EYFS and: kilogram half kilogram	All EYFS, Y1 and: gram	All EYFS, Y1, Y2	All EYFS, Y1, Y2, Y3 and: mass: big, bigger, small, smaller weight: heavy/light, heavier/lighter, heaviest/ lightest	All EYFS, Y1, Y2, Y3, Y4	All EYFS, Y1, Y2, Y3, Y4, Y5 and: tonne pound ounce
Capacity and Volume	full empty half full holds container	All EYFS and: litre, half litre capacity volume more than less than quarter full	All EYFS, Y1 and: millilitre contains	All EYFS, Y1, Y2	All EYFS, Y1, Y2, Y3 and: measuring cylinder	All EYFS, Y1, Y2, Y3, Y4 and: pint gallon	All EYFS, Y1, Y2, Y3, Y4, Y5 and: centilitre cubic centimetres (cm ³) cubic metres (m ³), cubic millimetres (mm ³) cubic kilometres (km ³)

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Temperature			temperature degree	All EYFS, Y1, Y2 and: centigrade	All EYFS, Y1, Y2, Y3		All EYFS, Y1, Y2, Y3, Y4, Y5
Time	time days of the week, Monday, Tuesday day, week birthday, holiday morning afternoon evening night bedtime dinner time playtime today yesterday tomorrow before after next, last now, soon early, late quick, quicker, quickest, quickly slow, slower, slowest, slowly old, older, oldest new, newer, newest takes longer takes less time hour o'clock clock watch hands	All EYFS and: months of the year (January, February ...) seasons: spring, summer, autumn, winter weekend month year earlier later first, midnight date how long ago? how long will it be to ...? how long will it take to ...? how often? always, never often, sometimes usually once, twice half past, quarter past, quarter to clock face hour hand minute hand hours minutes	All EYFS, Y1 and: fortnight 5, 10, 15 ... minutes past digital/analogue clock/watch timer seconds	All EYFS, Y1, Y2 and: century calendar earliest latest a.m., p.m. Roman numerals 12-hour clock time, 24-hour clock time	All EYFS, Y1, Y2, Y3 and: leap year millennium noon date of birth timetable arrive depart	All EYFS, Y1, Y2, Y3, Y4	All EYFS, Y1, Y2, Y3, Y4, Y5 and: Greenwich Mean Time British Summer Time International Date Line
Money	money coin penny pence pound price cost buy, sell spend, spent pay	All EYFS and: change dear, costs more cheap, costs less, cheaper costs the same as how much ...? how many ...? total	All EYFS, Y1 and: bought sold	All EYFS, Y1, Y2	All EYFS, Y1, Y2, Y3	All EYFS, Y1, Y2, Y3, Y4 and: discount currency	All EYFS, Y1, Y2, Y3, Y4, Y5 and: profit, loss

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Geometry							
Properties of Shape	Shape pattern flat curved straight round hollow solid sort make build draw size bigger larger smaller symmetrical pattern repeating pattern match	All EYFS and: symmetry symmetrical pattern	All EYFS, Y1 and: surface line symmetry	All EYFS, Y1, Y2 and: perimeter	All EYFS, Y1, Y2, Y3 and: line construct sketch centre angle right-angled base square-based reflect reflection regular irregular	All EYFS, Y1, Y2, Y3, Y4 and: radius diameter congruent axis of symmetry, reflective symmetry	All EYFS, Y1, Y2, Y3, Y4, Y5 and: circumference concentric arc net open closed intersecting intersection plane
2D Shape	corner, side rectangle (including square) circle triangle	All EYFS and: point pointed	All EYFS, Y1	All EYFS, Y1, Y2 and: pentagonal hexagonal octagonal quadrilateral right-angled parallel perpendicular	All EYFS, Y1, Y2, Y3 and: 2-D two-dimensional oblong rectilinear equilateral triangle isosceles triangle scalene triangle heptagon parallelogram rhombus trapezium polygon	All EYFS, Y1, Y2, Y3, Y4 and: x-axis y-axis quadrant	All EYFS, Y1, Y2, Y3, Y4, Y5 and: kite
3D Shape	face edge vertex vertices cube pyramid sphere cone	All EYFS and: cuboid cylinder	All EYFS, Y1 and: rectangular circular triangular pentagon hexagon octagon	All EYFS, Y1, Y2 and: hemisphere prism triangular prism	All EYFS, Y1, Y2, Y3 and: 3-D three-dimensional spherical cylindrical tetrahedron polyhedron	All EYFS, Y1, Y2, Y3, Y4 and: octahedron	All EYFS, Y1, Y2, Y3, Y4, Y5 and: dodecahedron net open closed

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Position and Direction	position over under above below top, bottom, side on, in outside, inside around in front, behind front, back beside next to opposite apart between middle, edge corner direction left, right up, down forwards, backwards, sideways across next to close near far along through to, from, towards, away from movement slide roll turn stretch bend whole turn half turn	All EYFS and: underneath centre journey quarter turn three-quarter turn	All EYFS, Y1 and: route higher lower clockwise anticlockwise right angle straight line	All EYFS, Y1, Y2 and: compass point north, south, east, west, N, S, E, W horizontal vertical diagonal angle ... is a greater/ smaller angle than acute angle obtuse angle	All EYFS, Y1, Y2, Y3 and: north-east north-west south-east south-west NE, NW, SE, SW translate translation rotate rotation degree reflection ruler set square angle measurer compass	All EYFS, Y1, Y2, Y3, Y4 and: coordinate protractor	All EYFS, Y1, Y2, Y3, Y4, Y5 and: reflex angle
Statistics	count, sort group, set list	All EYFS and: vote table	All EYFS, Y1 and: tally graph, block graph, pictogram represent label, title most popular, most common least popular, least common	All EYFS, Y1, Y2 and: chart, bar chart, frequency table Carroll diagram, Venn diagram axis, axes diagram	All EYFS, Y1, Y2, Y3 and: survey, questionnaire, data	All EYFS, Y1, Y2, Y3, Y4 and: database bar line chart line graph maximum/ minimum value outcome	All EYFS, Y1, Y2, Y3, Y4, Y5 and: pie chart mean (mode, median, range as estimates for this) statistics, distribution

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
	General						
	<p>pattern puzzle what could we try next? how did you work it out? recognise describe draw compare sort</p>	<p>All EYFS and: problem, problem solving mental, mentally explain your thinking</p>	<p>All EYFS, Y1 and: show how you ... explain your method describe the pattern describe the rule investigate</p> <p>mental calculation written calculation</p>	<p>All EYFS, Y1, Y2 and: greatest value, least value statement</p>	<p>All EYFS, Y1, Y2, Y3 and: justify make a statement</p>	<p>All EYFS, Y1, Y2, Y3, Y4 and: explain your reasoning</p>	<p>All EYFS, Y1, Y2, Y3, Y4, Y5</p>