

Mathematical Vocabulary

Part of being mathematically fluent is being able to talk about mathematics; describe procedures, explain understanding, teach someone else how to do it.

Vocabulary and language structures (sentence stems) are carefully planned for. The grid below shows how mathematical vocabulary is accumulated.

| EYFS | |
|---------------------------|--|
| 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 |
| Place Value | Ones, tens, digit, the 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 |
| Addition & 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 |
| Multiplication & division | Sharing, doubling, halving, number patterns |
| Fraction | parts of a whole, half, quarter, |
| Measure | 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 |
| Length | Metre, length, height, width, depth, long, short, tall, high, low, wide, narrow, thick, thin, longer, shorter, taller, higher ... and so on, longest, shortest, tallest, highest ... and so on, far, near, close |
| Weight | weigh, weighs, balances, heavy, light, heavier than, lighter than, heaviest, lightest, scales |
| Capacity & volume | Full, empty, half full, holds, container |
| 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 |
| Money | Money, coin, penny, pence, pound, price, cost, buy, sell, spend, spent, pay |
| Property of shape | shape, pattern, flat, curved, straight, round, hollow, solid, sort, make, build, draw, size, bigger, larger, smaller, symmetrical, pattern, repeating pattern, match |
| Shape names | corner, side, rectangle, square, circle, triangle, face, edge, vertex, vertices, cube, pyramid, sphere, cone |
| Position & 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 |

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| Statistics | count, sort, group, set, list |
| General | Pattern, puzzle, what could we try next? how did you work it out? Recognise, describe, draw, compare, sort |

| YEAR 1 | |
|---------------------------|--|
| Number | Numerals, twenty-one, twenty-two ... one hundred, forwards, backwards, equal to, equivalent to, most, least, many, multiple of |
| Place Value | equal to, half-way between, above, below, roughly |
| Addition & Subtraction | Addition, near double, half, halve, subtract, equals, is the same as, number bonds/pairs, missing number, |
| Multiplication & division | Multiplication, multiply, multiplied by, multiple, division, dividing, grouping, array |
| Fraction | Fraction, equal part, equal grouping, equal sharing, one of two equal parts, one of four equal parts |
| Measure | Measurement, roughly |
| Length | centimetre, Ruler, metre stick |
| Weight | kilogram, half kilogram |
| Capacity & volume | litre, half litre, capacity, volume, more than, less than, quarter full |
| Time | 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 |
| Money | Change, dear, costs more, cheap, costs less, cheaper, costs the same as, how much ...? how many ...? Total, |
| Property of shape | symmetry, symmetrical, symmetrical pattern |
| Shape names | point, pointed, cuboid, cylinder, |
| Position & direction | Underneath, centre, journey, quarter turn, three-quarter turn |
| Statistics | Vote, table, , |
| General | problem, problem solving, mental, mentally, explain your thinking |

| YEAR 2 | |
|---------------------------|--|
| Number | two hundred ... one thousand, threes, fours and so on, tally, sequence, continue, predict, rule, > greater than, < less than |
| Place Value | Hundreds, digit, one-, two- or three-digit number, place, place value, stands for, represents, exchange, twenty-first, twenty-second ...exact, exactly, |
| Addition & Subtraction | one hundred more, one hundred less, facts, tens boundary, |
| Multiplication & division | 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 |
| Fraction | equivalent fraction, mixed number, numerator, denominator, two halves, two quarters, three quarters, one third, two thirds one of three equal parts, |
| Measure | measuring scale |
| Length | further, furthest, tape measure |
| Weight | gram |
| Capacity & volume | Millilitre, contains, |
| Temperature | Temperature, degree |
| Time | Fortnight, 5, 10, 15 ... minutes past, digital/analogue clock/watch, timer, seconds |
| Money | Bought, sold, |
| Property of shape | Surface, line symmetry |
| Shape names | Rectangular, circular, triangular, pentagon, hexagon, octagon |
| Position & direction | Route, higher, lower, clockwise, anticlockwise, right angle, straight line |
| Statistics | tally, graph, block graph, pictogram, represent, label, title, most popular, most common, least popular, least common |
| General | show how you ...explain your method, describe the pattern, describe the rule, investigate, mental calculation, written calculation |

| YEAR 3 | |
|---------------------------|---|
| Number | eights, fifties, hundreds, factor of, relationship, Roman numerals |
| Place Value | one hundred more, one hundred less, approximate, approximately, round, nearest, round to the nearest ten, hundred, round up, round down |
| Addition & Subtraction | hundreds boundary, |
| Multiplication & division | Factor, product, remainder |
| Fraction | sixths, sevenths, eighths, tenths ... |
| Measure | Division, approximately, |
| Length | Millimetre, kilometre, mile, distance apart ... between ... to ... from, perimeter |
| Weight | |
| Capacity & volume | |
| Temperature | centigrade |
| Time | Century, calendar, earliest, latest, a.m., p.m., Roman numerals, 12-hour clock time, 24-hour clock time |
| Money | |
| Property of shape | Perimeter, |
| Shape names | Pentagonal, hexagonal, octagonal, quadrilateral, right-angled, parallel, perpendicular, hemisphere, prism, triangular prism |
| Position & direction | compass point, north, south, east, west, N, S, E, W, horizontal, vertical, diagonal, angle ... is a greater/smaller angle than, acute angle, obtuse angle |
| Statistics | chart, bar chart, frequency table, Carroll diagram, Venn diagram, axis, axes, diagram |
| General | greatest value, least value, statement |

| YEAR 4 | |
|---------------------------|---|
| Number | ten thousand, hundred thousand, million, sixes, sevens, nines, twenty-fives, next, consecutive, integer, positive, negative above/below zero, minus, negative numbers |
| Place Value | one thousand more, one thousand less, |
| Addition & Subtraction | inverse |
| Multiplication & division | Inverse, square, squared, cube, cubed |
| Fraction | Hundredths, decimal, decimal fraction, decimal point, decimal place, decimal equivalent, proportion |
| Measure | unit, standard unit, metric unit |
| Length | Breadth, edge, area, covers, square centimetre (cm ²) |

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|----------------------|---|
| Weight | mass: big, bigger, small, smaller, weight: heavy/light, heavier/lighter, heaviest/lightest |
| Capacity & volume | measuring cylinder |
| Temperature | |
| Time | leap year, millennium, noon, date of birth, timetable, arrive, depart |
| Money | |
| Property of shape | Line, construct, sketch, centre, angle, right-angled, base, square-based, reflect, reflection, regular, irregular, |
| Shape names | 2-D, two-dimensional, oblong, rectilinear, equilateral triangle, isosceles triangle, scalene triangle, heptagon, parallelogram, rhombus, trapezium, polygon, 3-D, three-dimensional, spherical, cylindrical, tetrahedron, polyhedron, |
| Position & direction | north-east, north-west, south-east, south-west, NE, NW, SE, SW, translate, translation, rotate, rotation, degree, reflection, ruler, set square, angle measurer, compass |
| Statistics | survey, questionnaire, data, |
| General | Justify, make a statement |

| YEAR 5 | |
|---------------------------|--|
| Number | factor pair, \geq greater than or equal to, \leq less than or equal to, formula, divisibility, square number, prime number, ascending/descending order |
| Place Value | ten thousand, ones boundary, tenths boundary, |
| Addition & Subtraction | |
| Multiplication & division | |
| Fraction | proper/improper fraction, equivalent, reduced to, cancel, thousandths, in every, for every, percentage, per cent, %, |
| Measure | imperial unit, |
| Length | square metre (m ²), square millimetre (mm ²) |
| Weight | |
| Capacity & volume | pint, gallon |
| Temperature | |
| Time | |
| Money | Discount, currency |
| Property of shape | radius, diameter, congruent, axis of symmetry, reflective symmetry, |
| Shape names | x-axis, y-axis, quadrant, octahedron |
| Position & direction | Coordinate, protractor, |

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| Statistics | Database, bar line chart, line graph, maximum/minimum value, outcome, |
| General | explain your reasoning |

| YEAR 6 | |
|---------------------------|--|
| Number | Factorise, prime factor, digit total |
| Place Value | |
| Addition & Subtraction | |
| Multiplication & division | |
| Fraction | Ratio, |
| Measure | |
| Length | yard, foot, feet, inch, inches, circumference |
| Weight | tonne, pound, ounce, |
| Capacity & volume | Centilitre, cubic centimetres(cm ³), cubic metres (m ³), cubic millimetres (mm ³), cubic kilometres (km ³) |
| Temperature | |
| Time | Greenwich Mean Time, British Summer Time, International Date Line |
| Money | profit, loss |
| Property of shape | circumference, concentric, arc, net, open, closed, intersecting, intersection, plane, |
| Shape names | Kite, Dodecahedron, net, open, closed |
| Position & direction | reflex angle |
| Statistics | pie chart, mean (mode, median, range as estimates for this) statistics, distribution |
| Algebra | Formulae, equation, unknown, variable |
| General | |