Maths Vocabulary

This document sets out the mathematical vocabulary we use throughout school. We display the key vocabulary on our 'Maths Working Walls' at appropriate times throughout the year depending on the topic being taught. The mathematical vocabulary the children need to learn is promoted through talk and discussions during maths lessons as we are aware that children cannot learn the meanings of words in isolation. We also use questioning to help them to understand mathematical ideas and use mathematical terms correctly.

The mathematical words listed include all the vocabulary that the children will have been introduced to in the Early Years, Key Stage I and Year 3 with new words for Year 4 highlighted in red.

Mathematical language continues to be developed through KS2 to the words that children are expected to know and be able to use in Year 6.

Maths Vocabulary Year 4

Number and place value

Number, numeral

Zero, one,

two, three to twenty, and beyond to one hundred, two hundredone thousand, ten thousand, hundred thousand, million

None

How many ...?

Count (on/up/to/from/down), Forwards, backwards

Count in ones, twos, fives, tens, threes and fours, eights, sixes, sevens, nines, twenty fives, fifties and so on to hundreds

Equal to, equivalent, is the same as, as many as, pair, rule, relationship, next, consecutive, > greater than, < less than

Roman numerals

Integer, positive, negative, above/below zero, minus, negative numbers

More, most, less, least, lesser, many, few, fewer, fewest, smaller, smallest, larger, largest, greater, greatest, bigger, biggest, sequence, continue, predict

Odd and even

Multiple of, factor of

One more, ten more, one less, ten less, one hundred more, one hundred less, one thousand more, one thousand less

Units, ones, tens, digit, one-, two- or three-digit number, place, place value stands for, represents, exchange, numeral

First, second, third, third.....twentieth, twenty first, twenty second etc Last, last one, last but one Before, after, next, between, half-way between, above, below

Compare, order, size, tally

Addition and subtraction

Addition, add, more, and, make, sum, total, altogether

Double, near double, half, halve

One more, two more....ten more, one hundred more.....

How many more to make ...?

How many more is.... than ...?

How much more is?

Subtract, take away, how many are left/left over?

How many have gone? How many fewer is.... than...? How much less is..?

One less, two less, ten less, one hundred less

Difference between

Equals, is the same as

Number bonds/pairs/facts tens boundary, hundreds boundary

Estimating

Guess, how many ...? estimate, nearly, roughly, close to, approximately, approximate, about the same as, just over, just under, too many, too few, enough, not enough, exact, exactly, round, nearest, round to the nearest ten, hundred, thousand, round up, round down

Multiplication and Division

Multiplication, multiply, multiplied by, multiple, factor, groups of, times, product, once, twice, three times ... ten times, repeated addition

Division, dividing, divide, divided by, divided into grouping, sharing, share, share equally, left, left over, remainder, one each, two each, three each ... ten each, group in pairs, threes ... tens equal groups of

Multiplication table, multiplication fact, division fact

Doubling, halving

Array, row, column

Number patterns

Inverse, square, squared cube, cubed

Fractions

Fraction, equivalent fraction, mixed number, numerator, denominator equal part, equal grouping, equal sharing, parts of a whole, half, two halves one of two equal parts, quarter, two quarters, three quarters, one of four equal parts, one third, two thirds, one of three equal parts, sixths, sevenths, eighths, tenths ... hundredths, decimal fraction, decimal point, decimal place, decimal equivalent, proportion

Measure

Measure, measurement, measuring scale, division

Size, compare, unit, standard unit, metric unit

Guess, estimate

Enough, not enough, too much, too little, too many, too few. nearly, close to, about the same as, approximately, roughly, just over, just under

Length

Millimetre, centimetre, metre, kilometre, mile

Length, height, width, depth, breadth

Long, short, tall, high, low, wide, narrow, thick, thin, longer, shorter, taller, higher, longest, shortest, tallest, highest

Far, further, furthest, near, close, distance apart ... between ... to ... from

Edge, perimeter, area, covers, square centimetre (cm2)

Ruler, metre stick, tape measure

Weight

Kilogram, half kilogram, gram, weigh, weighs,

Balances, scales

Heavy, light, heavier than, lighter than, heaviest, lightest, mass: big, bigger, small, smaller, heavier/lighter, heaviest/lightest

Capacity and volume

Litre, half litre, millilitre

Capacity, volume

Full, empty, more than, less than, half full, quarter full, holds, contains

Temperature

Temperature, degree, centigrade

Time

Days of the week, months of the year, seasons, day, week, weekend, fortnight, month, year, leap year, century, millennium, calendar, date, date of birth, birthday, morning, noon, afternoon, evening, night, bedtime, midnight
Today, yesterday, tomorrow

Before, after, earlier, later, next, first, last, now, soon, early, late, earliest, latest Quick, quicker, quickest, quickly, slow, slower, slowest, slowly Old, older, oldest, new, newer, newest

Takes longer, takes less time, how long ago? How long will it be to ...? How long will it take to ...? How often?

Always, never, often, sometimes, usually, once, twice

Hour, o'clock, half past, quarter past, quarter to, 5, 10, 15 ... minutes past, a.m., p.m clock, clock face, watch, hands, digital/analogue clock/watch, timer, hour hand, minute hand, hours, minutes, seconds, timetable, arrive, depart Roman numerals. 12-hour clock time. 24-hour clock time

Money

Money, coin, penny, pence, pound

Price, cost, buy, bought, sell, sold, spend, spent, pay, change, dear, costs more, cheap, costs less, cheaper, costs the same as

How much ...? How many....? Total

Geometry

Properties of shape

Shape, pattern

Flat, line, curved, straight, round, hollow, solid, centre, surface

Sort, make, build, construct, draw, sketch, perimeter angle, right-angled base, square-based

Reflect, reflection

Size, bigger, larger, smaller

Symmetry, symmetrical, symmetrical pattern, line symmetry, repeating pattern, match, regular, irregular

2-D shape

2-D, two-dimensional

Corner, side, point, pointed, rectangle (including square), rectangular, oblong, rectilinear, circle, circular

Triangle, triangular, equilateral triangle, isosceles triangle, scalene triangle
Pentagon, pentagonal, hexagonal, hexagonal, heptagon, octagon, octagonal
Quadrilateral, parallelogram, rhombus, trapezium, polygon, right-angled, parallel,
perpendicular

3-D shape

3-D, three-dimensional

Face, edge, vertex, vertices

Cube, cuboid, pyramid, sphere, spherical, hemisphere, cone, cylinder, cylindrical, prism, triangular prism, tetrahedron, polyhedron

Position and direction

Position, over, under, underneath, above, below, top, bottom, side, on, in, outside, inside, around, in front, behind, front, back, beside, next to, opposite, apart, between, middle, edge, centre, corner

Direction, journey, route, left, right, up, down, higher, lower, forwards, backwards, sideways, across, next to, close, near, far, along, through, to, from, towards, clockwise, anti-clockwise, away from,

Compass point, north, south, east, west, N, S, E, W, north-east, north-west, south-east, south-west, NE, NW, SE, SW, horizontal, vertical, diagonal, translate, translation

Movement, slide, roll, turn, stretch, bend

Whole turn, half turn, quarter turn, three-quarter turn, rotate, rotation, degree, right angle, straight line, ruler, set square, angle measurer, compass

Angle ... is a greater/smaller angle than, acute angle, obtuse angle, reflection

Statistics

Count, tally, sort, vote, survey, questionnaire, data, group, block graph, pictogram, represent, group, set, list, table, chart, bar chart, frequency table, Carroll diagram, Venn diagram, label, title, axis, axes, diagram, most popular, most common, least popular, least common

General

Pattern, puzzle, problem, problem solving, mental, mentally

Recognise, describe, draw, compare, sort

What could we try next?

How did you work it out?

Show how you....

Explain your thinking

Explain your method

Describe the pattern, describe the rule, investigate

Mental calculation, written calculation, greatest value, least value, statement, justify, make a statement