<u>Mathematical Vocabulary Children in Year 6</u> <u>Should know, understand, use and be able to spell.</u>

(Words new to Year 6 are emphasised.)

Numbers and the number system

Place value, ordering and rounding

units, ones tens, hundreds, thousands ten thousand, hundred thousand, million digit, one-, two-, three- or four-digit number numeral 'teens' number place, place value stands for, represents exchange the same number as, as many as equal to Of two objects/amounts: >, greater than, more than, larger than, bigger than <, less than, fewer than, smaller than \geq , greater than or equal to <, less than or equal to Of three or more objects/amounts: greatest, most, largest, biggest least, fewest, smallest, one... ten... one hundred... one thousand more/less compare, order, size ascending/descending order first... tenth... twentieth last, last but one before, after next between, half-way between guess how many, estimate nearly, roughly, close to, about the same as approximate, approximately \approx , is approximately equal to just over, just under exact, exactly too many, too few, enough, not enough round (up or down), nearest round to the nearest ten/hundred/thousand integer, positive, negative above/below zero, minus

Properties of numbers and number sequences

number, count, how many...? odd, even every other how many times? multiple of digit next, consecutive sequence continue predict pattern, pair, rule relationship sort, classify, property formula divisible (by), divisibility, factor, factorise square number one squared, two squared.... $(1^2, 2^2...)$ prime, prime factor

Fractions, decimals, percentages, ratio and proportion

part, equal parts fraction, proper/improper fraction mixed number numerator, denominator equivalent, reduced to, cancel one whole half, quarter, eighth third, sixth, ninth, twelfth fifth, tenth, twentieth hundredth, *thousandth* proportion, ratio, in every, for every to every, as many as decimal, decimal fraction decimal point, decimal place percentage, per cent, %

Calculations

Addition and subtraction

add, addition, more, plus, increase sum, total, altogether score double, near double how many more to make...? subtract, subtraction, take (away), minus, decrease leave, how many are left/left over? difference between half, halve how many more/fewer is... than...? how much more/less is...? is the same as, equals, sign tens boundary, hundreds boundary units boundary, tenths boundary inverse

Multiplication and division

lots of, groups of times, multiplication, multiply, multiplied by multiple of, product once, twice, three times four times, five times... ten times times as (big, long, wide, and so on) repeated addition array, row, column double, halve share, share equally one each, two each, three each... group in pairs, threes... tens equal groups of divide, division, divided by, divided into remainder factor, quotient, divisible by inverse

Using a calculator

calculator, display, key enter, clear, *sign change* constant, *recurring, memory, operation key*

Solving problems

Making decisions and reasoning

pattern, puzzle calculate, calculation mental calculation method, strategy jotting answer right, correct, wrong what could we try next? how did you work it out? number sentence sign, operation, symbol, equation

Money

money coin, note penny, pence, pound, (£) price, cost buy, bought, sell, sold spend, spent pay change dear, costs more, more/most expensive cheap, costs less, cheaper, less/least expensive cheap, costs less, cheaper, less/least expensive how much...? how many...? total, amount, value discount, *profit, loss* currency

Handling data

count, tally, sort, vote survey, questionnaire data, database graph, block graph, line graph pictogram, represent group, set list, chart, bar chart, bar line chart tally chart table, frequency table Carroll diagram, Venn diagram label, title, axis, axes diagram most popular, most common least popular, least common mode, range, mean, average, median statistics, distribution maximum/minimum value classify, outcome

Probability

fair, unfair likely, unlikely, likelihood, *equally likely* certain, uncertain probable, possible, impossible chance, good chance, poor chance, no chance *equal chance, even chance, fifty-fifty chance* risk, doubt *biased, random*

Measures, shape and space

Measures (general)

measure, measurement size compare unit, standard unit metric unit, imperial unit measuring scale, division guess, estimate enough, not enough too much, too little too many, too few nearly, roughly, about, close to about the same as, approximately just over, just under

Length

length, width, height, depth, breadth long, short, tall, high, low wide, narrow, deep, shallow, thick, thin longer, shorter, taller, higher... and so on longest, shortest, tallest, highest... and so on far, further, furthest, near, close distance apart/between... to... from edge, perimeter, *circumference* kilometre (*km*), metre (*m*), centimetre (*cm*), millimetre (*mm*) mile, *yard, feet, foot, inches, inch* ruler, metre stick, tape measure, compasses

Mass

mass: big, bigger, small, smaller, balances *weight:* heavy/light, heavier/lighter, heaviest/lightest weigh, weighs *tonne*, kilogram (*kg*), half-kilogram, gram (*g*) *pound, ounce* balance, scales

Capacity

capacity full, half full empty holds, contains litre (*l*), half-litre, *centilitre* (*cl*), millilitre (*ml*) pint, gallon container, measuring cylinder

Area

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area, covers, surface
square centimetre (cm^2), square metre (m^2)
square millimetre (mm^2)
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Time

time days of the week: Monday, Tuesday... months of the year: January, February... seasons: spring, summer, autumn, winter day, week, fortnight, month year, leap year, century, millennium weekend, birthday holiday calendar, date, date of birth morning, afternoon, evening, night am, pm, noon, midnight today, yesterday, tomorrow before, after, next, last now, soon, early, late, earliest, latest quick, quicker, quickest, quickly fast, faster, fastest, 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...? timetable, arrive, depart hour, minute, second

o'clock, half past, quarter to, quarter past clock, watch, hands digital/analogue clock/watch, timer 24-hour clock, 12-hour clock *Greenwich Mean Time, British Summer Time International Date Line* how often? always, never, often, sometimes, usually

Shape and space

shape, pattern flat, line curved, straight round hollow, solid corner point, pointed face, side, edge, end sort make, build, construct, draw, sketch centre, radius, diameter circumference, concentric, arc net surface angle, right-angled congruent intersecting, intersection plane base, square-based vertex, vertices layer, diagram regular, irregular concave, convex open, closed tangram

3D shapes

3D, three-dimensional cube, cuboid pyramid sphere, hemi-sphere, spherical cone cylinder, cylindrical prism tetrahedron, polyhedron, octahedron, *dodecahedron*

2D shapes

2D, two-dimensional circle, circular, semi-circle triangle, triangular equilateral triangle, isosceles triangle, scalene triangle square, *rhombus* rectangle, rectangular, oblong pentagon, pentagonal hexagon, hexagonal heptagon octagon, octagonal polygon quadrilateral *kite parallelogram, trapezium*

Patterns and symmetry

size bigger, larger, smaller symmetrical line of symmetry, axis of symmetry line symmetry, reflective symmetry fold match mirror line, reflection, reflect pattern, repeating pattern, translation

Position, direction and movement

position over, under, underneath above, below, top, bottom, side on, in, outside, inside, around in front, behind, front, back before, after, beside, next to opposite, apart between, middle, edge, centre corner direction journey, route, map, plan left, right up, down, higher, lower forwards, backwards, sideways, across close, far, near along, through, to, from, towards, away from ascend, descend grid, row, column origin, coordinates

clockwise, anti-clockwise 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 parallel, perpendicular x-axis, y-axis quadrant movement slide, roll whole turn, half turn, quarter turn, rotate, rotation angle, ... is a greater/smaller angle than right angle, acute, obtuse, reflex degree straight line stretch, bend ruler, set square angle measurer, compasses, protractor

Instructions

listen, join in, say, recite think, imagine, remember start from, start with, start at look at, point to, show me

put, place arrange, rearrange change, change over *adjusting, adjust* split, separate

carry on, continue, repeat what comes next?, predict describe the pattern, describe the rule

find, find all, find different investigate

choose, decide collect use, make, build, construct, bisect

tell me, *define*, describe, name, pick out, identify discuss, talk about explain explain your method/answer/reasoning give an example of... show how you... show your working justify make a statement

read, write, record write in figures present, represent interpret trace, copy complete, finish, end

fill in, shade, colour label, plot

tick, cross draw, sketch draw a line between, join (up), ring, arrow

cost, count, tally

calculate, work out, solve, convert

investigate, *interrogate (data)*, question, *prove* answer check

General

same, *identical*, different missing number/s number facts, number pairs, number bonds greatest value, least value

number line, number track number square, hundred square number cards, number grid abacus counters, cubes, blocks, rods die, dice, spinner dominoes pegs, peg board, pin board geo-strips

same way, different way best way, another way in order, in a different order

not all, every, each