## Maths Vocabulary Progression

This document sets out maths vocabulary to be introduced for each year group. The lists are intended as a guide as to what pupils should know, and are not exhaustive. It is expected that key vocabulary is displayed on 'Maths Learning Walls' at appropriate times during the academic year, and is promoted through mathematical talk in lessons.

|  | EYFS | 1 | 2 | 3 | 4 | 5 | 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| General |  | 100 square, Explain, Continue the pattern Can you notice an error? Organise Solve <br> Is there another way? <br> Mental <br> Mentally <br> Investigate | Predict, describe the pattern, describe the rule, find all, find different, calculation, <br> Automatically (ref to recall) <br> Recall X quickly <br> Complex problem <br> One step problem <br> Two step problem <br> Explain your thinking <br> Related fact <br> Use the inverse to check <br> Does it look right? Convince me... <br> What will happen if.. | Calculate <br> Approximate <br> Approximately <br> Prove <br> Systematic <br> Mental method <br> So you can deduce <br> Demonstrate <br> Diagram <br> Accurate <br> Accuracy | Justify Explain your reasoning Operation <br> From this you can deduce/derive commutative | Formula Interpret <br> Determine Notation (e.g. fraction/decimal) | Multi-step problems |

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|  | Can you notice a mistake? <br> Sequence In your head Check |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number and Place Value | Subitise How many? <br> Count, count up, count on, count back. <br> quantity <br> Number, <br> Zero, one, two, three .. to twenty, and beyond, none <br> one more, one less <br> equal to, the same as <br> before, next, after <br> many few, fewer, fewest, least largest, larger, small, smallest odd, even, pair | Count (on/up/to/from/ down) More, less, smallest, greater, lesser ones, tens Ten more/less, Digit, Numeral, Figure ( $s$ ) Value between, half way between, above, below, | Numbers to one hundred and beyond <br> Hundreds, Partition, represent, stands for, recombine, Hundred more/less <br> >Greater <br> than <br> < less than <br> Estimate <br> Two digit number | Numbers to one thousand <br> Round to nearest ten/hundred Round up/down <br> Three digit number | Ten thousand Count in $6 \mathrm{~s}, 7 \mathrm{~s}, 9 \mathrm{~s}$, $25 \mathrm{~s}, 100 \mathrm{~s}$. Thousands, Tenths, hundredths Decimal (places) Decimal point, decimal equivalent, Round to nearest Thousand more/less than Negative integers Count through zero Roman numerals (I to C) Negative numbers Positive numbers Integer Consecutive | Hundred <br> Thousand <br> Prime number Ascending Descending Greater than or equal to (symbol) Less than or equal to (symbol) <br> Roman numerals to 1000 (M) | Numbers to ten million |

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|  | order, different, order size, compare, first, second, third... twelfth, before, after, next, between <br> guess, how many, estimate, too many, too few, enough, not enough |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Addition and Subtraction | Number bonds, Add, more, plus, make, sum, total, altogether Equals, is the same as (including equals sign) How many more to make..? How many left? Take away Subtract | Number line, Inverse Double, near double Half, halve Difference between, <br> Count on, count back Minus <br> Sum (only use in relation to adding numbers together) | Regrouping Can be done in any order | Column addition and subtraction <br> Mental method Formal method Expanded method |  | Efficient written method |  |
| Multiplication and Division | Share Sharing Count in $2 \mathrm{~s}, 5 \mathrm{~s}$, 10s (introduce pattern in numbers), double | Count in twos, fives Count in tens (forwards from/backwards from) How many times? Lots of, groups of Once | Multiple of multiplication Count in 3s remainder | Product Multiples of four, eight, fifty and one hundred Scale up, Mental method Grid method | Factor, Factors pairs Multiplication facts (up to $12 \times 12$ ) Division facts Inverse Derive, Short division and multiplication Regrouping | Composite numbers, prime number, prime factors, square number, cubed number Common factor Long multiplication | Common factors, common multiples Long division |

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|  |  | twice, three times, five times <br> Multiple of, times, multiply, multiply by Repeated addition, array, row, column, halve, share equally <br> Group in pairs, threes etc. <br> Equal groups of, divide, divided by , left, left over |  |  | Distributive law Formal method | Scaling Divisibility divisible |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Fractions | Half | Whole Equal parts, four equal parts <br> One, two halves A quarter, two quarters | Three quarters, one third, a third, equal <br> Equivalence, equivalent | Numerator, denominator Unit fraction, non-unit fraction Compare and order Tenths Sixths, Sevenths, eighths, tenths. <br> Proper fraction Mixed number fraction Simplify | Hundredths Decimal equivalents Value of the digits | Proper fractions, improper <br> fractions, mixed numbers <br> Percentage Half, quarter, fifth, two fifths, four fifths Ratio, proportion Reduced to Cancel <br> Thousandths In every For every Percentage Percent | Degree of accuracy Simplify |

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|  |  |  |  |  |  | Number of parts per hundred |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Measurement | Capacity, full, half full, empty, nearly full, nearly empty Holds, Container, jug <br> Weigh, weighs, balances Heavy, heavier, heaviest, light, lighter, lightest Balance scales <br> Measuring cylinder Measure <br> Time, days of the week: Monday, Tuesday, etc. Seasons: spring, summer, autumn, winter, day, week, weekend, year, Birthday, holiday Morning, afternoon, evening, night, bed time, dinner time, playtime Today, yesterday, tomorrow, before, after, next, last, order. | Months <br> Now, soon, early, <br> late,,quick, quicker, <br> quickest, quickly <br> , fast, faster, <br> fastest, slow, <br> slower, slowest, slowly Old, <br> older, oldest, new, newer, newest, takes longer, <br> Takes less time, hour, o'clock, half past, clock, watch, hands, How long ago? How long will it be to...?, how long will it take to... ? , how often ? Always, never, often, sometimes, usually, once, twice. , close to, about the same as, just over, just under Too | Quarter past/to <br> 5, 10, 20 minutes <br> past <br> m/km, g/kg, ml/l <br> Temperature <br> (degrees), <br> Fortnight <br> Digital <br> Analogue <br> Chronological order <br> Scales, temperature, thermometer Cylinder Beaker <br> Going up in intervals of <br> Estimate point in between <br> Combination (of coins) | Decade, century, <br> Leap year Twelve hour/twenty-four hour clock Roman numerals I to XIII <br> Minutes <br> Noon, midnight Duration <br> Calculate the time taken <br> Latest <br> Earliest <br> Am/pm <br> Centigrade <br> Mm, km <br> Distance <br> apart..between..to..from.. <br> Perimeter <br> Convert (between different units of measurement) <br> Units mm accurate | Convert <br> Area (cm2) covers <br> Units, standard unit, metric unit <br> Mass <br> Volume <br> Millennium <br> Timetable <br> Arrive <br> Depart <br> Measuring cylinder | Square meter Square millimetre Pint <br> Gallon <br> Discount, currency <br> Approximate equivalences Imperial units Yard <br> Foot <br> Feet <br> Inches <br> Ton, pound, ounce, pint <br> Degrees protractor | Volume, Imperial units Cl <br> Cubic cl Cubic m Cubic mm Cubic km Prophet Loss |

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|  |  | seconds |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shape | sort <br> 3.D. shape: Cube, cuboid, pyramid, sphere, cone, cylinder, edge. What shape can you see on this part of the XXX? <br> 2.D. shape: circle, triangle, square, rectangle, star Flat, curved, straight, round, point, Sides, corners. If a child makes reference to a diamond they may be told that whilst it's often called a diamond, when they're older they will learn its proper name is a rhombus. <br> Repeated pattern Pointy, spotty, blobs (informal descriptions of patterns) | Hexagon, Octagon <br> If a child makes reference to a diamond they may be told that whilst it's often called a diamond, when they're older they will learn its proper name is a rhombus. <br> Group, Hollow, solid face, vertex, vertices | Pentagon, square based pyramid, triangular based pyramid Describe it, describe it's properties Surface <br> Compare the objects/shapes Sort the objects/shapes What's different about the shapes <br> If a child makes reference to a diamond they may be told that whilst it's often called a diamond, when they're older they will learn its proper name is a rhombus. <br> Symmetrical, line of symmetry Fold Match Mirror line, reflection Pattern, repeating pattern, surface nets | Heptagon <br> Triangular prism <br> Pentagonal prism <br> Hexagonal prism <br> Octagonal prism <br> Quadrilateral <br> Orientation <br> Irregular shapes <br> Horizontal, vertical, perpendicular and parallel lines right angles (shapes) greater than a right angle less than a right angle | Oblong, isosceles, right angle triangle, scalene, equilateral triangle <br> Parallelogram Rhombus <br> Trapezium polygon <br> Regular and irregular Polygons <br> acute and obtuse angles <br> Construct <br> Reflect, reflection | Regular polygon Irregular polygon octahedron | Kite Dodecahedron <br> Vertically opposite (angles) Meet at a point Circumference, radius, diameter Reflex angle <br> Classify the shapes Dimensions |

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|  | Make, build, draw |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Position and Direction | Under, in, on, next to. In between, behind, In front, front, back, before, after, beside <br> Route location | Position Over, underneath, above, below, top, bottom, <br> side on, outside, inside around, <br> Opposite Apart, middle, edge, centre corner, direction, journey, left, right, up, down, forwards, backwards, sideways, across, Close, far, near, along, through to, from , towards, a way from, movement, Slide, roll, turn, whole turn, half turn, stretch, bend | Rotation, rotating, Clockwise, anticlockwise Straight line, ninety degree turn, right angle, quarter turn ,half turn, threequarter turn order, arrange | Greater/less than ninety degrees Orientation (same orientation, different orientation) <br> Compass points - N, S, W, E. | Coordinates, Translation Quadrant, x-axis, $y$-axis, plot <br> Compass points NE,NW SE, SW. | Reflex angle <br> Dimensions Reflection Translation translate | Four quadrants (for coordinates) <br> Full coordinate grid Rotation Rotate |
| Data/Statistics |  |  | Count, tally, tally chart, sort, vote Graph, bar graph, pictogram, Represent Group, set, list, table, label, title Most | Chart, bar chart, frequency table, Carroll diagram, Venn diagram <br> Axis, axes Diagram Interval, Survey How many more How many fewer | Construct Continuous data Line graph Questionnaire Data x-axis $y$-axis | Data base Line graph Outcome Maximum minimum Timetables database | Pie chart <br> Mean <br> Statistics <br> Distribution Range <br> Average <br> Discrete data |

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$\left.\begin{array}{|c|l|l|l|l|l|l|}\hline & & & \begin{array}{c}\text { popular, most } \\ \text { common, least } \\ \text { popular, least } \\ \text { common, compare }\end{array} & & & \begin{array}{c}\text { make a } \\ \text { comparison }\end{array} \\ \hline \begin{array}{c}\text { Ratio and } \\ \text { Proportion }\end{array} & & & & & \begin{array}{c}\text { Continuous data } \\ \text { Proportion } \\ \text { Likely } \\ \text { Unlikely } \\ \text { Probably }\end{array} \\ \hline \text { Algebra } & & & & \text { Corresponds (lxw) } & & \begin{array}{c}\text { linear number } \\ \text { sequence } \\ \text { Substitute, } \\ \text { Variables, Symbol } \\ \text { Known values, } \\ \text { formulae } \\ \text { equation }\end{array} \\ \text { unknown, satisfy an } \\ \text { equation, }\end{array}\right\}$

