## Vocabulary for Mathematics

At Emmer Green, we use vocabulary development to enhance the children's understand whilst widening their vocabulary knowledge. The following vocabulary is taught as part of the associated topic so that the children can explain their meaning. The year group's vocabulary is displayed at the back of children's maths books and is revisited and built upon with the use of knowledge organisers also.

## Reception

| Number and Place Value | Addition and Subtraction | Multiplication and Division | Fractions | Measurement | Properties of Shape (Geometry) | Position and Direction (Geometry) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| One more <br> One less <br> Greater than <br> Less than <br> Place <br> Order <br> Number <br> Count <br> One,two,three... <br> twenty <br> Number line <br> Answer <br> Equals <br> Odd <br> Even | Add <br> Subtract <br> Addition <br> Subtraction <br> Adding <br> Subtracting <br> Plus <br> Number <br> Number line <br> Single digit <br> Double digit <br> Count on <br> Count back <br> Doubling <br> Halving <br> Sharing <br> Check | Lots of Sets of Groups of Doubling Halving Sharing | Halving | Measure <br> Measurement <br> Length <br> Size <br> Weight <br> Capacity <br> Compare <br> Solve <br> Problems <br> Object <br> Time | Shape <br> Square <br> Rectangle <br> Circle <br> Triangle Sides <br> Straight side <br> Curved side <br> Flat | Position <br> Distance Direction <br> Move <br> Movement <br> Patterns |

## Year 1

| Number and Place Value | Addition and Subtraction | Multiplication and Division | Fractions | Measurement | Properties of Shape (Geometry) | Position and Direction (Geometry) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| One more <br> One less <br> Place <br> Order <br> Count <br> Number line <br> One,two,three... <br> twenty <br> Pictorial <br> Answer <br> Forwards <br> Backwards <br> Numerals <br> Greater/More than <br> Less than <br> Most/Least <br> Odd <br> Even | Add <br> Total <br> Sum of <br> Altogether <br> Plus <br> Subtract <br> Take away <br> Number Bond <br> Number facts <br> One step problem <br> Missing number <br> Problem <br> Equals = <br> Equal to <br> Signs <br> One-digit <br> Two-digit <br> Ones <br> Tens <br> Mental Method <br> Mentally | Multiples <br> Twos <br> Fives <br> Tens <br> Multiply <br> Divide <br> Multiplication <br> Division <br> Lots of <br> Sets of <br> Groups of <br> Multiplied by <br> times <br> One step problem <br> Answer <br> Arrays <br> Count <br> Equals <br> Write | Fraction <br> Half <br> Equal parts <br> One whole <br> Part(s) of a whole <br> Object <br> Shape <br> Quantity <br> Quarter | Length <br> Height <br> Long <br> Short <br> Longer <br> Shorter <br> Tall <br> Double <br> Half <br> Mass <br> Heavy <br> Light <br> Heavier than <br> Lighter than <br> Volume <br> Full <br> Empty <br> More than <br> Less than <br> Half <br> Half full <br> Quarter <br> Quicker <br> Slower <br> Earlier <br> Later <br> Sequence events <br> Chronological order <br> Before <br> After | 2-D Shapes <br> 3-D Shapes <br> Two- Dimensional <br> Three-Dimensional <br> Cuboid <br> Cube <br> Pyramid <br> Cone <br> Cylinder <br> Sphere | Whole turn <br> Half turn <br> Quarter turn <br> Three-quarter turn <br> Left <br> Right <br> Up <br> Down <br> Clockwise <br> On top of <br> In front of <br> Above/below <br> Top/middle/bottom <br> Forward/backwards <br> Inside/outside |

## Year 2

| Number and Place Value | Addition and Subtraction | Multiplication and Division | Fractions | Measurement | Properties of Shape (Geometry) | Position and Direction (Geometry) | Statistics |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ones <br> Tens <br> Hundreds <br> One-digit <br> Two-digit <br> Three-digit <br> Estimate <br> Place Value <br> Solve problems <br> Greater than > <br> Less than < <br> Nearest ten <br> Number facts <br> Number bonds <br> Number line <br> Partition <br> Count in steps <br> Zero <br> Compare <br> Value <br> Order | Add <br> Total <br> Sum of <br> Altogether <br> Plus <br> Increase <br> Number line <br> Column addition <br> Column <br> subtraction <br> Take away <br> Difference <br> Order <br> Inverse <br> Relationship <br> Calculation <br> Solve problems <br> Missing number <br> problems <br> Quantities <br> Measures <br> Formal Written <br> method <br> Mental method <br> Mentally <br> Operation <br> Whole number <br> Estimate | Lots of <br> Sets of <br> Groups of <br> Group <br> Times <br> Multiplication <br> facts <br> Division facts <br> Multiplication <br> tables <br> Odd numbers <br> Even numbers <br> Share <br> Shared between <br> Equally <br> Repeated division <br> Calculate | Simple fractions <br> Equivalent <br> equivalence <br> Count <br> half <br> Quarter <br> Three-quarters | Greater than > Less than < <br> Equals = <br> Intervals <br> Standard units <br> Estimate <br> Direction <br> Temperature <br> Unit <br> Scales <br> Rulers <br> Thermometers <br> Measuring <br> Capacity <br> Vessels <br> Metres <br> Centimetres <br> Kilograms <br> Grams <br> Degrees Celsius <br> Litres <br> Millilitres <br> Symbols <br> Money <br> Pounds (£) <br> Pence (p) <br> Change <br> Half past <br> Five past <br> Quarter past <br> Quarter to | Properties <br> Compare <br> Common <br> Line symmetry <br> Vertical line <br> Edges <br> Faces <br> Vertices <br> Pentagon <br> Hexagon <br> Heptagon <br> Octagon <br> Nonagon <br> Decagon <br> Sides <br> Corners | Rotation <br> Right angle <br> Clockwise <br> Anti-clockwise <br> Order <br> Arrange <br> Sequence | Interpret <br> Construct <br> Pictogram <br> Tally chart <br> Block diagrams <br> Horizontal <br> Vertical <br> $x$-axis <br> $y$-axis <br> key <br> title <br> chart title <br> Simple tables <br> Ask <br> Answer <br> Questions <br> Counting <br> Objects <br> Category <br> Sort <br> Quantity <br> Total <br> Compare <br> Data |

## Year 3

| Number and Place Value | Addition and Subtraction | Multiplication and Division | Fractions | Measurement | Properties of Shape (Geometry) | Statistics |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hundreds <br> Three-digit <br> ten more one hundred more ten less one hundred less Roman numeral Thousand | Addition <br> Total <br> Sum of <br> Plus <br> Altogether <br> Increase <br> Subtract <br> Minus <br> Take away <br> Find the difference <br> How many more <br> Hundreds <br> Estimate <br> Number facts | Lots of <br> Sets of <br> Groups of <br> Multiplied by <br> Product <br> Times <br> Divide <br> Missing number <br> problem <br> Estimate <br> Inverse <br> Formal written <br> method <br> Recall <br> Integer | Tenths <br> Unit fractions <br> Non- unit fractions <br> Numerator <br> Denominator <br> Compare <br> Order <br> Add <br> Subtract <br> Solve problems <br> Equivalent <br> whole | Duration <br> Time taken <br> Nearest minute <br> Record <br> Seconds <br> a.m. <br> p.m. <br> noon <br> midnight <br> kilometre <br> add <br> subtract <br> millimetres <br> perimeter <br> simple 2-D shapes <br> analogue clock <br> roman numerals <br> 12-hour <br> 24-hour <br> Leap year <br> Lengths <br> Mass <br> Volume <br> Capacity | Angle <br> Turn <br> Right angles <br> Quarter of a turn <br> Half-turn <br> Three quarters of a turn <br> Complete turn <br> Horizontal lines <br> Vertical lines <br> Perpendicular lines <br> Parallel lines | Present <br> Presented <br> Graph <br> Statistics <br> Bar charts <br> Tables <br> Solve <br> One- step questions <br> Two- step questions <br> Information |

Year 4

| Number and Place Value | Addition and Subtraction | Multiplication and Division | Fractions | Measurement | Properties of Shape (Geometry) | Position and Direction (Geometry) | Statistics | Algebra |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Thousands <br> Four- digit <br> Negative <br> number <br> One thousand <br> more <br> One thousand <br> less <br> Decimal <br> Decimal place <br> Rounding <br> Place holder <br> Nearest ten <br> Nearest <br> hundred <br> Nearest <br> thousand <br> One place <br> Whole number <br> Integer <br> Tenths <br> Hundredths <br> Roman numerals | Addition <br> Total <br> Sum of <br> Plus <br> Altogether <br> Increase <br> Subtract <br> Minus <br> Take away <br> Find the <br> difference <br> How many more <br> Two-step <br> problems | Lots of <br> Sets of <br> Groups of <br> Multiplied by <br> Product <br> Times <br> Divide <br> Shared between <br> Multiples <br> Derived facts <br> Factors <br> Factor pairs <br> Scaling <br> problems <br> Three-digit | Hundredths <br> Decimal <br> Decimal place <br> One decimal <br> place <br> Two decimal places <br> Round decimals <br> Whole number <br> Common <br> equivalent <br> fractions <br> Decimal <br> equivalents <br> Dividing <br> Ones <br> Tenths <br> Hundredths <br> Simple measure <br> Pounds <br> Pence | Estimate Rectilinear figure Area Rectilinear shapes Convert Analogue Digital | Lines of symmetry <br> Symmetric <br> figure <br> Classify <br> Geometric <br> shapes <br> Quadrilaterals <br> Acute angle <br> Obtuse angle <br> Isosceles <br> Equilateral <br> Scalene <br> Quadrilateral <br> Protractor | Co-ordinates <br> Quadrant <br> Grid <br> Translate <br> Translation <br> Axis <br> X-axis <br> Y-axis <br> Spaces <br> Unit <br> Plot <br> Point <br> Polygon | Time graphs Comparison Problems Scale | Perimeter <br> Algebra <br> Algebraically |

## Year 5

| Number and Place Value | Addition and Subtraction | Multiplication and Division | Fractions | Measurement | Properties of Shape (Geometry) | Position and Direction (Geometry) | Statistics | Algebra |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ten thousands Hundred thousands Millions <br> Context <br> Steps of <br> powers <br> Decimal <br> equivalents <br> Two decimal <br> places <br> Thousandths <br> One million <br> Positive <br> Negative | Five digits Rounding Determine Context Multi-step problems Accuracy | Decimals <br> Four-digit <br> Long <br> multiplication <br> Product <br> Short division <br> Remainders <br> Context <br> Common factors <br> Common <br> multiples <br> Factor pair <br> Prime numbers <br> Prime factors <br> Composite <br> numbers <br> Square number <br> Cube number <br> Notation | Thousandths <br> Multiples <br> Three decimal <br> places <br> Per cent <br> Number of <br> parts per <br> hundred <br> Percentages <br> Decimal <br> fraction <br> Mixed numbers <br> Improper <br> fraction <br> Proper fraction <br> Convert <br> Mathematical <br> statements <br> Multiply <br> Percentage and <br> decimal <br> equivalents | Square centimetres (cm2) <br> Square metres (m2) <br> Irregular shapes <br> Volume (cm3) <br> Cubes <br> Cuboids <br> Square numbers <br> Cube numbers <br> Metric measure <br> Metric units <br> Imperial units <br> Inches <br> Pounds <br> Pints <br> Scaling | Angles <br> Measure <br> Degrees <br> Missing lengths <br> Missing angles <br> Regular <br> polygons <br> Irregular <br> polygons <br> Degrees <br> Estimate <br> compare <br> Reflex angle <br> Point <br> Straight line <br> Multiples | Reflection <br> Straight line <br> Whole turn <br> Regular <br> Irregular <br> Polygons <br> Translation | Timetables <br> Line graph <br> Interpret | Properties <br> Rectangles <br> Deduce <br> Related facts <br> Missing lengths <br> Missing angles |

## Year 6

| Number and Place Value | Addition and Subtraction | Multiplication and Division | Fractions | Measurement | Properties of Shape (Geometry) | Position and Direction (Geometry) | Statistics | Algebra | Ratio and Proportion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intervals across zero <br> Three decimal places Hundredths <br> Thousandths Ten thousandths Ten million | Estimation Mixed operations | Scale factor <br> Long division <br> Whole number <br> remainders <br> Fractions <br> Rounding <br> Mixed <br> operations <br> Common <br> factors <br> Common <br> multiples | Decimal fraction equivalents Simplest form | Decimal notation <br> Cubic centimetres (cm3) <br> Cubic metres (m3) <br> Cubic <br> millimetre <br> (mm3) <br> Cubic <br> kilometre <br> (Km3) <br> Decimal places <br> Formulae <br> Miles <br> Parallelogram <br> Area <br> Perimeter <br> Convert | Radius <br> Diameter <br> Circumference <br> Nets | Four quadrants Translate Reflect | Pie chart Calculate Mean Average | Missing number Problem Pairs <br> Number <br> sentence <br> Variables <br> Combination <br> Possibility <br> Enumerate <br> Equation <br> Formulae <br> Generate <br> Linear number sequence | Ratio <br> Proportion <br> Size <br> Quantity <br> Missing value <br> Integer <br> Percentage <br> Comparison <br> Unequal <br> sharing <br> Grouping <br> Fractions <br> Multiples |

