

Vocabulary per year group:

Each year group should build on and consolidate previous year groups

**NUMBER AND PLACE VALUE**

<p><u>Rec</u>  <b>Numeral</b> – how to write a number using digits  <b>Count</b>  <b>More, fewer</b>  <b>Subitise</b> – recognise quantities without counting  <i>“Say the amount, don’t count!”</i></p>	<p><u>Year 1</u>  <b>Numeral</b> – how to write a number using digits  <b>Digit</b> – 24 is a 2-digit number. The 2 represents the tens, the 4 represents the ones  <b>Compare - equal</b> (is the same as = ), <b>greater, more, less, fewer, most, least</b>  <b>Order</b>  <b>Sort</b>  <b>Count</b> – forwards, backwards,  <b>Represent</b>  <b>Tens, Ones,</b>  <b>One more, One less</b></p>	<p><u>Year 2</u>  <b>Consecutive</b> – following in order 2,3,4 are consecutive numbers  <b>Tens, ones, hundreds</b>  <b>Place value</b>  <b>Numeral / words</b>  <b>Partition</b>  <b>Estimate</b></p>	<p><u>Year 3</u>  <b>Tens, ones, hundreds, thousands</b>    <b>Roman numerals 1 – 12</b>    <b>Whole number</b></p>	<p><u>Year 4</u>  <b>Tens, ones, hundreds, thousands,</b>    <b>Tenths, hundredths</b>  <b>Whole number</b>  <b>Decimal number</b>  <b>Decimal point</b>    <b>Round to the nearest 10</b>  <b>Round to the nearest 100</b>  <b>Round to the nearest 1,000</b>    <b>Negative numbers</b> – negative 3 is written -3    <b>Roman numerals to 100:</b>  <b>I, V, X, L, C</b></p>	<p><u>Year 5</u>  <b>Tens, ones, hundreds, thousands, ten thousands, hundred thousands, million</b>    <b>Tenths, hundredths, Thousandths,</b>    <b>Roman numerals to 1,000:</b> I, V, X, L, C, D, M</p>	<p><u>Year 6</u>  <b>Tens, ones, hundreds, thousands, ten thousands, hundred thousands, millions,</b>    <b>Tenths, hundredths, Thousandths</b>    <b>Decimal places</b></p>
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**ADDITION**

<p><u>Rec</u>  <b>Part</b> – a number of parts added together makes a whole  <b>Whole</b> – a whole is made up of a number of parts  <b>Equal</b> – symbol (=) read ‘equals’ or ‘is the same as’  <b>One more</b>  <b>Numberbond</b> - numbers that add together to make a given total  <b>Double</b> – the same amount again</p>	<p><u>Year 1</u>  <b>Numeral</b> – how to write a number using digits  <b>Digit</b> – 24 is a 2-digit number. The 2 represents the tens, the 4 represents the ones  <b>Sum</b> – the total of one or more additions  <b>Total</b> – the sum found by adding  <b>More</b> – to increase an amount  <b>Numberbond</b> – 2 numbers that add together to make a total, e.g. 6+4 is a numberbond to 10.  <b>Adding together</b> – (<i>aggregation</i>) – combining 2 parts together  <b>Adding more</b> – (<i>augmentation</i>) - starting with an amount and increasing it by another amount</p>	<p><u>Year 2</u>  <b>Commutative</b> – addition is commutative so <math>8 + 2 = 2 + 8</math>  <b>Inverse</b> – addition and subtraction are inverse operations so <math>7 + 3 = 10</math> and <math>10 - 3 = 7</math>  <b>Exchange</b> – when adding the ones in column addition if the total is greater than 10 we exchange 10 ones for a ten OR 10 tens for a hundred.  <b>Bridging 10</b> – adding 2 numbers to make ten and then add on the rest  <b>Column addition</b> – where the digits are placed in columns to add the numbers together</p>	<p><u>Year 3</u>  <b>Column addition</b> – where the digits are placed in columns to add the numbers together  <b>Compensation</b> – a mental strategy where one number is rounded to make the calculation easier and then adjusted e.g. <math>56 + 38</math> is treated as <math>56 + 40</math> and then 2 is subtracted to compensate    <b>Estimate</b>  <b>Increase</b></p>	<p><u>Year 4</u>            Consolidation of terms learnt in previous year groups</p>	<p><u>Year 5</u>  <b>Integer</b> – any of the positive or negative whole numbers  <b>Positive</b> – any number larger than zero  <b>Negative</b> – any number smaller than zero</p>	<p><u>Year 6</u>            Consolidation of terms learnt in all previous year groups</p>
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## MATHEMATICAL VOCABULARY ACROSS THE SCHOOL

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### SUBTRACTION

<p><u>Rec</u>  <b>Whole</b> – a whole subtract any number of parts equals a part  <b>Take away</b> – to remove a number of items from a group</p>	<p><u>Year 1</u>  <b>Subtract</b> – to carry out the process of subtraction  <b>Minus</b> – a name for the symbol '-'  <b>Less</b> – to decrease an amount  <b>Counting back</b>  <b>Difference</b></p>	<p><u>Year 2</u>  <b>Inverse</b> – addition and subtraction are inverse operations so <math>10 - 4 = 6</math> and <math>6 + 4 = 10</math> (it is NOT commutative)  <b>Exchange</b> – when the number to subtract is larger than the number we are subtracting from we exchange a ten into ten ones.  <b>Difference</b> – we subtract to find the difference</p>	<p><u>Year 3/4</u>  <b>Column subtraction</b> – where the digits are placed in columns to subtract one number from another  <b>Compensation</b> – a mental strategy where one number is rounded to make the calculation easier and then adjusted            e.g. <math>56 - 38</math> is treated as <math>56 - 40</math> and then 2 is added to compensate  <b>Efficient subtraction (Y4)</b> – instead of <math>4,000 - 2,124</math> do <math>3,999 - 2,123</math>  <b>Decrease</b></p>	<p><u>Year 5 &amp; 6</u>            Consolidation of terms learnt in previous year groups</p>
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## MULTIPLICATION

<u>Rec</u>	<u>Year 1</u>	<u>Year 2</u>	<u>Year 3</u>	<u>Year 4</u>	<u>Year 5 &amp; 6</u>
	<p><b>Groups of, sets of, lots of</b> <b>Equal groups</b> <b>Counting patterns (2s, 5s, 10s)</b> <b>Doubles</b></p>	<p><b>Multiply</b> – to carry out the process of multiplication <b>Multiple</b> – a number in a times table e.g. the multiples of 2 are 2,4,6 etc. <b>Groups of, lots of, sets of, times, multiplied by</b> – different ways to say the symbol “x” <b>Array</b> – an ordered collection of objects in rows and columns <b>Commutative</b> – knowing 3 x 5 will get the same answer as 5 x 3 <b>Even</b> – numbers in the 2 times table <b>Odd</b> – numbers not in the 2 times tables <b>Pairs</b></p>	<p><b>Factor</b> – factor x factor = product <b>Product</b> – the result of multiplying 2 numbers <b>Multiply</b> <b>Scaling</b> – to enlarge a number, quantity or measurement by an amount <b>Short multiplication</b> – a method used to multiply 2 or more digits by a 1 digit number, using columns</p>	<p><b>Factor</b> – factor x factor = product e.g. 1,2,3,4,6,12 are factors of 12 <b>Factor pairs</b> - A <u>factor pair</u> is 2 factors multiplied together to make a given product <b>Short multiplication</b> – a method used to multiply 2 or more digits by a 1 digit number, using columns</p>	<p><b>Prime number</b> – A whole number greater than 1 that only has two factors, itself and 1. <b>Composite</b> – a non prime number. <b>Common factor</b> – a number which is a factor of 2 or more other numbers e.g. 3 is a common factor of 9 and 30, 7 is a common factor of 14 and 21. <b>Prime factor</b> – the factors of a number that are prime e.g. 2 and 3 are the prime factors of 12 <b>Common multiple</b> – the smallest positive number that is a <b>multiple</b> of two or more numbers e.g. 24 is a common multiple of 4,6,8 etc. <b>Square numbers</b> <b>Cube numbers</b></p>

## MATHEMATICAL VOCABULARY ACROSS THE SCHOOL

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### DIVISION

#### Rec & Year 1

**Equal** – the same

**Sharing** – share equally a number of objects into a specified number of groups.

**Divide** – to carry out the process of division

**Make equal groups** – grouping

**Make equal groups** - sharing

#### Year 2

**Sharing** – sharing equally between

**Grouping** - put into groups of

**Divided by** – sharing or grouping

**Inverse** – multiplication and division are inverse operations so  $10 \div 2 = 5$  and  $5 \times 2 = 10$

(it is NOT commutative)

**Even** – numbers that can be divided by 2

**Odd** – numbers that will have a remainder of 1 when divided by 2

#### Year 3, 4, 5 and 6

**Dividend** – the number that is being divided into equal parts

**Divisor** – for sharing: the number that it is being shared between. For grouping: the number in each group  
In  $15 \div 3$ , 15 is the dividend and 3 is the divisor

**Quotient** – the result of a division

$\text{dividend} \div \text{divisor} = \text{quotient}$

**Divisible** – A whole number is divisible by another if there is no remainder after division

**Remainder** – the amount remaining after division

e.g.  $29 \div 7 = 4 \text{ r}1$

**Scaling** – to reduce a number, quantity or measurement by an amount

**Short division** – a method used to divide 2 or more digits by a 1 digit number

#### Y6 – Long division

Order of operations – brackets, indices  $^2$   $^3$   $\sqrt{\quad}$ , multiplication and division, addition and subtraction

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**FRACTIONS**

<p><u>Rec</u></p>	<p><u>Year 1</u>  <b>Equal parts</b>  <b>Whole</b>  <b>Half</b>  <b>Quarter</b></p>	<p><u>Year 2</u>  <b>Whole</b>  <b>Half</b> <math>\frac{1}{2}</math>  <b>Quarters</b> <math>\frac{1}{4}</math> <math>\frac{2}{4}</math> <math>\frac{3}{4}</math>  <b>Third</b> <math>\frac{1}{3}</math> <math>\frac{2}{3}</math>  <b>Unit fraction</b> – the numerator is 1  <b>Non-unit fraction</b> – the numerator is more than 1  <b>Equivalent fraction</b>  <b>Numerator</b> - the top number in a fraction  <b>Denominator</b> - the bottom number in a fraction</p>	<p><u>Year 3</u>  <b>Whole, part</b>  <b>Halves, quarters, thirds</b>  <b>Tenths</b> – as fractions and decimals  <b>Unit fraction</b>  <b>Non-unit fraction</b></p>	<p><u>Year 4</u>  <b>Tenths</b>  <b>Hundredths</b>  <b>Proper fractions</b> – where the numerator is less than the denominator  <b>Improper fraction</b> - where the numerator is more than the denominator  <b>Mixed number</b> – a whole number and a fraction  <b>Decimal equivalent</b></p>	<p><u>Year 5</u>  <b>Improper fraction</b>  <b>Mixed number</b>    <b>Thousandths</b>    <b>Percentage</b> – out of 100  <b>Equivalent fractions, decimals and percentages</b></p>	<p><u>Year 6</u>  <b>Equivalent fractions</b>  <b>Simplify</b>  <b>Highest common factor (HCF)</b>  <b>Lowest common multiple (LCM)</b>    <b>Percentage of an amount</b></p>
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**MEASURES**

<p><u>Rec</u>  <b>Before, after</b>  <b>First, next</b>  <b>Long, longer</b>  <b>Short, shorter</b>  <b>Tall, taller</b>  <b>Heavy, light</b>  <b>Full, nearly full,</b>  <b>Empty, nearly empty</b></p>	<p><u>Year 1</u>  <b>Length</b>            Height            cm (centimetres)  <b>Weight</b>            Mass            Heavy/Heavier / heaviest            Light / Lighter / lightest            Equal / Same  <b>Capacity</b> (the volume of a material held in a container)  <b>Volume</b> (the space taken up inside a container)  <b>Container</b>  <b>Time</b> – before, after, morning, afternoon, evening  <b>Today, yesterday, tomorrow</b>  <b>Days of the week</b>  <b>Months of the year</b>  <b>o'clock</b> – minute hand pointing to the 12  <b>Minute hand</b> – longer hand  <b>Hour hand</b> – shorter hand  <b>Half past</b> – minute hand pointing to the 6</p>	<p><u>Year 2</u>  <b>Length</b> – cm, m,  <b>Mass</b> – g, kg,  <b>Volume</b> – ml, litres  <b>Temperature</b> - °C    <b>Time:</b>  <b>Analogue clock</b>  <b>Minute hand</b>  <b>Hour hand</b>  <b>O'clock, half past</b>  <b>Quarter past, quarter to,</b>  <b>5 minutes past etc</b>  <b>Seconds, minutes, hours</b></p>	<p><u>Year 3</u>  <b>Length</b> – mm  <b>Perimeter</b> – distance around the edge of a closed shape  <b>Intervals</b>    <b>Time</b> – to the minute  <b>AM / PM</b>  <b>24 hour clock</b>  <b>Duration</b>    <b>Midnight</b>  <b>Midday - noon</b></p>	<p><u>Year 4</u>  <b>Convert</b>  <b>Equivalent</b>  <b>Length</b> – km  <b>Rectilinear shape</b> – a rectilinear shape can be divided into rectangles in order to find the area  <b>Area</b> – the amount of space within a closed 2D shape  <b>Square cm - cm<sup>2</sup>,</b>    <b>Time</b> – to the minute  <b>AM / PM</b>  <b>24 hour clock</b>  <b>Duration</b>  <b>Analogue</b>  <b>Digital</b></p>	<p><u>Year 5</u>  <b>Metric measures</b>  <b>Imperial measures</b>  <b>Timetables</b>    <b>Area of a rectangles</b>  <b>Area of compound shapes</b>    <b>Square cm - cm<sup>2</sup></b>  <b>Square metres - m<sup>2</sup></b></p>	<p><u>Year 6</u>  <b>Area of a triangle</b>    <b>Area of a parallelogram</b>    <b>Volume of a cube/cuboid</b>    <b>Cubic cm - cm<sup>3</sup></b>    <b>Cubic metres - m<sup>3</sup></b></p>
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**GEOMETRY**

<p><u>Rec</u>  <b>3D shapes – cube, cuboid, cylinder, cone, pyramid, sphere</b>  <b>2D shapes – square, rectangle, circle, triangle</b></p>	<p><u>Year 1</u>  <b>3D shapes – cube, cuboid, cylinder, cone, pyramid, sphere,</b>                  Faces                  Curved surface                  Roll                  Stack  <b>2D shapes – square, rectangle, circle, triangle</b>                  Sides – curved, straight  <b>Pattern</b>  <b>Next</b>  <b>Repeat</b></p>	<p><u>Year 2</u>  <b>2D shapes – as Y1 plus pentagon, hexagon, octagon,</b>                  Sides – curved, straight  <b>Regular, irregular</b>  <b>Vertex/Vertices – where 2 lines meet at a point</b>  <b>Lines of symmetry</b>  <b>Symmetrical</b>  <b>3D shapes – as Y1 plus triangular prism, tetrahedron, square based pyramid,</b>                  Flat faces                  Curved surfaces  <b>Edge – where 2 faces or a face and a curved surface meet</b>  <b>Vertex/vertices – where 2 or more edges meet</b>  <b>Apex – point at the top of a cone or pyramid</b>  <b>Turn</b>                  Clockwise                  Anti-clockwise                  Direction                  Position                  Right angle                  Orientation</p>	<p><u>Year 3</u>  <b>Right angle</b>  <b>Acute angle – less than a right angle</b>  <b>Obtuse angle – more than a right angle</b>  <b>Horizontal</b>  <b>Vertical</b>  <b>Parallel</b>  <b>Perpendicular</b></p> <p><b>Prism – same shape all the way through</b></p> <p><b>Pyramid – tapers to a point</b></p> <p><b>Quadrilateral</b>  <b>Polygon</b></p> <p><b>Carroll diagram</b>  <b>Venn diagram</b></p>	<p><u>Year 4</u>  <b>Right angles</b> are 90 degrees (°)  <b>Acute angles</b> are less than 90°  <b>Obtuse angles</b> are more than 90° but less than 180°  <b>Triangles:</b>                  Right angled, Equilateral, Isosceles, Scalene  <b>Quadrilaterals:</b> squares, rectangles, parallelogram, trapezium, rhombus, kite,  <b>Parallel lines, perpendicular lines, Symmetrical figure</b></p>	<p><u>Year 5</u>  <b>Right angles</b>  <b>Acute angles</b>  <b>Obtuse angles</b>  <b>Reflex angles</b></p> <p><b>Protractor</b>  <b>Straight line</b>  <b>Around a point</b></p> <p><b>First Quadrant</b>  <b>Translation</b>  <b>Co-ordinates</b>  <b>Reflection</b></p>	<p><u>Year 6</u>                  Circle:  <b>Centre – the middle point, radius – the distance from the centre to the edge of a circle, diameter - the distance from one edge to another going through the centre, circumference – the distance around a circle (its perimeter)</b></p> <p><b>Four quadrants</b>  <b>Co-ordinates – positive and negative</b>  <b>Translation</b>  <b>Transformation</b></p> <p><b>Vertically opposite angles</b>  <b>Angles in triangles</b>  <b>Angles in quadrilaterals</b></p> <p><b>Nets of 3D shapes</b></p>
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**STATISTICS**

<p><u>Rec</u></p>	<p><u>Year 1</u></p>	<p><u>Year 2</u>            Pictogram            Tally chart            Block diagram            Total, altogether            More/less/fewer/            difference</p>	<p><u>Year 3</u>            Key            Symbol            Data            Horizontal / vertical            x-axis, y-axis            Bar chart            Scale            Table</p>	<p><u>Year 4</u>            Line graph            Continuous data</p>	<p><u>Year 5</u>            Consolidation of Y2 to Y4</p>	<p><u>Year 6</u>            Pie chart            Segment            Mean            Average</p>
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