## St. Katharine's Primary School Mathematics Progression Pathway Year 4

|  | Number |  |  |  | Measurement | Geometry |  | Statistics |
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| Year | Number and Place Value | Addition and Subtraction | Multiplication and Division | Fractions and decimals | Measurement | Properties of Shape | Position and Direction | Statistics |
| 4 | Count in multiples of $6,7,9,25$ and 1000. <br> Find 1000 more or less than a given number. <br> Count backwards through zero to include negative numbers. <br> Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones). <br> Order and compare numbers beyond 1000. <br> Identify, represent and estimate numbers using different representations. <br> Round any number to the nearest 10, 100 or 1000. <br> Solve number and practical problems that involve all of the | Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. <br> Estimate and use inverse operations to check answers to a calculation. <br> Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why. <br> (White Rose Autumn Block 2) | Recall multiplication and division facts for multiplication tables up to $12 \times 12$. <br> Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1 ; dividing by 1; multiplying together three numbers. <br> Recognise and use factor pairs and commutativity in mental calculations. <br> Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. <br> Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence | Recognise and show, using diagrams, families of common equivalent fractions. <br> Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. <br> Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. <br> Add and subtract fractions with the same denominator. <br> Recognise and write decimal equivalents of any number of tenths or hundredths. <br> Recognise and write decimal equivalents to one quarter, one half and three quarters. <br> Find the effect of dividing a one- or two-digit number by 10 and 100 , identifying the value of the digits in the answer as ones, tenths and hundredths. | Convert between different units of measure [for example, kilometre to metre; hour to minute]. <br> Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. <br> Find the area of rectilinear shapes by counting squares. <br> Estimate, compare and calculate different measures, including money in pounds and pence. <br> (White Rose Autumn Block 3 for area, Spring Block 2 for Length and Perimeter, Summer Block 2 for money, Summer Block 2 for Time) | Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. <br> Identify acute and obtuse angles and compare and order angles up to two right angles by size. Identify lines of symmetry in 2-D shapes presented in different orientations. <br> Complete a simple symmetric figure with respect to a specific line of symmetry. <br> (White Rose Summer Block 4) | Describe positions on a 2-D grid as coordinates in the first quadrant. <br> Describe movements between positions as translations of a given unit to the left/right and up/down. <br> Plot specified points and draw sides to complete a given polygon. <br> (White Rose Summer Block 7) | Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. <br> Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. <br> (White Rose Summer Block 6) |

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