St Austin's RC Primary School
Mathematics Progression Statement KS1

|  | Year 1 | Year 2 |
| :---: | :---: | :---: |
| Number and place value |  |  |
| counting (in multiples) | Count to and across 100, forward and backwards, beginning with 0 or 1, or from any given number | Count in steps of 2, 3, and 5 from 0 , and in tens from any number, forward or backward |
|  | Count in multiples of twos, fives and tens |  |
| read, write, order and compare numbers | Count, read and write numbers to 100 in numerals | Read and write numbers to at least 100 in numerals and in words |
|  | Given a number, identify one more and one less | Compare and order numbers from 0 up to 100; use <, > and = signs |
|  | Read and write numbers from 1 to 20 in numerals and words |  |
| place value; roman numerals |  | Recognise the place value of each digit in a two-digit number (tens, ones) |
| identify, represent and estimate; rounding | Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least | Identify, represent and estimate numbers using different representations, including the number line |
| number problems |  | Use place value and number facts to solve problems |
| Addition, subtraction, multiplication and division (calculations) |  |  |
| add / subtract mentally | Represent and use number bonds and related subtraction facts within 20 | Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 |
|  |  | Add and subtract numbers mentally, including: <br> - a two-digit number and ones <br> - a two-digit number and tens <br> - two two-digit numbers <br> - adding three one-digit numbers |
| add / subtract using written methods | Add and subtract one-digit and two-digit numbers to 20, including zero | Add and subtract numbers using concrete objects and pictorial representations, including: <br> - a two-digit number and ones <br> - a two-digit number and tens <br> - two two-digit numbers <br> - adding three one-digit numbers |
|  | Read, write and interpret mathematical statements involving addition (+), |  |


|  | subtraction (-) and equals (=) signs |  |
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| estimate, use inverses and check |  | recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems |
| add / subtract to solve problems | Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=\square$ - 9 | Solve problems with addition and subtraction: <br> - using concrete objects and pictorial representations, including those involving numbers, quantities and measures <br> - applying their increasing knowledge of mental and written methods |
| multiply / divide mentally |  | Recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers |
| multiply / divide using written methods |  | Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals (=) signs |
| solve problems (commutative, associative, distributive and all four operations) | Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher | Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts |
| order of operations |  | Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot |
|  |  | Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot |
| Fractions, decimals and percentages |  |  |
| recognise, find, write, name and count fractions | Recognise, find and name a half as one of two equal parts of a object, shape or quantity | Recognise, find, name and write fractions $\frac{1}{3}, \frac{1}{4}, \frac{2}{4}$, and $\frac{3}{4}$ of a length, shape, set of objects or quantity |
|  | Recognise, find and name a quarter as one of four equal parts of a object, shape or quantity | Write simple fractions [eg: $\frac{1}{2}$ of 6 = 3] |
| equivalent fractions |  | Recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ |

## Measurement

| compare, describe and order measures | Compare, describe and solve practical problems for: <br> - lengths and heights [eg: long/short, longer/ shorter, tall/short, double/half] <br> - mass/weight [eg: heavy/light, heavier than, lighter than] <br> - capacity and volume [eg: full/empty, more than, less than, half, half full, quarter] <br> - time [eg: quicker, slower, earlier, later] | Compare and order lengths, mass, volume/capacity and record the results using >, < and = |
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| estimate, measure and read scales | Measure and begin to record the following: <br> - lengths and heights <br> - mass/weight <br> - capacity and volume <br> - time (hours, minutes, seconds) | Choose and use appropriate standard units to estimate and measure length/height in any direction ( $\mathrm{m} / \mathrm{cm}$ ); mass ( $\mathrm{kg} / \mathrm{g}$ ); temperature $\left({ }^{\circ} \mathrm{C}\right)$; capacity (litres/ ml ) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels |
| Money | Recognise and know the value of different denominations of coins and notes | Recognise and use symbols for pounds ( $£$ ) and pence (p); combine amounts to make a particular value |
|  |  | Find different combinations of coins that equal the same amounts of money |
| telling time, ordering time, duration and units of time | Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times | Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times |
|  | Sequence events in chronological order using language [eg: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening] | Compare and sequence intervals of time |
|  | Recognise and use language relating to dates, including days of the week, weeks, months and years | Know the number of minutes in an hour and the number of hours in a day |
| solve problems (a, money; b, length; c, mass / weight; d, capacity / volume) |  | Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change |
| Geometry - properties of shapes |  |  |
| Recognise and name common shapes | Recognise and name common 2-D shapes [eg: rectangles (including squares), circles and triangles] | Compare and sort common 2-D shapes and everyday objects |
|  | Recognise and name common 3-D shapes [eg: cuboids (including cubes), pyramids and spheres] | Compare and sort common 3-D shapes and everyday objects |
| describe properties and classify shapes |  | Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line |
|  |  | Identify and describe the properties of 3-D shapes including the number of edges, vertices and faces |


| draw and make shapes and relate 2-D to 3-D shapes (including nets) |  | Identify 2-D shapes on the surface of 3-D shapes, [eg: a circle on a cylinder and a triangle on a pyramid] |
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| Geometry - position and direction |  |  |
| patterns |  | Order and arrange combinations of mathematical objects in patterns and sequences |
| describe position, direction and movement | Describe position, directions and movement, including half, quarter and three-quarter turns | Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clock-wise and anti-clockwise) |
| Statistics |  |  |
| interpret and represent data |  | Interpret and construct simple pictograms, tally charts, block diagrams and simple tables |
| solve problems involving data |  | Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity |
|  |  | Ask and answer questions about totalling and comparing categorical data |

