

Mathematics

Mathematical Curricular Goal Progression			
	Autumn	Spring	Summer
Reception	<ol style="list-style-type: none"> 1. Count to 5; recognise numerals to 5 / Compare groups within 5. 2. Recognise, name and talk about the properties of 2D and 3D shapes. 3. Say what is one more or one less than a number to 5 / Understand the composition of numbers to 5. 4. Explore the properties of shape. 	<ol style="list-style-type: none"> 1. Count to 10; recognise numbers to 10 / Compare numbers within 10. 2. Add numbers within 10 by combining 2 groups to find the whole. 3. Explore measure by comparing quantities / sizes. 4. Understand the composition of numbers to 10. 5. Subtract numbers within 10 by taking away. 6. Make simple patterns and explore increasingly complex patterns. 	<ol style="list-style-type: none"> 1. Add numbers within 10 by counting on and counting back / Begin to solve simple problems by adding. 2. Count to and from 20; recognise numerals to 20 / Begin to solve simple problems by counting. 3. Explore numerical patterns. 4. Explore the properties of shape. 5. Explore measure by comparing quantities / sizes in a range of different contexts.
Y1	<ol style="list-style-type: none"> 1. Use numbers within 10 to represent quantities. 2. Add numbers within 10 using the correct equation notation. 3. Subtract numbers within 10 using the correct equation notation. 4. Name and manipulate 2D and 3D shapes to create patterns. 5. Count from any number with 20, forwards or backwards. 	<ol style="list-style-type: none"> 1. Solve addition and subtraction problems within 20, identifying the correct operation. 2. Count to 50, saying what is 1 more or 1 less than any number. 3. Measure small objects in centimetres. 4. Solve simple weight and volume problems using comparison. 	<ol style="list-style-type: none"> 1. Solve simple multiplication problems by counting. 2. Solve simple division problems by making equal groups or sharing equally. 3. Use mathematical language when talking about position and direction. 4. Show half of an object, shape or small quantity. 5. Count, order, write and compare numbers to 100. 6. Solve simple time problems using o'clock and half past. 7. Recognise and say the value of notes and coins.
Y2	<ol style="list-style-type: none"> 1. Explain the place value of digits in 2-digit numbers. 2. Add and subtract numbers within 100. 3. Use formal written methods to solve addition and subtraction problems. 4. Solve simple addition and subtraction problems involving money, using the correct notation. 5. Use knowledge of the 2, 5 and 10 times tables to solve simple multiplication problems. 	<ol style="list-style-type: none"> 1. Use knowledge of the 2, 5 and 10 times tables to solve simple division problems. 2. Use simple graphs and charts to compare data. 3. Measure length/height in centimetres and metres and use measurements to solve comparison problems. 4. Describe the properties of shapes, using the correct mathematical vocabulary. 5. Find halves and quarters of shapes and quantities. 	<ol style="list-style-type: none"> 1. Describe position, direction and movement. 2. Select the correct operation and an efficient method to solve addition and subtraction problems. 3. Tell the time using 5 minute intervals. 4. Solve measurement problems using the correct standard measures.
Y3	<ol style="list-style-type: none"> 1. Solve number problems using knowledge of place value within 4 digit numbers. 2. Solve addition and subtraction problems with 3 digit numbers, calculating mentally. 3. Use formal written methods to solve addition and subtraction problems with 3 digit numbers. 4. Use knowledge of times tables to calculate with multiplication and division. 	<ol style="list-style-type: none"> 1. Select the correct operation to solve multiplication and division problems. 2. Solve two step addition and subtraction problems using money. 3. Interpret graphs to solve two step problems. 4. Calculate the perimeter of 2D shapes. 5. Read and compare unit fractions and fractions with the same denominator. 	<ol style="list-style-type: none"> 1. Explain equivalence in the context of fractions. 2. Tell the time using analogue clocks. 3. Use mathematical language to describe shape and turn. 4. Solve mass problems by measuring and comparing. 5. Solve volume/capacity problems involving addition and subtraction.
Y4	<ol style="list-style-type: none"> 1. Solve number and practical problems that involve numbers to 10 000 000. 2. Solve addition and subtraction two-step problems in contexts with up to 4 digit numbers. 3. Measure and calculate the perimeter of a rectilinear shapes. 4. Recall multiplication and division facts for multiplication tables up to 12×12 	<ol style="list-style-type: none"> 1. Use efficient methods to multiply and divide. 2. Use squares to calculate the area of rectilinear shapes. 3. Recognise and use the decimal and fraction equivalents of tenths and hundredths. 	<ol style="list-style-type: none"> 1. Understand the value of decimals up to 2dp and the fraction equivalent. 2. Solve money and measure problems up to 2dp. 3. Convert between different units of time. 4. Solve comparison problems using information presented in bar charts, pictograms, tables and other graphs 5. Solve complex shape problems. 6. Describe and plot coordinates on a single quadrant grid.

<p>Y5</p>	<ol style="list-style-type: none"> 1. Solve number and practical problems with numbers to 1 000 000. 2. Complete multi-step addition and subtraction problems using formal written methods. 3. Interpret data and solve problems using information presented on graphs and tables. 4. Identify and recall Factors, Prime numbers, square and cubed numbers. 5. Calculate and compare the area and perimeter of rectilinear and irregular shapes. 	<ol style="list-style-type: none"> 1. Use formal written methods of multiplication and division to solve a range of problems. 2. Complete addition, subtraction and multiplication sums using a range of mixed numbers and improper fractions. 3. Solve problems which require knowledge of decimals and percentages. 	<ol style="list-style-type: none"> 1. Reason and solve problems that include decimals up to 3DP. 2. Identify and draw a range of different angles. 3. Describe and identify the properties of regular and irregular 2D and 3D shapes. 4. Solve problems which involve converting a range of units of measurements. 5. Estimate volume and capacity.
<p>Y6</p>	<ol style="list-style-type: none"> 1. Solve number and practical problems with numbers up to 10 000 000. 2. Calculate and solve multi-step problems using formal written methods of all four operations. 3. Calculate mentally using their knowledge of orders of calculation and properties of numbers. 4. Use knowledge of equivalent fractions to add and subtract fractions with different denominators and mixed numbers. 5. Use knowledge of the order of operations to multiply and divide proper fractions and mixed numbers. 6. Draw, reflect and translate shapes in a four-quadrant grid. 	<ol style="list-style-type: none"> 1. Solve decimal problems using written methods which require answers to be rounded to specified degrees of accuracy. 2. Solve problems involve the calculating of percentages and converting between F,D,P. 3. Find the possibilities of combinations of two variables and express missing number problems algebraically. 4. Solve problems involving the calculation and conversion of units of measure using decimal notation where appropriate. 5. Calculate and compare the area, perimeter and volume of a range of shapes. 6. Solve problems using ratio and proportion. 	<ol style="list-style-type: none"> 1. Illustrate, classify and describe a range of properties of different 2D and 3D shapes. 2. Use knowledge of all areas of the maths curriculum and apply it to a range of different reasoning and problem solving. 3. Interpret a range of different statistics and use this to construct pie charts and line graphs and solve problems.