Year 2 & 3 Maths Curriculum Objectives
Long Term Plan 2023-2024

Topic	Objectives	
* = TAF Statement	Year 2	Year 3
Number and Place Value	• Read and write numbers to at least 100 in numerals and in words • Count in steps of 2, 3, and 5 and 10 forwards and backward from a given number and use this to solve problems • Recognise the place value of each digit in a two-digit number (10s, 1s) • Partition a two-digit number into different combinations of 10s and 1s. • Identify, represent and estimate numbers using different representations, including the number line • Compare and order numbers from 0 up to 100; use <, > and = signs • Use place value and number facts to solve problems	• Read and write numbers up to 1000 in numerals and in words • Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number • Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) • Identify, represent and estimate numbers using different representations • Compare and order numbers up to 1000 • Solve number problems and practical problems involving these ideas.
Addition and Subtraction	• Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 • Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: - a two-digit number and 1s - a two-digit number and 10s - 2 two-digit numbers - adding 3 one-digit numbers • Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems	• Add and subtract numbers mentally, including: - a three-digit number and ones - a three-digit number and tens - a three-digit number and hundreds • Add and subtract numbers with up to three digits, using formal written methods of column addition and subtraction • Estimate the answer to a calculation and use inverse operations to check answers • Solve problems, including missing number facts, place value, and more complex addition and subtraction.

	• Show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot • Solve problems with addition and subtraction (1 Step and 2 Step): - using concrete objects and pictorial representations, including those involving numbers, quantities and measures - applying their increasing knowledge of mental and written methods. • use reasoning about numbers and relationships to solve more complex problems and explain their thinking	
Multiplication and Division	• Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers, and use this to solve simple problems. • Make deductions outside known multiplication facts • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs • Show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot • Solve problems involving multiplication and division (1 Step and 2 Step), using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts • use reasoning about numbers and relationships to solve more complex problems and explain their thinking	• Recall and use multiplication and division facts for the 3, 4 and 8 multiplication table • Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods • Solve problems, including missing number problems,involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects

Fractions	• Recognise, find, name and write fractions (one half, one third, one quarter, two quarters, three quarters) and of a length, shape, set of objects or quantity and know that all parts must be equal parts of a whole. • Write simple fractions, for example 1/2 of 6 = 3 and recognise the equivalence of two quarters and one half.	• Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 • Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators • Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators • Recognise and show, using diagrams, equivalent fractions with small denominators • Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7] • Compare and order unit fractions, and fractions with the same denominators • Solve problems that involve all of the above.
Measurement	• Read scales in divisions of 2, 5 and 10 • Read scales where not all numbers on the scale are given and estimate points in between • Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels • Compare and order lengths, mass, volume/capacity and record the results using >, < and = • Know the value of different coins • Recognise and use symbols for pounds (£) and pence (p)	• Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml) • Add and subtract amounts of money to give change, using both £ and p in practical contexts • Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks • Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight • Know the number of seconds in a minute and the number of days in each month, year and leap year

	• Combine amounts to make a particular value, find different combinations of coins that equal the same amounts of money • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change • Compare and sequence intervals of time • 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 • Know the number of minutes in an hour and the number of hours in a day	• Compare durations of events [for example to calculate the time taken by particular events or tasks].
Shape	• 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 • Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid] • Compare and sort common 2-D and 3-D shapes and everyday objects	• Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them • Measure the perimeter of simple 2-D shapes • Recognise angles as a property of shape or a description of a turn • Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle • Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.
Position and Direction	• Order and arrange combinations of mathematical objects in patterns and sequences • 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 (clockwise and anti-clockwise)	• N/A

Statistics	• Read scales in divisions of 2, 5 and 10 • Read scales where not all numbers on the scale are given and estimate points in between • Interpret and construct simple pictograms, tally charts, block diagrams and tables • 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	• Interpret and present data using bar charts, pictograms and tables • Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.