St Mary's C of E (VA) Primary School

Mathematics Scheme of Work – YEAR 2

Mathematics Strand	NC Requirement	Resources/Time	Success Criteria (Outcome)
NUMBER **Number and place value**	**By the end of Year 2:** • count in steps of 2, 3, and 5 from 0, and in tens from any number, forward or backward • recognise the place value of each digit in a two-digit number (tens, ones) • identify, represent and estimate numbers using different representations, including the number line • compare and order numbers from 0 up to 100; use <, > and = signs • read and write numbers to at least 100 in numerals and in words • use place value and number facts to solve problems.	• Number cards, • Number lines 0-100, • Hundred squares. • Numicon • Place value cards • Multilink • Base 10	• Children fluently read, count, order and write in numerals and words to 100. • To secure counting in intervals of 2, 3 and 5 to 100. • To secure understanding of place value of 2 and 3 digit numbers.
Addition and subtraction	• solve problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures • applying their increasing knowledge of mental and written methods • 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 ones* *- a two-digit number and tens* *- two two-digit numbers* *- adding three one-digit numbers*	• Number cards, • Number lines 0-100, • Hundred squares. • Numicon • Counting bears (or similar) • Peg boards • Multilink • Base 10	• To fluently use number bonds to 20 for addition and subtraction including within one-step word problems. • To use various concrete objects and pictorial representations to help solve addition and subtraction problems including measures. • Add and subtract up to 3 digit numbers, including inverse operations. • Secure understanding of correct order of

	• show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot • recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.		calculations.
Multiplication and division	• recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers • 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 two numbers can be done in any order (commutative) and division of one number by another cannot • solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.	• Number cards, • Number lines 0-100, • Hundred squares. • Numicon • Counting bears (or similar) • Peg Boards • Multiplication Squares • Multilink • Base 10	• Children use various methods to solve multiplication and division problems including one-step problems. • To secure 2, 3, 5 and 10 times tables. • Multiply and divide using correct operations. • Secure understanding of correct order of calculations.
Fractions	• recognise, find, name and write fractions 1/3, 1/4, 2/4 and ¾ of a length, shape, set of objects or quantity • write simple fractions e.g. 1/2 of 6 = 3 and recognise the equivalence of 2/4 and 1/2.	• Fraction fans • Counting bears (or similar) • Peg boards • Numicon • Multilink • Base 10	• To confidently identify thirds, three quarters and equivalent fractions.
MEASUREMENT	• 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 = • recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value	• Metre rulers • Rulers • Tape measures • Scales • Balance scales • Measuring jugs/tubes • Numicon • 1p, 2p, 5p, 10p, 20p, 50p, £1, £2 coins	• To estimate, accurately identify and measure length, weight and capacity using the correct units of measurement. • Compare measurements using the correct symbols. • To identify various denominations of money including all coins and

	• 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.	• £5, £10 and £20 notes • Clocks • Calendars/timetables	notes. • Compare and identify amounts including within practical problems. • Fluently recognise and compare time using the correct sequencing language. • Children to record and tell the time to the nearest 5 minutes.
GEOMETRY **Properties of shapes**	• identify and describe the properties of 2-D shapes, including the number of sides and 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.	• 2D/3D shapes	• To recognise and name 2D and 3D shapes fluently including within everyday objects. • To identify properties of 2D and 3D shapes including lines of symmetry. • To identify 2D shapes on the surface of 3D shapes.
Position and direction	• order and arrange combinations of mathematical objects in patterns • use mathematical vocabulary to describe position, direction and movement including distinguishing between rotation as a turn and in terms of right angles for quarter, half and three quarter turns clockwise and anti-clockwise), and movement in a straight line.	• Compasses • Measuring tapes • Numicon	• To accurately use positional language including fractions. • To identify and continue different patterns.
STATISTICS	• interpret and construct simple pictograms, tally charts, block diagrams and simple 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.	• Laptops/iPads • Rulers • Colouring pencils	• To collect and interpret data in different ways.