Vine Core Curriculum

Termly Curriculum Overviews – Maths **Year Group - Year 2**

CHILDREN MUST ACHIEVE ALL THE UNDERLINED EXPECTED STANDARD OBJECTIVES FROM THE FRAMEWORK TO BE EXPECTED STANDARD

	Autumn	Spring	Summer
Number and Place Value	**Partition any two-digit number into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus** · count in steps of 2 and 5 from 0, and in tens, forward or backward · recognise the place value of each digit in a two-digit number (tens, ones) *to 20, 30, 50…?* · identify, represent numbers using different representations, including the number line · compare and order numbers from 0 up to 100 · read and write numbers to 100 in numerals.	**Partition any two-digit number into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus** · identify, represent numbers using different representations, including the number line · compare and order numbers from 0 up to 100; use = sign · use place value and number facts to solve problems.	· 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) *to 20, 30, 50…?* · 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 100 in numerals and in words · use place value and number facts to solve problems.
Addition and Subtraction	**Recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships (e.g. If 7 + 3 = 10, then 17 + 3 = 20; if 7 – 3 = 4, then 17 – 3 = 14; leading to if 14 + 3 = 17, then 3 + 14 = 17, 17 – 14 = 3 and 17 – 3 = 14)** · solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers and quantities · recall and use addition and subtraction facts to 20 fluently. · add and subtract numbers using concrete objects, pictorial representations, and mentally, including: · a two-digit number and ones · a two-digit number and tens · adding three one-digit numbers · recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.	**Add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48 + 35; 72 – 17)** **Recall all number bonds to and within 10 and use these to reason with and calculate bonds to and within 20, recognising other associated additive relationships** · solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers and quantities · 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	**Add and subtract any 2 two-digit numbers using an efficient strategy, explaining their method verbally, in pictures or using apparatus (e.g. 48 + 35; 72 – 17)** · 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: · two two-digit numbers · 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.

		· recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.	
Multiplication and Division	**Recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary** · recall and use multiplications 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 (×) and equals (=) signs · show that multiplication of two numbers can be done in any order (commutative) · solve problems involving multiplication, using materials, arrays, repeated addition, mental methods, and multiplication	**Recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary** · recall and use multiplications 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.	**Recall multiplication and division facts for 2, 5 and 10 and use them to solve simple problems, demonstrating an understanding of commutativity as necessary** · recall and use multiplications 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.
Fractions	· recognise, find, name and write fractions 1/4, 1/2 of a length, shape, set of objects or quantity · write simple fractions e.g. 1/2 of 6 = 3	**Identify 1/4, 1/3 , 1/2 , 2/4, 3/4, of a number or shape, and know that all parts must be equal parts of the whole** · recognise, find, name and write fractions 1/4, 1/3 1/2 2/4 and 3/4 of a length, shape, set of objects or quantity	**Identify 1/4, 1/3 , 1/2 , 2/4, 3/4, of a number or shape, and know that all parts must be equal parts of the whole** · recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 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.
Money	**Use different coins to make the same amount** · recognise and use symbols for pounds (£) and pence (p) · find different combinations of coins that equal the same amounts of money	**Use different coins to make the same amount** · 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	**Use different coins to make the same amount** · 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

	• solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change		
Shape and Geometry	**Name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry.** • identify and describe the properties of 2-D shapes, including the number of sides • identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces • compare and sort common 2-D and 3-D shapes and everyday objects.	**Name and describe properties of 2-D and 3-D shapes, including number of sides, vertices, edges, faces and lines of symmetry.** • identify and describe the properties of 2-D shapes, including the number of sides and lines of symmetry • 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.	• lines of symmetry • 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. • 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)
Measure	**Read scales* in divisions of ones, twos, fives and tens** • choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); using rulers • compare and order lengths record the results using >, < and =	**Read scales* in divisions of ones, twos, fives and tens** • choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); using rulers and scales	**Read scales* in divisions of ones, twos, fives and tens** • 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 =
Time	• tell and write the time, including quarter past/to the hour • know the number of minutes in an hour	**Read the time on a clock to the nearest 15 minutes** • compare and sequence intervals of time • tell and write the time, including quarter past/to the hour and draw the hands on a clock face to show these times.	**Read the time on a clock to the nearest 15 minutes** • compare and sequence intervals of time • tell and write the time 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.
Data	• interpret and construct simple pictograms, tally charts and block diagrams • ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity • ask and answer questions	• ask and answer questions about totalling and comparing categorical data.	• 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.