Vine Core Curriculum

Termly Curriculum Overviews – Maths   **Year Group - Year 4**

	Autumn	Spring	Summer
Number and Place Value	☐ count in multiples of 1000 ☐ find 1000 more or less than a given number ☐ recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) **☐ order and compare numbers to 1000** ☐ round any number to the nearest 10 ☐ solve number and practical problems that involve all of the above and with increasingly large positive numbers ☐ read Roman numerals to 100 (I to C)	☐ count in multiples of 6, 7, 9, and 1000 ☐ find 1000 more or less than a given number ☐ count backwards through zero to include negative numbers ☐ recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) **☐ order and compare numbers beyond 1000** ☐ identify, represent numbers using different representations ☐ round any number to the nearest 10 or 100 ☐ solve number and practical problems that involve all of the above and with increasingly large positive numbers	☐ count in multiples of 6, 7, 9, 25 and 1000 ☐ find 1000 more or less than a given number ☐ count backwards through zero to include negative numbers ☐ recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) **☐ order and compare numbers beyond 1000** ☐ identify, represent and estimate numbers using different representations ☐ round any number to the nearest 10, 100 or 1000 ☐ solve number and practical problems that involve all of the above and with increasingly large positive numbers ☐ read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value.
Addition and Subtraction	**☐ add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction** ☐ solve addition and subtraction two-step problems in contexts, deciding which operations	**☐ add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction** ☐ estimate and use inverse operations to check answers to a calculation ☐ solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	**☐ add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate** ☐ estimate and use inverse operations to check answers to a calculation ☐ solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.
Multiplication and Division	**☐ recall multiplication for multiplication tables up to 12 × 12** ☐ recognise and use factor pairs and commutatively in mental calculations **☐ multiply two-digit by a one-digit number using formal written layout** **☐ Divide 3-digit numbers by a single digit using the Expanded bus stop method for 3-digit divided by 1-digit number** ☐ solve problems involving multiplying and adding	**☐ recall multiplication and division facts for multiplication tables up to 12 × 12** ☐ use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1 ☐ recognise and use factor pairs and commutatively in mental calculations **☐ multiply two-digit and three-digit numbers by a one-digit number using formal written layout**	**☐ recall multiplication and division facts for multiplication tables up to 12 × 12** ☐ use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers ☐ recognise and use factor pairs and commutatively in mental calculations **☐ multiply two-digit and three-digit numbers by a one-digit number using formal written layout**

		☐ **Divide 3-digit numbers by a single digit using the Expanded bus stop method for 3-digit divided by 1-digit number – with remainders.** ☐ solve problems involving multiplying and adding, including using the distributive law to multiply two-digit numbers by one digit	☐ **Divide 3-digit numbers by a single digit using the Expanded bus stop method for 3-digit divided by 1-digit number – with remainders.** ☐ solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.
Fractions, Decimals and Percentages	☐ **recognise and show, using diagrams, families of common equivalent fractions** ☐ add and subtract fractions with the same denominator ☐ recognise and write decimal equivalents to ¼ ; ½ ; ¾ ☐ find the effect of dividing a one- or two-digit number by 10, identifying the value of the digits in the answer as ones, tenths ☐ **round decimals with one decimal place to the nearest whole number**	☐ **recognise and show, using diagrams, families of common equivalent fractions** ☐ count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten. ☐ solve problems involving increasingly harder fractions to calculate quantities ☐ add and subtract fractions with the same denominator ☐ recognise and write decimal equivalents of any number of tenths ☐ recognise and write decimal equivalents to ¼ ; ½ ; ¾ ☐ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones and tenths. ☐ **round decimals with one decimal place to the nearest whole number** ☐ compare numbers with the same number of decimal places up to two decimal places	☐ **recognise and show, using diagrams, families of common equivalent fractions** ☐ count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten. ☐ solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number ☐ add and subtract fractions with the same denominator ☐ recognise and write decimal equivalents of any number of tenths or hundredths ☐ recognise and write decimal equivalents to ¼ ; ½ ; ¾ ☐ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths ☐ **round decimals with one decimal place to the nearest whole number** ☐ compare numbers with the same number of decimal places up to two decimal places
Money	☐ solve simple measure and money problems involving decimals to two decimal places.	☐ solve simple measure and money problems involving fractions and decimals to two decimal places.	☐ solve simple measure and money problems involving fractions and decimals to two decimal places. ☐ estimate, compare and calculate different measures, including money in pounds and pence
Shape and Geometry	☐ compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes ☐ identify lines of symmetry in 2-D shapes presented in different orientations ☐ complete a simple symmetric figure with respect to a specific line of symmetry.	☐ compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes ☐ identify acute and obtuse angles and compare and order angles up to two right angles by size ☐ identify lines of symmetry in 2-D shapes presented in different orientations	☐ compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes ☐ identify acute and obtuse angles ☐ identify lines of symmetry in 2-D shapes presented in different orientations

		□ complete a simple symmetric figure with respect to a specific line of symmetry.	□ complete a simple symmetric figure with respect to a specific line of symmetry. □ describe positions on a 2-D grid as coordinates in the first quadrant □ describe movements between positions as translations of a given unit to the left/right and up/down □ plot specified points and draw sides to complete a given polygon.
Measure	□ Convert between different units of measure [e.g. kilometre to metre) □ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres □ find the area of rectilinear shapes by counting squares	□ Convert between different units of measure [e.g. kilometre to metre □ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres □ find the area of rectilinear shapes by counting squares □ estimate and compare	□ Convert between different units of measure [e.g. kilometre to metre; hour to minute] □ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres □ find the area of rectilinear shapes by counting squares □ estimate, compare and calculate different measures, including money in pounds and pence
Time	□ read, write time between analogue and digital 12 clocks	□ read, write and convert time between analogue and digital 12 and 24-hour clocks	□ solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.
Data	□ interpret and present discrete data using appropriate graphical methods, including bar charts □ solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	□ interpret and present discrete and continuous data using appropriate graphical methods, including bar charts □ solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.	□ interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs □ solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs.