Strands	Autumn 1 Summary
NPV Number and place value; **MMD** Mental multiplication and division; **DPE** Decimals, percentages and their equivalence to fractions; **FRP** Fractions, ratio and proportion **MAS** Mental addition and subtraction; **NPV** Number and place value; **WAS** Written addition and subtraction; **DPE** Decimals, percentages and their equivalence to fractions; **PRA** Problem solving, reasoning and algebra **PRA** Problem solving, reasoning and algebra; **MAS** Mental addition and subtraction **MEA** Measurement; **PRA** Problem solving, reasoning and algebra; **NPV** Number and place value **MAS** Mental addition and subtraction; **WAS** Written addition and subtraction; **NPV** Number and place value; **PRA** Problem solving, reasoning and algebra **MMD** Mental multiplication and division; **WMD** Written multiplication and division; **MAS** Mental addition and subtraction; **PRA** Problem solving, reasoning and algebra; **NPV** Number and place value	- Find out about famous mathematicians including Fibonacci and Pascal and use their different methods. - Read, write and compare 6-digit numbers and know what each digit represents; read, write and compare 1-, 2- and 3-place decimal numbers; multiply and divide by 10, 100 and 1000; round decimals to nearest tenth and whole number and place on a number line; convert decimals (up to 3 places) to fractions and vice-versa. - Use mental addition strategies to solve additions including decimal numbers; use column addition to add 5-digit numbers, decimal numbers and amounts of money; solve problems involving number up to 3 decimal places, choose an appropriate method to solve decimal addition. - Express missing number problems algebraically and find pairs of numbers that satisfy equations involving two unknowns; find missing lengths and angles; understand how brackets can be used in calculation problems; use knowledge of the order of operations to carry out calculations involving the four operations, solve addition and subtraction multi-step problems using knowledge of the order of operations. - Convert between grams and kilograms, millilitres and litres, millimetres and centimetres, centimetres and metres, metres and kilometres, and miles and kilometres; revise reading the 24-hour clock and convert 12-hour times to 24-hour; read and write Roman numerals; find time intervals using the 24-hour clock. - Use mental addition, column subtraction and Counting up to solve subtractions of amounts of money and word problems; use mathematical reasoning to investigate. - Use mental multiplication strategies to multiply by numbers such as 4, 8, 5, 25, 19, 29 and 99; revise using short multiplication to multiply 4-digit numbers by 1-digit numbers and use this to multiply amounts of money; solve word problems involving multiplication including two-step problems and finding change; use long multiplication to multiply 3-digit and 4-digit numbers by teens numbers.

Strands	Autumn 2 Summary
NPV Number and place value; **PRA** Problem solving, reasoning and algebra; **FRP** Fractions, ratio and proportion **MEA** Measurement; **GPS** Geometry: properties of shapes **MMD** Mental multiplication and division; **FRP** Fractions, ratio and proportion; **WMD** Written multiplication and division; **PRA** Problem solving, reasoning and algebra **FRP** Fractions, ratio and proportion; **PRA** Problem solving, reasoning and algebra; **DPE** Decimals, percentages and their equivalence to fractions **FRP** Fractions, ratio and proportion	- Understand negative numbers; calculate small differences between negative numbers and negative and positive numbers; add and subtract negative numbers; compare fractions with unlike, but related, denominators; correctly use the terms fraction, denominator and numerator; understand what improper fractions and mixed numbers are and add fractions with the same denominator, writing the answer as a mixed number - Calculate the perimeter, area and volume of shapes, and know their units of measurement; understand that shapes can have the same perimeters but different areas and vice versa; calculate the area of a triangle using the formula $A = 1/2\ b \times h$; find the area of parallelograms using the formula $A = b \times h$; name and describe properties of 3D shapes; systematically find and compare nets for different 3D shapes. - Use mental strategies to divide by 2, 4, 8, 5, 20 and 25; find non-unit fractions of amounts; use short division to divide 3- and 4-digit numbers by 1-digit numbers, including those which leave a remainder; express a remainder as a fraction, simplifying where possible. - Add and subtract unit fractions with different denominators including mixed numbers; use mental strategies to find simple percentages of amounts, including money - Multiply fractions less than 1 by whole numbers, converting improper fractions to whole numbers; use commutativity to efficiently multiply fractions by whole numbers; divide unit and non-unit fractions by whole numbers; solve word problems involving fractions.

Strands	Spring 1 Summary
NPV Number and place value; **WAS** Written addition and subtraction **DPE** Decimals, percentages and their equivalence to fractions; **FRP** Fractions, ratio and proportion **MMD** Mental multiplication and division; **WMD** Written multiplication and division; **PRA** Problem solving, reasoning and algebra; **NPV** Number and place value **GPS** Geometry: properties of shapes; **PRA** Problem solving, reasoning and algebra **MAS** Mental addition and subtraction; **NPV** Number and place value; **WAS** Written addition and subtraction; **PRA** Problem solving,	- Read and write numbers with up to 7-digits, understanding what each digit represents; work systematically to find out how many numbers round to 5000000; solve subtraction of 5- and 6-digit numbers using written column method (decomposition). - Multiply and divide by 10, 100 and 1000; compare and order numbers with up to three decimal places; know common fraction / decimal equivalents; multiply pairs of unit fractions and multiply unit fractions by non-unit fractions - Use partitioning to mentally multiply 2-digit numbers with one decimal place by whole 1-digit numbers; multiply numbers with two decimal places; use short multiplication to multiply amounts of money; use estimation to check answers to calculations; use long multiplication to multiply 3-digit and 4-digit numbers by numbers between 10 and 30. - Name, classify and identify properties of quadrilaterals; explore how diagonal lines can bisect quadrilaterals; understand what an angle is and that it is measured in degrees; know what the angles of triangles, quadrilaterals, pentagons, hexagons and octagons add to and use these facts and mathematical reasoning to calculate missing angles; recognise and identify the properties of circles and name their parts; draw circles using pairs of compasses; draw polygons using a ruler and a protractor - Add and subtract numbers using mental strategies; solve addition of 4- to 7-digit numbers using written column addition; identify patterns in the number of steps required to generate palindromic numbers; solve subtraction of 5-, 6- and 7-digit numbers using written column method (decomposition); solve additions and subtractions choosing mental strategies or written procedures as appropriate; read, understand and solve word problems

Strands	
• reasoning and algebra • **WMD** Written multiplication and division; **NPV** Number and place value; **PRA** Problem solving, reasoning and algebra	• Identity common factors and common multiples; understand that a prime number has exactly two factors and find prime numbers less than 100; understand what a composite (non-prime) number is; use long division to divide 3- and 4-digit numbers by 2-digit numbers, giving remainders as a fraction, simplifying where possible

Strands	Spring 2 Summary
• **MAS** Mental addition and subtraction; **WAS** Written addition and subtraction; **PRA** Problem solving, reasoning and algebra • **STA** Statistics; **DPE** Decimals, percentages and their equivalence to fractions • **GPD** Geometry: position and direction; **NPV** Number and place value; **PRA** Problem solving, reasoning and algebra; **GPS** Geometry: properties of shapes • **WMD** Written multiplication and division; **PRA** Problem solving, reasoning and algebra • **PRA** Problem solving, reasoning and algebra; **FRP** Fractions, ratio and proportion	• Solve addition and subtraction multi-step problems in shopping contexts, and add and subtract money using column addition and counting up; add and subtract decimal numbers choosing an appropriate strategy, and add decimal numbers with different numbers of places using column addition; use mathematical reasoning to investigate and solve problems, and solve subtractions of decimal numbers with different numbers of places (2-places) using counting up • Calculate and understand the mean average; construct and interpret distance/time line graphs where intermediate points have meaning, including conversion line graphs; understand pie charts are a way of representing data using percentages, interpret and construct pie charts • Read and plot coordinates in all four quadrants, draw and translate simple polygons using coordinates and find missing coordinates for a vertex on a polygon; draw and reflect simple polygons in both the x-axis and y-axis using coordinates; find unknown angles around a point, on a line, in a triangle or vertically opposite and in polygons where diagonals intersect • Multiply 4-digit numbers including those with two decimal places by 1-digit numbers; use long multiplication to multiply 4-digit numbers by numbers between 10 and 30, including those with two decimal places; revise using short division to divide 4-digit by 1-digit and 2-digit numbers including those which leave a remainder, and divide the remainder by the divisor to give a fraction, simplifying where possible, and make approximations; use long division to divide 4-digit by 2-digit numbers, and use a systematic approach to solve problems • Generalise a relationship between pairs of numbers, express simple formulae in words, then using letters; describe and continue sequences, generalise to predict the tenth term, begin to generalise a term in a sequence using n to stand for the number of the term in a sequence; describe ratio and use ratio to solve problems; find fractions and simplify ratios

Strands	Summer 1 Summary
NPV Number and place value; **DPE** Decimals, percentages and their equivalence to fractions **NPV** Number and place value; **MAS** Mental addition and subtraction; **WAS** Written addition and subtraction; **DPE** Decimals, percentages and their equivalence to fractions; **FRP** Fractions, ratio and proportion; **PRA** Problem solving, reasoning and algebra; **GPS** Geometry: properties of shapes **MAS** Mental addition and subtraction; **FRP** Fractions, ratio and proportion; **WMD** Written multiplication and division; **MMD** Mental multiplication and division; **PRA** Problem solving, reasoning and algebra; **NPV** Number and place value **WMD** Written multiplication and division; **PRA** Problem solving, reasoning and algebra; **NPV** Number and place value; **STA** Statistics; **GPD** Geometry: position and direction	- Revise reading, writing, comparing and ordering numbers with up to seven digits and decimal numbers with up to three decimal places; revise rounding decimal numbers to the nearest tenth and whole number; revise rounding big numbers to the nearest thousand, ten thousand, hundred thousand and million; revise locating a number on a number line marking numbers it lies between; revise comparing and ordering negative numbers including calculating differences between negative numbers and positive and negative numbers - Revise adding and subtracting whole numbers and decimal numbers using mental and written methods; revise finding percentages of numbers, converting fractions, decimals and percentages and making comparisons using percentages; revise how brackets can be used in calculation problems, revise the order of operations for calculations involving the four operations; revise solving missing number problems using inverse operations; revise using trial and improvement to solve equations involving one or two unknowns, and find missing lengths and angles - Revise scaling, using mental strategies for multiplying and dividing; revise solving problems involving rate; revise multiplying pairs of 2-digit numbers and finding factors of 2-digit numbers; multiply 3-digit and 4-digit numbers including decimals by whole 1-digit numbers and solve word problems involving multiplication of money and measures; use a systematic approach to solve problems involving multiplication and division, including long multiplication of 3-digit and 4-digit numbers and decimals - Revise using short division to find unit fractions of amounts, including decimals, and round answers to money problems according to the context; revise using long division to divide 4-digit by 2-digit numbers, giving remainders as a fraction, simplifying where possible; revise using long division to divide 3-digit and 4-digit numbers by numbers between 10 and 30, writing the fractional part of the answer as a decimal where equivalents are known; revise calculating the mean average; revise reading and marking coordinates in all four quadrants, draw simple polygons and find missing coordinates on a polygon or line - Revise properties and classification of 2D shapes, drawing 2D shapes using ruler, protractor and compasses, parts of a circle and angles in polygons; revise calculating missing angles by knowing angle facts; use a protractor to measure and draw angles in degrees; identify and name acute, right, obtuse and reflex angles; understand perimeter, area and volume; find the perimeter of rectangles, find the area of rectangles, parallelograms and triangles, and find the volumes of cubes and cuboids; revise reading and interpreting different types of data display - Revise properties and classification of 2D shapes, drawing 2D shapes using ruler, protractor and compasses, parts of a circle and angles in polygons; revise calculating missing angles by knowing angle facts; use a protractor to measure and draw angles in degrees; identify and name acute, right, obtuse and reflex angles; understand perimeter, area and volume; find the perimeter of rectangles, find the area of rectangles, parallelograms and triangles, and find the volumes of cubes and cuboids; revise reading and interpreting different types of data display

Strands	Summer 2 Overview
NPV Number and place value; **FRP** Fractions, ratio and proportion; **MEA** Measurement **GPS** Geometry: properties of shapes; **MEA** Measurement; **STA** Statistics **NPV** Number and place value; **PRA** Problem solving, reasoning and algebra; **GPD** Geometry: position and direction; **WMD** Written multiplication and division	- Use mathematical reasoning to investigate and solve problems, and to estimate and predict; solve problems using doubling, solve calculations with enormous numbers. - Collect data and put this into a table, chart, bar graph, line graph or pie chart. Interpret this data, drawing conclusions. Use fractions, percentages and proportions to make statements about the data. - Use computer programs such as Excel to create tables and graphs to make comparisons across data.