WROUGHTON ACADEMIES
Creative Education Trust

Maths 2026-2027

Curriculum Intent Statement

The national curriculum for mathematics aims to ensure that all pupils:

- become fluent in the fundamentals of mathematics, including through varied and frequent practice with increasingly complex problems over time, so that pupils develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately
- reason mathematically by following a line of enquiry, conjecturing relationships and generalisations, and developing an argument, justification or proof using mathematical language
- can solve problems by applying their mathematics to a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions

Mathematics is an interconnected subject in which pupils need to be able to move fluently between representations of mathematical ideas. The programmes of study are, by necessity, organised into apparently distinct domains, but pupils should make rich connections across mathematical ideas to develop fluency, mathematical reasoning and competence in solving increasingly sophisticated problems. They should also apply their mathematical knowledge to science and other subjects.

The expectation is that the majority of pupils will move through the programmes of study at broadly the same pace. However, decisions about when to progress should always be based on the security of pupils' understanding and their readiness to progress to the next stage. Pupils who grasp concepts rapidly should be challenged through being offered rich and sophisticated problems before any acceleration through new content. Those who are not sufficiently fluent with earlier material should consolidate their understanding, including through additional practice, before moving on.

ELGs related to Subject and Topics

ELG: Number
Children at the expected level of development will:
- Have a deep understanding of number to 10, including the composition of each number;
- Subitise (recognise quantities without counting) up to 5;
- Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.

ELG: Numerical Patterns
Children at the expected level of development will:
- Verbally count beyond 20, recognising the pattern of the counting system;
- Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity;
- Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.

	Nursery	Reception
Autumn	Colours (2 weeks) Identify red, green, yellow, purple and blue objects. Explore other colours, discuss their favourite colour and match objects to the correct colour name. Matching (2 weeks) Match a range of objects such as buttons, pairs of shoes, prints and tower blocks made of the same colour. Identify matching Numicon shapes and begin to identify how they have the same number of holes. Sorting (2 weeks) Sort objects by a range of categories: size, shape and colour and look at similarities and differences between objects. Number 1 and Number 2 (3 weeks) Subitise, count and match objects to the numerals 1 and 2. Children to be able to show these numbers on their fingers. Pattern (2 weeks) Describe, explore, create and continue AB patterns with natural objects and using movement of their body. Children describe and predict ABC patterns using different colours. Consolidation (1 week): sorting and matching, counting and pattern.	Match, sort and compare (2 weeks) Match physical objects and pictures. Identify sets of different objects pointing these out in images, stories and classroom provision. Sort collects of objects based on attributes such as colour, size or shape and create rules based on this. Compare and order sets using vocabulary such as 'more' and 'fewer'. Talk about measure and patterns (2 weeks) Learn that objects can be compared and ordered by size, mass and capacity using specific language. Explore pattern as a repeated unit and learn that patterns can be both visual and auditory. Explore and create AB patterns in a range of contexts. It's me 1, 2, 3! (3 weeks) Represent, compare, compose and perceptually subitise numbers 1, 2 and 3. Develop knowledge of the counting sequence developing one-to-one correspondence and relating this to cardinality. Children are introduced to the concept of 1 more and 1 less when working with numbers up to 3. Circles and triangles (1 week) Notice circles and triangles all around them and begin to describe their properties. Compare and draw shapes. Investigate non-examples and explain why these are not circles or triangles. 1, 2, 3, 4, 5 (2 weeks) Find different representations of 4 and 5 and continue building one-to-one correspondence and understanding of cardinality. Perceptually subitise groups of 4 and 5 items. Create representations of 4 and 5 using different objects and match these to numerals. Learn '1 more' and '1 less', working with numbers up to 5. Practically partition a whole number up to 5. Shapes with four sides (1 week) Notice squares and rectangles all around them and begin to describe their properties. Understand that squares are a special kind of rectangle. Investigate combining and partitioning shapes related to everyday contexts. Children identify shapes in their environment and discuss why some shapes are 'almost' shapes. Discuss key events in their daily routine. They will recognise what occurs during the day compared to at night.
Spring	Number 3, 4, 5 and 6 (8 weeks) Children will subitise and count objects using the counting principles. In small steps, children will be introduced to the numerals 3, 4, 5 and 6. Children are introduced to the idea that numbers are made up of smaller numbers and they will begin to explore what smaller numbers these are composed of through a range of hands-on, practical activities. Learn 2D shapes such as triangles, squares, rectangles and pentagons and identify these by counting their sides. Height and Length (1 week) Children compare the height or length of different objects using the vocabulary 'long', 'tall' and 'short'. Mass (2 weeks) Children are introduced to balance scales. Explore what happens when they put different objects in them and investigate which is heavier and lighter. Capacity (1 week) Explore containers that are full, empty or nearly full and nearly empty both practically and pictorially. Compare capacities of different containers by directly pouring from one to another. Consolidation (1 week) Length, capacity and mass.	Alive in 5! (2 weeks) Introduce the number name zero and numeral O and find an amount to 5 including zero. Explore the different compositions of 4 and 5 developing subitising skills. Practically represent the numbers zero to five. Find '1 more' and '1 less' with the numbers to 5, including zero. Mass and Capacity (1 week) Make precise comparisons with different units using a range of scales, including balance scales. Investigate different capacities and how the relate to each other using descriptive language when describing containers and when ordering these from smallest capacity to greatest capacity. Growing 6, 7, 8 (2 weeks) Create representations and match these to the numerals of 6, 7 and 8. Find '1 more' and '1 less' with numbers up to 8. Explore the composition of numbers up to 8. Understand that a pair is two and doubling means 'twice as many'. Combine two groups to find how many there are altogether. Children develop conceptual subitising (subitise smaller quantities that make up a whole number). Length, height and time (2 weeks) Explore objects using language of length and height to describe them and make comparisons using non-standard objects such as cubes. Children talk about time in more detail; discuss what is happening tomorrow, next week or at the weekend to talk about the more immediate future. Order and sequence simple events. Building 9 & 10 (3 weeks) Explore different representations of 9 and 10 and count to 10 using objects to build on the counting principles. Develop conceptual subitising to 10. Children find '1 more' and '1 less' of a number up to 10. Explore the composition of numbers to 10 and number bonds to 10. Understand that there can be three or more parts when looking at bonds to 10. Children progress to doubles to 10 and further develop the concept of 'odd' and 'even' numbers. Explore 3D shapes (2 weeks) Recognise, name and describe properties of 3D shapes and explore print making to recognise 2D shapes that are made from the flat faces. Look for representations of 3D shapes in the environment and exploring 'almost shapes'. Children copy more complex patterns including ABC, ABCD, AABB, AAB, ABB and ABBA. Explore patterns that are both visible, audible and in their environment.
Summer	Sequencing (1 week) Sequence pictures from nursery rhymes, their daily routines and from familiar stories. Position (1 week) Explore positions of objects using the vocabulary on, under, in, out, in front and behind using hands-on activities. Comparing groups (1 week) Look at two sets of objects and identify which set has more and which set has fewer. 2D and 3D shapes (2 weeks) Learn to identify and recognise circles, triangles, squares, rectangles, cubes, cuboids, cylinders and spheres and begin to talk about some of their properties. Consolidation of sequencing, position and more or fewer (1 week) Number composition (1 week) Children explore the different pairs of numbers that make up 3, 4 and 5. What comes after and before? (2 weeks) Children count and sequence numerals on a number track (up to 5) identifying what comes before or after a given number. Numbers to 5 (1 week) Count how many objects are in a set and identify if there are enough of each object for everyone. Children work out what number is represented by different counting cards and then sequence them. Complete mazes by working their way through the numerals in the correct order. Consolidation of learning (2 weeks): shape patterns, more or fewer, before or after and composition.	To 20 and beyond (2 weeks) Become familiar with numbers beyond 10 and the pattern (stable order) of numbers to 20 and beyond. Develop one-to-one correspondence to count items beyond 10. Count forwards and backwards consolidating stable order principle. Children recreate the pattern of 'ten and - more'. Count verbally beyond 20 by noticing the counting patterns involved. How many now? (1 week) Explore the change structure of addition (augmentation) and subtraction (reduction) by adding more or taking away objects within 10. To further deepen understanding, children find how many more have been added to a group of objects. Manipulate, compose and decompose (2 weeks) Explore 3D shapes including properties and spatial relations and look how shapes appear in different orientations. Match arrangements of shapes, using positional language to describe where the shapes are in relation to one another. Investigate combining and decomposing shapes to create new shapes. Copy more complex 2D shapes using maths vocabulary to describe properties. Notice 2D shapes within 3D shapes in a range of contexts. Sharing and grouping (2 weeks) Develop an understanding of sharing: equal, fair and unfair and share practically for a purpose. Explore grouping using knowledge of equal and unequal groups to support them. Investigate how many groups are needed to give out all the objects. Identify if a number is odd or even by sharing into two groups. Build doubles in a range of different contexts. Visualise, build and map (3 weeks) Draw out the unit of repeat in a pattern and create repeating pattern rules describing their own and others' patterns verbally. Spatial reasoning is developed by the manipulation and discussion of pre-made scenes, models or their own designs. Look at the world, structures and their own creations from different perspectives, verbalising this by using positional language. Children follow instructions to build new models and scenarios. Explore different maps and look at aerial views; represent maps using models and draw simple maps of familiar places and those based on stories. Make connections (1 week) Make connections between all the aspects of maths that have been covered through the year. Deepen understanding of reasoning and problem-solving strategies. Engage in extended problem solving and develop critical thinking skills. Explore and investigate relationships between numbers, shapes and patterns and explore possibilities. Consolidation (1 week)

	Year 1	Year 2
Autumn	Place Value (within 10) (5 weeks) Sort, count and represent objects. Recognise numbers as words and count on from any number and count backwards (within 10). Find '**1** more' and '**1** less'. Compare groups by matching using one-to-one correspondence. Introduced to the vocabulary 'fewer', 'more' and 'same'. Compare and order objects and numbers and introduce to 'less than', 'greater than' and 'equal to'. Introduce to number lines for the first time. Addition and subtraction (within 10) (5 weeks) Introduce to part whole models. Write number sentences and addition fact families. Explore number bonds within and to 10. Addition is introduced and applied to word problems. Subtraction is introduced by first finding a part and using number lines. Addition and subtraction of 1 or 2. Shape (1 week) Recognise, name and sort 3-D and 2-D shapes. Create patterns with 2-D and 3-D shapes. Consolidation of learning (1 week)	Place value (4 weeks) Count objects to 100 using concrete resources to make tens and support counting. Recognise tens and ones and use a place value chart. Partition and write numbers to 100 in words and expanded form. Use number lines up to 100 with intervals of one and ten and estimate the position of numbers. Compare and order objects and numbers. Count in 2s, 3s, 5s and 10s using concrete resources such as counters and Rekenreks. Addition and subtraction (5 weeks) Explore fact families by learning addition and subtraction bonds within 10, 20 and 100 (in tens). Use number bonds knowledge to add and subtract across a 10 using up to two 2-digit numbers. Use knowledge of number bonds within 10 to identify related facts. Add and subtract Is from a number. Add three 1-digit numbers. Concrete resources such as ten frames and Rekenreks aid number sense and understanding. Find '10 more' and '10 less' than a given number as well as adding and subtracting tens. Shape (3 weeks) Recognise, count sides and vertices and identify lines of symmetry for 2-D shapes, and use these to complete shapes. Learn to draw 2-D shapes. Count faces, edges and vertices on 3-D shapes. Children learn to sort 2-D and 3-D shapes and make patterns with them. Money (2 weeks) Count money in pence and pounds using notes and coins. Choose notes and coins to create a given amount. Explore different ways of making the same amount. Compare amounts of money using language 'greater than', 'less than', 'most' and 'least'. Calculate with money using addition and subtraction. Make a pound in different ways and calculate change from a pound. Solve two step problems.
Spring	Place value within 20 (3 weeks) Count within 20 using concrete resources and repeated practise. Understand 10 and 20 and the numbers in between using ten frames, bead strings, towers of cubes and Rekenreks to support subitising. Calculate '1 more' and '**1** less' with any number within 20. Understand the number line to 20 and estimate on it. Compare and order numbers to 20. Addition and subtraction within 20 (3 weeks) Add by counting on from any number within 20. Add ones by using number bonds and investigate number bonds to 20. Focus on adding two equal quantities to learn doubles and calculate near doubles. Subtract using number bonds, counting back and finding the difference. Look at related addition and subtraction fact families. Solve missing number problems. Place value within 50 (2 weeks) Count from 20 to 50 in ones and tens. Count objects efficiently by making groups of tens and ones. Partition numbers up to 50 into tens and ones. Explore the similarities and differences between number lines and number tracks and look at the number line to 50 estimating positions of number. Calculate '1 more' and '**1** less' of any number between zero and 50 using concrete resources and representations. Length and height (2 weeks) Compare lengths and heights using language such as 'longer than', 'shorter than' and 'taller than'. Measure length using objects and then by using a ruler and measuring in centimetres. Mass and volume (2 weeks) Compare objects and determine if they are heavier or lighter. Explore capacity and volume practically. Measure and compare mass (using non-standard units), volume and capacity.	Multiplication and division (5 weeks) Recognise, make and add equal groups linking multiplication and repeated addition. Introduce to multiplication sentences using pictures and arrays. Explore division by making equal groups (grouping and sharing). Explore the 2, 5 and 10 times table and division facts making links between the 5 and 10 tables. Divide by 2 and double and halve numbers. Using this knowledge, identify odd and even numbers. Length and height (2 weeks) Measure in centimetres and metres using a ruler, metre sticks and tape measures. Compare, order and complete the four operations(+,-, x, +) with lengths and heights. Mass, capacity and temperature (3 weeks) Measure in grams, kilograms, millilitres and litres. Compare mass, volume and capacity. Apply the four operations knowledge to questions relating to mass, volume and capacity. Learn to read different scales and use real-life examples of measurement. Read scales relating to temperature and introduce to degrees Celsius. Fractions (3 weeks) Children understand the concept of a whole and explore making equal and unequal parts. Children are introduced to the notation 1/2, 1/4, 1/3 and terms 'numerator', 'denominator' and 'unit fractions'. Find a half, a quarter and a third of a shape, set of objects and quantities. Children are introduced to non-unit fractions 2/3 and 3/4 for the first time and explore the equivalence of two quarters and one half. Children use their understanding of quarters to find three quarters of a quantity. Count in halves, thirds and quarters from any number up to 10.
Summer	Multiplication and division (3 weeks) Count in multiples of 2, 5 and 10 up to 50. Explore making and adding equal groups. Make arrays by creating equal groups building them up in columns or rows. Explore doubling with numbers up to 20. Make equal groups by grouping a given total and explore sharing as a model of division using concrete objects. Fractions (2 weeks) Find a half and a quarter using shapes and sets of objects and apply this to finding half and quarter of a quantity using equal sharing. Explore equal and non-equal parts. Position and direction (1 week) Use the language 'full', 'half', 'quarter' and 'three quarters' to describe turns made by shapes and objects. Use positional language to describe the position of objects and shapes from different starting positions. Place value (within 100) (2 weeks) Introduce to the hundred square and use it to count forwards and backwards within 100. Continue grouping in 10s to make counting more efficient and when partitioning. Compare and order numbers using language 'more than', 'less than' and 'equal to' as well as the symbols<,> and=. Children find '1 more' and '**1** less' of given numbers or amounts to 100. Money (1 week) Recognise and know the value of different denominations of coins and notes and use place value knowledge to match these with equivalent values. Combine knowledge of money when counting in 2s, 5s and 10s for efficiency. Time (2 weeks) Use key vocabulary to sort and order events. Learn the seven days of the week and months of the year. Discuss events including their birthday. Tell the time to the hour and half hour using an analogue clock. Explore the difference between seconds, minutes and hours measuring activities in each unit of time. Consolidation of learning (1 week)	Time (3 weeks) Read and draw the times to the hour, half past, quarter past and quarter to the hour. Read and show analogue time to 5-minute intervals. Learn that there are 24 hours in a day and 60 minutes in an hour. Children use clocks to convert minutes to hours and minutes. Find and compare the durations of events using start and end times. Statistics (2 weeks) Children are introduced to tally charts as a systematic method of recording data. Use tally charts to produce pictograms. Build pictograms using concrete apparatus then move to drawing pictures to complete missing columns or rows. Interpret, make comparisons and answer questions about the data presented in pictograms. Children collect data and draw pictograms where the symbols represent 2, 5 or 10 items. Position and direction (2 weeks) Children use language 'forwards', 'backwards', 'up', 'down', 'left' and 'right' to describe movement in a straight line. Children describe turns using the language 'full turn', 'half turn', 'quarter turn', 'three-quarter turn', 'clockwise' and 'anticlockwise'. Using this knowledge, describe and record directions and routes. Describe and create patterns that involve direction and turns. Consolidation of learning (2 weeks)

	Year 3	Year 4
Autumn	Place Value (3 weeks) Represent, partition, compare, order and use number lines to represent numbers up to 1,000, beginning with numbers up to 100. Investigate the structure of a number considering the hundreds, tens and ones using concrete resources such as place value counters, base 10 and place value charts. These can be used to find 1, 10 or 100 more or less than a given number or representation. Children build upon their knowledge of number lines up to 1,000 by reading, estimating and interpreting exact values. Children will apply their knowledge of the 5 times-tables to count in 50s from zero both forwards and backwards without going beyond 1,000. Addition and subtraction (5 weeks) Children will recap number bonds to 10 and apply this knowledge when adding and subtracting ls, 10s and 100s. Develop number sense through explicitly exploring calculations and making links. Add and subtract a 2-digit and 3-digit number with exchanges (across 10 and 100). To ensure accuracy, children will estimate and use inverse operations. Make decisions on the appropriate operation to use for word problems using bar models to support understanding. Multiplication and division A (4 weeks) Arrays are used to enhance the link between repeated addition and multiplication to refer to the times-table facts learnt in Year 2. Multiples of 2, 5 and 10 are revisited. Children are introduced to multiples of 3, 4 and 8 using their knowledge of equal groups and a range of concrete manipulatives and pictorial representations. Explore dividing by 3, 4 and 8 by sharing into equal groups. Explicit opportunities to make connections between the 2, 4 and 8 times-tables. Continue to develop fluency of times-table facts.	Place value (4 weeks) Represent, partition, compare and order numbers up to 10,000 beginning with investigating numbers to 1,000. Use number lines to estimate and consolidate learning. Round numbers to the nearest 10, 100 or 1,000. Find 1, 10, 100, and 1,000 more or less than a given number. Explore the similarities and differences between the Roman number system and our number system; learn that L represents 50 and C represents 100. Addition and subtraction (3 weeks) Add and subtract ls, 10s, 100s and 1,000s to any 4-digit number. Add and subtract two 4-digit numbers with more than one exchange. Investigate efficient subtraction strategies such as mental methods and choose the most appropriate. Estimate answers and develop further checking strategies to ensure accuracy. Area (1week) Investigate different methods to find an area of a two-dimensional shape or surface including counting squares and half squares. Make rectilinear shapes to further investigate area. Use greater than, less than and equal symbol to compare areas. Multiplication and division A (3 weeks) Use facts they already know to find unknown facts. Children bring together their knowledge of multiplying and dividing by 3, 6, 9, 7, 11and 12 to become more fluent in these multiplication and division facts. Explore multiplying by 1 and 0 and dividing a number by 1 and itself. Multiply three numbers; link this idea to commutativity and change the order of the numbers to group them more efficiently.
Spring	Multiplication and division B (3 weeks) Look at multiples of 10 beyond the times tables and explore related calculations using known facts. Children reason about multiplication in abstract representations. Multiply a 1-digit by a 2-digit number with exchanges using partitioning and concrete and pictorial representations. Develop understanding of related facts by linking multiplication and division facts. Divide a 2-digit number by a 1-digit number with exchanges and remainders using partitioning, concrete resources and pictorial representations. Children focus on scaling and correspondence problems. Length and perimeter (3 weeks) Measure in metres, centimetres and millimetres and understand the appropriateness of when to use different units. Children convert between metres, centimetres and millimetres using their knowledge of equivalent lengths. Compare and order lengths using comparison language and inequality symbols. Add and subtract lengths with different units. Introduce to perimeter for the first time. Measure and calculate perimeter. Fractions A (3 weeks) Explore denominators of unit fractions and compare and order these. Understand numerators and compare and order non-unit fractions. Investigate the whole in relation to fractions. Examine real-life contexts of measure by interpreting scales focusing on quarters, halves and thirds. Represent fractions on a number line counting forwards and backwards. Compare number lines and use bar models to find equivalent fractions. Mass and capacity (3 weeks) Use scales to read measurements by dividing 100 into 2, 4, 5 and 10 equal parts. Measure mass in grams and kilograms. Investigate equivalent masses. Measure capacity and volume in millilitres and litres. Add, subtract and compare masses, capacities and volumes.	Multiplication and division B (3 weeks) Children are introduced to factor pairs, using arrays to consolidate understanding. Multiply and divide integers by 10 and 100. Explore related facts within multiplication and division. Explore informal methods to multiply a 2-digit and 1-digit number using concrete and pictorial representations. Use formal written methods to multiply a 3-digit by a 1-digit number. Learn to divide a 3-digit number by a 1-digit number with remainders using concrete and pictorial representations. Use a range of representations and contexts and solve correspondence problems. Explore and make decisions about the most efficient multiplication method to use in a range of contexts. Length and perimeter (2 weeks) Measure lengths and convert between kilometres and metres. Calculate the perimeter of rectilinear shapes on a grid and using side lengths. Problem solve to find the missing lengths in rectilinear shapes to calculate the perimeter. Find perimeters of regular and irregular polygons. Fractions (4 weeks) Recap the part-whole relationship of fractions and explore fractions greater than 1. Partition a mixed number fraction. Compare and order mixed numbers and represent them on number lines. Convert between mixed number fractions and improper fractions. Investigate equivalent fractions on a number line and equivalent fraction families. Add and subtract fractions including mixed number fractions. Add two or more fractions together. Decimals A (3 weeks) Explore tenths and hundredths as fractions and decimals. Represent tenths and hundredths on a place value chart and number line. Divide a 1- or 2-digit number by 10 and 100.
Summer	Fractions B (2 weeks) Explore and represent a tenth in different ways including as decimals and count in tenths. Represent fractions beyond one whole on a number line. Find a fraction of an amount by dividing into equal groups and solve problems in various contexts. Compare and order fractions. Add and subtract fractions with the same denominator within one whole. Money (2 weeks) Understand the value of coins and notes and represent amounts in different ways. Convert between pounds and pence. Add and subtract two amounts of money using pictorial representations to support learning. Use number lines and part-whole models to subtract to find change. Time (3 weeks) Look at months, years and leap years. Discuss hours in a day and introduce children to language such as 'noon', 'midday' and 'midnight' 'a.m.' and 'p.m.' to describe the time of day. Tell the time to the nearest minute on an analogue clock and recognise and use Roman numerals on a clock face. Tell the time on a 24-hour digital clock. Find and compare the duration of events using digital and analogue clocks. Find the start and end times of events. Measure and compare durations of time in seconds. Shape (2 weeks) Recognise angles as a measure of a turn understanding clockwise and anti-clockwise. Investigate angles in shapes. Introduce to the words 'acute' and 'obtuse' as a way of describing angles. Measure and draw straight lines accurately in centimetres and millimetres. Practice rounding measurements to the nearest centimetre. Identify and find horizontal lines, vertical lines and lines of symmetry in a range of contexts. Find parallel and perpendicular lines. Recognise, describe properties and draw 2-D shapes accurately. Recognise, describe and construct 3-D shapes. Statistics (2 weeks) Build on understanding of pictograms from Year 2 continuing to read and interpret information in order to answer questions about the data. Interpret information in pictograms and tally charts in order to construct bar charts. Interpret data from tables to answer one and two-step problems.	Decimals B (2 weeks) Children look at the place value of decimal numbers and counting in decimals. Explore making a whole from any number of tenths and hundredths. Compare and order decimals up to 2 decimal places. Round numbers with 1 decimal place to the nearest whole. Write one half, one quarter and three quarters as decimals. Money (2 weeks) Recap converting between pounds and pence and adding and subtracting with money. Partition pounds and pence; children are introduced to decimal notation. Compare amounts using the knowledge that £1 = lO0p. Estimate with money by rounding to the nearest pound. Solve simple problems with money involving the four operations(+,-, x, -;.) exploring methods such as partitioning and recombining to add money. Time (2 weeks) Recap telling the time to the nearest minute and using the 12- and 24-hour clock. Using knowledge of the four operations(+,-, x, -;.), convert between different units of time (hours, minutes, seconds, years, months, weeks and days). Convert between analogue and digital times using the 12- and 24-hour clocks. Shape (2 weeks) Identify obtuse, acute and right angles. Compare and order angles in ascending and descending order. Classify triangles for the first time using the names 'isosceles', 'scalene' and 'equilateral' using rulers to measure sides. Name and draw quadrilaterals and describe their properties. Find and identify lines of symmetry within 2-D shapes. Statistics (1 week) Decide which scale is most appropriate when drawing bar charts from information gathered. Answer and ask questions about data in pictograms, bar charts and tables. Children are introduced to line graphs in the context of time and create graphs to represent continuous data. Solve comparison, sum and difference problems using discrete and continuous data with a range of scales. Position and direction (2 weeks) Children are introduced to coordinates for the first time and they describe positions and plot points in the first quadrant. Move shapes and points in specific directions.

	Year 5	Year 6
Autumn	Place value (3 weeks) Children will learn to read, write, order, compare, partition and round numbers up to one million. Record numbers up to one thousand as Roman numerals. Place numbers on number lines and solve problems applying this learning. Addition and subtraction (2 weeks) Mental strategies will continue to be developed as well as written methods where children will add and subtract whole numbers with more than four digits. Use rounding and inverse calculations to check accuracy of methods. Solve multi-step addition and subtraction problems including finding missing numbers. Multiplication and division A (3 weeks) Find common multiples and factors between two numbers. Prime, square and cube numbers will also be introduced. Multiply and divide numbers by 10, 100 and 1,000 as well as finding multiples of 10, 100 and 1.000. Fractions A (4 weeks) Children learn to find and recognise equivalent fractions for unit and non-unit fractions. Convert between mixed and improper fractions. Compare and order fractions. Add and subtract fractions with the same denominator. Following this, add and subtract fractions with different denominators where the denominator is a factor or multiple of the other denominator. Add fractions within and greater than 1. Add and subtract fractions involving mixed number fractions.	Place value (2 weeks) Read, write and investigate numbers to ten million using concrete and pictorial resources. Learning how to use and problem solve with number lines and apply this to negative numbers. Compare, order and round integers up to ten million. Use place value knowledge and power of ten to identify integers that are 10, 100, 1,000 times the size, or one-tenth, one-hundredth, one-thousandth the size of other integers. Addition, subtraction, multiplication and division (5 weeks) Add and subtract integers both mentally and in formal written methods and apply knowledge to multi-step problems. Use estimation to check for accuracy. Use their times table and division knowledge to find factors, multiples, primes numbers to 100 and square and cube numbers. Multiply up to a 4-digit number by a 2-digit number. Recap short division and learn the long division written method (chunking) including remainders. Learn the rules for the order of operations. Children of all abilities apply their learning to problem solving and reasoning activities. Fractions A and B (4 weeks) Understand equivalent fractions and simplifying. Compare and order fractions using the denominator or numerator. Add and subtract simple and mixed number fractions including when problem solving. Multiply fractions by integers and fractions. Divide fractions by integers. Find fractions of an amount and missing values using bar models. Position and direction (1 week) Recap reading and plotting coordinates on the first quadrant. Read and plot coordinates in all four quadrants, draw shapes from given coordinates and find the length of a line using coordinates of its two endpoints. Use knowledge of coordinates and positional language to translating and reflecting shapes in all four quadrants.
Spring	Multiplication and division B (3 weeks) Multiply up to a 4-digit number by a 2-digit number using the long multiplication method (expanded) where necessary. Introduce to short division. Divide up to a 4-digit number by a 1-digit number (including questions with remainders) and choose the most efficient method. Solve problems with multiplication and division. Fractions B (2 weeks) Multiply a unit or non-unit fraction by an integer. Multiply a mixed number by an integer. Calculate a fraction of a quantity or of an amount. Use a fraction of an amount to find a whole. Look at fractions as operators. Decimals and percentages (3 weeks) Represent tenths, hundredths and thousandths as decimals and fractions. Investigate equivalent fractions and decimals specifically focusing on halves, quarters, fifths and tenths. Place value counters and place value charts are used to introduce children to thousandths which are also represented as fractions and decimals. Order and compare decimals up to three decimal places. Children will round numbers with **1** and 2 decimal places to the nearest whole number or **1** decimal place. Introduce children to percentages and compare these to fractions and decimals. Find equivalent fractions, decimal and percentages focusing on the equivalents to halves, quarters, fifths and tenths. Perimeter and area (2 weeks) Use a ruler to accurately measure the perimeter of a rectangle, rectilinear shapes and polygons. Explore different methods of finding the perimeter and solve problems to find missing lengths. Find areas and missing lengths from geometric shapes including compound shapes. Estimate the area of non-rectilinear shapes. Statistics (2 weeks) Draw, read and interpret line graphs and solve problems using them. Read and interpret tables (including two-way tables and timetables) applying addition and subtraction skills as well as making comparisons.	Decimals (2 weeks) Represent numbers up to 3 decimal places. Round, add and subtract decimals. Multiply and divide decimals by integers. Multiply and divide decimals by integers and in different contexts. Converting units (1 week) Compare, convert and complete calculations with a range of metric and imperial measures including miles and kilometres. Fractions, Decimals and Percentages (2 weeks) Find equivalent decimals, fractions and percentages. Order and compare decimals, fractions and percentages. Find percentages of an amount that require multiple steps and find a whole number from a given percentage. Ratio (2 weeks) Children are introduced to ratio representing a multiplicative relationship between two amounts, ratio language and the ratio symbol whilst exploring the similarities and differences to fractions. Children will learn scale factors and scale drawing as well as solving ratio, proportion and recipe problems. Algebra (2 weeks) Complete 1-step and 2-step function machines to use the inverse to find an unknown value. Form expressions from word problems and diagrams. Use substitution and formulae to find values. Form equations from word problems and diagrams. Solve 1-step and 2-step equations and solve problems with two unknown values. Shape (3 weeks) Recap measuring angles accurately with a protractor. Calculate missing angles by applying understanding of angles in a right angle, on a straight line and around a point. Recognise that opposite angles share a vertex and that they are equal; continue to apply knowledge of angles on a straight line. Explore interior angles in different triangles and quadrilaterals and solve missing angle problems. Draw shapes and nets of 3-D shapes accurately.
Summer	Shape (3 weeks) Define angles in terms of degrees and as fractions of a full turn. Reflex angles are introduced explicitly. Children measure angles using a protractor. Accurately draw lines to the nearest millimetre and draw angles. Calculate missing angles on a straight line and around a point. Calculate lengths and angles in shapes. Distinguish between regular and irregular polygons and calculate sizes of missing angles. Reason and problem solve with 3-D shapes. Position and direction (2 weeks) Recap use of coordinates and investigate positions in the first quadrant. Translate coordinates and shapes. Reflect objects and coordinates using lines that are parallel to the axes. Decimals (3 weeks) Using place value and knowledge of exchange, subtract decimals within 1. Find compliments which sum to make 1 and use this to add decimals crossing the whole. Add and subtract numbers with decimals up to two decimal places. Add and subtract numbers with decimals from integers. Investigate and create decimal sequences. Multiply and divide by 10, 100 and 1,000. Negative numbers (1 week) Continue to explore negative numbers and their position on a number line. Use negative number in context, such as temperature, to be able to count back through zero. Converting units (2 weeks) Convert between millimetres, centimetres, metres and kilometres, grams to kilograms, milligrams and litres and vice versa. Choose the appropriate unit for measurement. Introduce to imperial measurements and approximate equivalences for inches, pounds and pints. Convert between different units of time and use timetables to retrieve information and solve problems. Volume (1 week) Define volume and capacity. Compare, order and estimate the volume and capacity of different solids made of cubes.	Area, Perimeter and Volume (2 weeks) Find the area and perimeter of shapes including triangles and parallelograms using formula. Find the volume of cubes and cuboids using formula. Statistics (2 weeks) Find information from and draw line graphs (including those with more than one line). Interpret duel bar charts. Read, interpret and draw pie charts including those with percentages. Find the mean from a set of data. Themed projects and consolidation Throughout this unit, children will learn to apply maths and develop skills that will be essential in everyday life. Bakery unit Children learn how to use scaling within recipes, create shopping lists for ingredients, learn the concept of profit and loss and calculate sales prices to make profits. In this project, children will also design packages using knowledge of 3D shapes, area and volume and investigating real-life problems encountered when cooking and baking. Futures unit Children will investigate salaries, hourly rates and paying bills including mortgages.