WINSLOW CHURCH OF ENGLAND SCHOOL

Maths Medium Term Overviews

Early Years: Autumn.

Pupils will build on previous experiences of number from their home and nursery environments, and further develop their subitising and counting skills.
They will explore the composition of numbers within 5.
They will begin to compare sets of objects and use the language of comparison.

Pupils will:

• identify when a set can be subitised and when counting is needed
• subitise different arrangements, both unstructured and structured, including using the Hungarian number frame
• make different arrangements of numbers within 5 and talk about what they can see, to develop their conceptual subitising skills
• spot smaller numbers 'hiding' inside larger numbersconnect quantities and numbers to finger patterns and explore different ways of representing numbers on their fingers
• hear and join in with the counting sequence, and connect this to the 'staircase' pattern of the counting numbers, seeing that each number is made of one more than the previous number
• develop counting skills and knowledge, including: that the last number in the count tells us 'how many' (cardinality); to be accurate in counting, each thing must be counted once and once only and in any order; the need for 1:1 correspondence; understanding that anything can be counted, including actions and sounds
• compare sets of objects by matching
• begin to develop the language of 'whole' when talking about objects which have parts

Shape/ space/ measure and pattern:

• Select, rotate and manipulate shapes to develop spatial reasoning skills
• Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can
• Continue, copy and create repeating patterns
• Compare length, weight and capacity

Early Years: Spring.

Pupils will continue to develop their subitising and counting skills and explore the composition of numbers within and beyond 5.
They will begin to identify when two sets are equal or unequal and connect two equal groups to doubles. They will begin to connect quantities to numerals.

Pupils will:

- continue to develop their subitising skills for numbers within and beyond 5, and increasingly connect quantities to numerals
- begin to identify missing parts for numbers within 5
- explore the structure of the numbers 6 and 7 as '5 and a bit' and connect this to finger patterns and the Hungarian number frame
- focus on equal and unequal groups when comparing numbersunderstand that two equal groups can be called a 'double' and connect this to finger patterns
- sort odd and even numbers according to their 'shape'
- continue to develop their understanding of the counting sequence and link cardinality and ordinality through the 'staircase' pattern
- order numbers and play track games
- join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers

Shape/ space/ measure and pattern:

- Select, rotate and manipulate shapes to develop spatial reasoning skills
- Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can
- Continue, copy and create repeating patterns
- Compare length, weight and capacity

Early Years: Summer.

Pupils will consolidate their counting skills, counting to larger numbers and developing a wider range of counting strategies.
They will secure knowledge of number facts through varied practice.

Pupils will:

• continue to develop their counting skills, counting larger sets as well as counting actions and sounds
• explore a range of representations of numbers, including the 10-frame, and see how doubles can be arranged in a 10-frame
• compare quantities and numbers, including sets of objects which have different attributes
• continue to develop a sense of magnitude, e.g. knowing that 8 is quite a lot more than 2, but 4 is only a little bit more than 2begin to generalise about 'one more than' and 'one less than' numbers within 10
• continue to identify when sets can be subitised and when counting is necessary
• develop conceptual subitising skills including when using a rekenrek

Shape/ space/ measure and pattern:

• Select, rotate and manipulate shapes to develop spatial reasoning skills
• Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can
• Continue, copy and create repeating patterns
• Compare length, weight and capacity

Year 1: Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Place Value (within 10). ▪ Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. ▪ Count numbers to 100 in numerals; count in multiples of twos, fives and tens. ▪ Identify and represent numbers using objects and pictorial representations. Read and write numbers to 100 in numerals. ▪ Read and write numbers from 1 to 20 in numerals and words. ▪ Given a number, identify one more and one less.					***Number: Addition and Subtraction (within 10).*** ▪ Add and subtract one-digit and two-digit numbers to 20, including zero. ▪ Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = χ – 9.					***Geometry: Shape.*** ▪ Recognise and name common 2-D shapes [for example, rectangles (including squares), circles and triangles]. ▪ Recognise and name common 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].	Cons.

Year 1: Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Place Value (within 20). ▪ Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. Count numbers to 100 in numerals; count in multiples of twos, fives and tens ▪ identify and represent numbers using objects and pictorial representations ▪ Read and write numbers to 100 in numerals. ▪ Read and write numbers from 1 to 20 in numerals and words. ▪ Given a number, identify one more and one less.			***Number: Addition and Subtraction (within 20).*** ▪ Add and subtract one-digit and two-digit numbers to 20, including zero. ▪ Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = χ – 9.			***Number: Place Value (within 50 – multiples of 2, 5 and 10 included).*** ▪ Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. ▪ Count numbers to 100 in numerals. ▪ Count in multiples of twos, fives and tens. ▪ Identify and represent numbers using objects and pictorial representations. ▪ Read and write numbers to 100 in numerals. ▪ Read and write numbers from 1 to 20 in numerals and words. ▪ Given a number, identify one more and one less.		***Measurement: Length and Height.*** ▪ Compare, describe and solve practical problems for: ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time. ▪ Measure and begin to record the following: ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time (hours, minutes, seconds).		***Measurement: Mass and Volume.*** ▪ Compare, describe and solve practical problems for: ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time. ▪ Measure and begin to record the following: ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time (hours, minutes, seconds)	

Year 1: Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Multiplication and Division. ▪ Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.			***Number: Fractions.*** ▪ Recognise, find and name a half as one of two equal parts of an object, shape or quantity. ▪ Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.		***Geometry: Position and Direction.*** ▪ Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	***Number: Place Value (within 100).*** ▪ Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. ▪ Count numbers to 100 in numerals. ▪ Count in multiples of twos, fives and tens. ▪ Identify and represent numbers using objects and pictorial representations. ▪ Read and write numbers to 100 in numerals. ▪ Read and write numbers from 1 to 20 in numerals and words. ▪ Given a number, identify one more and one less.		***Measurement: Money.*** ▪ Recognise and know the value of different denominations of coins and notes.	***Measurement: Time.*** ▪ Compare, describe and solve practical problems for: ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time. ▪ Measure and begin to record the following: ➢ lengths and heights ➢ mass/weight ➢ capacity and volume ➢ time (hours, minutes, seconds). ▪ Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]. ▪ Recognise and use language relating to dates, including days of the week, weeks, months and years. ▪ Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.		***Cons.***

Year 2: Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Place value. ▪ Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward. ▪ Read and write numbers to at least 100 in numerals and in words. ▪ Identify, represent and estimate numbers using different representations, including the number line. ▪ Recognise the place value of each digit in a two-digit number (tens, ones). ▪ Compare and order numbers from 0 up to 100. ▪ Use > < and = signs. ▪ Use place value and number facts to solve problems.				***Number: Addition and subtraction.*** ▪ 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. ▪ 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.					***Geometry: Shape.*** ▪ Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. ▪ 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 shapes and everyday objects. ▪ Recognise and name common 3- D shapes [for example, cuboids (including cubes), pyramids and spheres]. ▪ Compare and sort common 3-D shapes and everyday objects.		

Year 2: Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Measurement: Money. ▪ Recognise and use symbols for pounds (£) and pence (p). ▪ 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.		***Number: Multiplication and division.*** ▪ Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. ▪ Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. ▪ Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs. ▪ Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.					***Measurement: Length and height.*** ▪ Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit, using rulers. ▪ Compare and order lengths and record the results using >, < and =.		***Measurement: Mass, capacity and temperature.*** ▪ Choose and use appropriate standard units to estimate and measure mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using scales, thermometers and measuring vessels. ▪ Compare and order mass, volume/capacity and record the results using >, < and =.		

Year 2: Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Fractions. ▪ Recognise, find, name and write fractions 1/3, 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity. ▪ Recognise the equivalence of 2/4 and ½. ▪ Write simple fractions for example, 1/2 of 6 = 3.			***Measurement: Time.*** ▪ 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. ▪ Know the number of minutes in an hour and the number of hours in a day.			***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.		***Geometry: Position and direction.*** ▪ 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 anticlockwise).		***Consolidation.***	

Year 3: Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Place value. ▪ Identify, represent and estimate numbers using different representations. ▪ Read and write numbers up to 1000 in numerals and in words. ▪ Count from 0 in multiples of 4, 8, 50 and 100. ▪ Find 10 or 100 more or less than a given number. ▪ Recognise the place value of each digit in a three-digit number (hundreds, tens, ones). ▪ Compare and order numbers up to 1000. ▪ Solve number problems and practical problems involving these ideas.			***Number: Addition and subtraction.*** ▪ Add and subtract numbers mentally, including: ➢ a three-digit number and ones ➢ a three-digit number and tens ➢ a three-digit number and hundreds. ▪ Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction. ▪ Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.					***Number: Multiplication and division A.*** ▪ Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. ▪ Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ▪ Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods.		

Year 3: Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Multiplication and division B. ▪ Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. ▪ Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods. ▪ Solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.			***Measurement: Length and perimeter.*** ▪ Measure, compare, add and subtract: lengths (m/cm/mm). ▪ Measure the perimeter of simple 2-D shapes			***Number: Fractions A.*** ▪ Count up and down in tenths. ▪ Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. ▪ Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators. ▪ Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators. ▪ Recognise and show, using diagrams, equivalent fractions with small denominators. ▪ Compare and order unit fractions, and fractions with the same denominators. ▪ Solve problems that involve all of the above.			***Measurement: Mass and capacity.*** ▪ measure, compare, add and subtract: mass (kg/g); volume/capacity (l/ml).		

Year 3: Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Fractions B. ▪ Add and subtract fractions with the same denominator within one whole [for example, 5/7 + 1/7 = 6/7. ▪ Solve problems that involve all of the above.		***Measurement: Money.*** ▪ Add and subtract amounts of money. To give change, using both £ and p in practical contexts.		***Measurement: Time.*** ▪ Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12- hour and 24-hour clocks. ▪ Estimate and read time with increasing accuracy to the nearest minute. ▪ Record and compare time in terms of seconds, minutes and hours. ▪ Use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. ▪ Know the number of seconds in a minute and the number of days in each month, year and leap year. ▪ Compare durations of events [for example to calculate the time taken by particular events or tasks].			***Geometry: Shape.*** ▪ Draw 2-D shapes. ▪ Make 3-D shapes using modelling materials. ▪ Recognise 3-D shapes in different orientations and describe them ▪ recognise angles as a property of shape or a description of a turn. ▪ Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn. ▪ Identify whether angles are greater than or less than a right angle. ▪ Identify horizontal and vertical lines and pairs of perpendicular and parallel lines.		***Statistics.*** ▪ Interpret and present data using bar charts, pictograms and tables. ▪ Solve one-step and two-step questions [for example, 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables.		***Cons.***

Year 4: Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Place value. ▪ Count in multiples of 6, 7, 9, 25 and 1000. Count backwards through zero to include negative numbers. ▪ Identify, represent and estimate numbers using different representations. ▪ 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. ▪ 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 beyond 1000. ▪ 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.				***Number: Addition and subtraction.*** ▪ Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate. ▪ Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.			***Measurement: Area.*** ▪ Find the area of rectilinear shapes by counting squares.	***Number: Multiplication and division A.*** ▪ Count in multiples of 6, 7, 9, 25 and 1000. ▪ Count backwards through zero to include negative numbers. ▪ 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 commutativity in mental calculations.			***Cons.***

Year 4: Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Multiplication and division B. ▪ 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 commutativity in mental calculations. ▪ Multiply two-digit and three-digit numbers by a one-digit number using formal written layout. ▪ 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.			***Measurement: Length and perimeter.*** ▪ Convert between different units of measure [for example, kilometre to metre]. ▪ Estimate, compare and calculate different measures. ▪ Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres.		***Number: Fractions.*** ▪ Recognise and show, using diagrams, families of common equivalent fractions. ▪ Add and subtract fractions with the same denominator. ▪ 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. ▪ Solve simple measure and money problems involving fractions and decimals to two decimal places.				***Number: Decimals A.*** ▪ Count up and down in hundredths. Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ▪ Recognise and write decimal equivalents of any number of tenths or hundredths. ▪ Recognise and write decimal equivalents to 1/4, 1/2, ¾. ▪ 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. ▪ Solve simple measure and money problems involving fractions and decimals to two decimal places.		

Year 4: Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Decimals A. ▪ Count up and down in hundredths. Recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ▪ Recognise and write decimal equivalents of any number of tenths or hundredths. ▪ Recognise and write decimal equivalents to 1/4, 1/2, ¾. ▪ 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. ▪ Solve simple measure and money problems involving fractions and decimals to two decimal places.		***Measurement: Money.*** ▪ Estimate, compare and calculate different measures, including money in pounds and pence.		***Measurement: Time.*** ▪ Convert between different units of measure [for example, hour to minute]. ▪ Estimate, compare and calculate different measures. ▪ 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.		***Cons.***	***Geometry: Shape.*** ▪ 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. ▪ 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. ▪ Complete a simple symmetric figure with respect to a specific line of symmetry.		***Statistics.*** ▪ 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.	***Geometry: Position and direction.*** ▪ 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.	

Year 5: Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Place value. ▪ Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. ▪ Count forwards and backwards with positive and negative whole numbers, including through zero. ▪ Read, write, (order and compare) numbers to at least 1,000,000 and determine the value of each digit. ▪ Read Roman numerals to 1,000 (M) and recognise years written in Roman numerals. ▪ (Read, write) order and compare numbers to at least 1,000,000 and determine the value of each digit. ▪ Interpret negative numbers in context. ▪ Round any number up to 1,000,000 to the nearest 10, 100, 1,000, 10,000 and 100 000. ▪ Solve number problems and practical problems that involve all of the above.			***Number: Addition and subtraction.*** ▪ Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). ▪ Add and subtract numbers mentally with increasingly large numbers. ▪ Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. ▪ Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.		***Number: Multiplication and division A.*** ▪ Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers. ▪ Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers. ▪ Establish whether a number up to 100 is prime and recall prime numbers up to 19. ▪ Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}). ▪ Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. ▪ Multiply and divide numbers mentally drawing upon known facts. ▪ Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. ▪ Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. ▪ Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. ▪ Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.			***Number: Fractions A.*** ▪ Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. ▪ Recognise mixed numbers and improper fractions and convert from one form to the other, and write mathematical statements > 1 as a mixed number [for example, 2/5 + 4/5 = 6/5 = 1 1/5. ▪ Compare and order fractions whose denominators are all multiples of the same number. ▪ Add and subtract fractions with the same denominator and denominators that are multiples of the same number. ▪ Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.			

Year 5: Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Multiplication and division B. ▪ Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers. ▪ Multiply and divide numbers mentally drawing upon known facts. ▪ Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. ▪ Multiply and divide whole numbers and those involving decimals by 10, 100 and 1,000. ▪ Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes. ▪ Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates. ▪ Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.			***Number: Fractions B.*** ▪ Add and subtract fractions with the same denominator and denominators that are multiples of the same number. ▪ Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.		***Number: Decimals and percentages.*** ▪ Read and write decimal numbers as fractions [for example, 0.71 = 71/100]. Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. ▪ Round decimals with two decimal places to the nearest whole number and to one decimal place. ▪ Read, write, order and compare numbers with up to three decimal places. ▪ Recognise the percent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal. ▪ Solve problems which require knowing percentage and decimal equivalents of 1/2, 1/4, 1/5, 2/5, 4/5 and those fractions with a denominator of a multiple of 10 or 25.			***Measurement: Area and perimeter.*** ▪ Convert between different units of metric measure. ▪ Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. ▪ Use all four operations to solve problems involving measure using decimal notation, including scaling ▪ Measure, and calculate the perimeter of composite rectilinear shapes in centimetres and metres. ▪ Calculate and compare the area of rectangles (including squares) and including using standard units, square centimetres (cm^2) and square metres (m^2) and estimate the area of irregular shapes.		***Statistics.*** ▪ Complete, read and interpret information in tables, including timetables. ▪ Solve comparison, sum and difference problems using information presented in a line graph.	

Year 5: Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Geometry: Shape. ▪ Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. ▪ Use the properties of rectangles to deduce related facts and find missing lengths and angles. ▪ Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.			***Geometry: Position and direction.*** ▪ Know angles are measured in degrees. ▪ Estimate and compare acute, obtuse and reflex angles. ▪ Draw given angles, and measure them in degrees. ▪ Identify: ➢ angles at a point and one whole turn (total 360°) ➢ angles at a point on a straight line and 1 2 a turn (total 180°) ➢ other multiples of 90°. ▪ Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.		***Number: Decimals.*** ▪ Read and write decimal numbers as fractions [for example, 0.71 = 71/100]. ▪ Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents. ▪ Round decimals with two decimal places to the nearest whole number, and to one decimal place. ▪ Read, write, order and compare numbers with up to three decimal places. ▪ Use all four operations to solve problems involving measure [for example, money].			***Number: Negative numbers.*** ▪ Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000. Count forwards and backwards with positive and negative whole numbers, including through zero.	***Measurement: Converting units.*** ▪ Convert between different units of metric measure. ▪ Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. ▪ Use all four operations to solve problems involving measure [for example, length, mass, volume, money] using decimal notation, including scaling. ▪ Solve problems involving converting between units of time.		***Measurement: Volume.*** ▪ Convert between different units of metric measure. ▪ Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. ▪ Use all four operations to solve problems involving measure, using decimal notation, including scaling. ▪ Estimate volume [for example, using blocks to build cuboids] and capacity [for example, using water].

Year 6: Autumn

Week 1 / Week 2	Week 3 / Week 4 / Week 5 / Week 6 / Week 7	Week 8 / Week 9	Week 10 / Week 11	Week 12
Number: Place value. ▪ Read, write, (order and compare) numbers up to 10,000,000 and determine the value of each digit. ▪ (Read, write), order and compare numbers up to 10,000,000 and determine the value of each digit. ▪ Round any whole number to a required degree of accuracy. ▪ Use negative numbers in context, and calculate intervals across zero. Solve number and practical problems that involve all of the above.	***Addition, subtraction, multiplication and division.*** ▪ Perform mental calculations, including with mixed operations and large numbers. ▪ Use their knowledge of the order of operations to carry out calculations involving the four operations. ▪ Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why. ▪ Identify common factors, common multiples and prime numbers. ▪ Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. ▪ Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication. Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. ▪ Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context. ▪ Perform mental calculations, including with mixed operations and large numbers. ▪ Solve problems involving addition, subtraction, multiplication and division. ▪ Use their knowledge of the order of operations to carry out calculations involving the four operations.	***Number: Fractions A.*** ▪ Use common factors to simplify fractions. ▪ Use common multiples to express fractions in the same denomination. ▪ Compare and order fractions, including fractions > 1. ▪ Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions. ▪ Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example,1/4 × 1/2 = 1/8]. ▪ Divide proper fractions by whole numbers [for example 1/3 ÷ 2 = 1/6].	***Number: Fractions B.*** ▪ Add and subtract fractions with different denominators, and mixed numbers, using the concept of equivalent fractions. ▪ Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example,1/4 × 1/2 = 1/8]. ▪ Divide proper fractions by whole numbers [for example 1/3 ÷ 2 = 1/6].	***Measurement: Converting units.*** ▪ Solve problems involving the calculation and conversion of units of measure, using decimal notation up to 3 d.p. where appropriate. ▪ Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 d.p. ▪ Convert between miles and kilometres. ▪ Use, read, write and convert between standard units, converting measurements of time from a smaller unit of measure to a larger unit, and vice versa.

Year 6: Spring

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number: Ratio. ▪ Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. ▪ Solve problems involving the calculation/use of percentages for comparison. ▪ Solve problems involving similar shapes where the scale factor is known or can be found. ▪ Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.		***Number: Algebra.*** ▪ Use simple formulae. ▪ Generate and describe linear number sequences. ▪ Express missing number problems algebraically. ▪ Find pairs of numbers that satisfy an equation with two unknowns. ▪ Enumerate possibilities of combinations of two variables.		***Number: Decimals.*** ▪ Identify the value of each digit in numbers given to three decimal places. ▪ Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]. Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.		***Number: Fractions, decimals and percentages.*** ▪ Associate a fraction with division and calculate decimal fraction equivalents [for example, 0.375] for a simple fraction [for example, 3/8]. ▪ Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.		***Measurement: Area, perimeter and volume.*** ▪ Recognise that shapes with the same areas can have different perimeters and vice versa. ▪ Recognise when it is possible to use formulae for area and volume of shapes. ▪ Calculate the area of parallelograms and triangles. ▪ Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm^3) and cubic metres (m^3), and extending to other units.		***Statistics.*** ▪ Interpret and construct pie charts and line graphs and use these to solve problems. ▪ Calculate and interpret the mean as an average.	

Year 6: Summer

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Geometry: Shape. ▪ Draw 2-D shapes using given dimensions and angles. ▪ Compare and classify geometric shapes based on their properties and sizes. ▪ Illustrate and name parts of circles, including radius, diameter and circumference, and know that the diameter is twice the radius. ▪ Recognise, describe and build simple 3-D shapes, including making nets. ▪ Find unknown angles in any triangles, quadrilaterals, and regular polygons. ▪ Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles.			***Geometry: Position and direction.*** ▪ Describe positions on the full coordinate grid (all four quadrants). ▪ Draw and translate simple shapes on the coordinate plane, and reflect them in the axes.								