

Y5	Autumn	
Week 1	Number: Place Value	N1 Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit N2 Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 N5 Solve number problems and practical problems that involve all of the above N30 Round decimals with two decimal places to the nearest whole number and to one decimal place N31 Read, write, order and compare numbers with up to three decimal places
Week 2	Number: Place Value	N3 Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero N4 Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 N5 Solve number problems and practical problems that involve all of the above N30 Round decimals with two decimal places to the nearest whole number and to one decimal place N31 Read, write, order and compare numbers with up to three decimal places
Week 3	Number: addition and subtraction	N7 Add whole numbers with more than 4 digits, including using formal written methods (columnar addition) N8 Subtract whole numbers with more than 4 digits, including using formal written methods (columnar subtraction) N9 Add and subtract numbers mentally with increasingly large numbers N10 Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy N11 Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
Week 4	Measurement	M1 Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) M2 Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints M7 Use all four operations to solve problems involving measure [e.g. length, mass, volume, money] using decimal notation, including scaling
Week 5	Number: multiplication and division	N12 Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers N13 Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers N14 Establish whether a number up to 100 is prime and recall prime numbers up to 19 N19 Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)
Week 6	Measurement	M3 Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres M4 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 M7 Use all four operations to solve problems involving measure [e.g. length, mass, volume, money] using decimal notation, including scaling
Week 7	Statistics Measurement	M6 Solve problems involving converting between units of time S1 Solve comparison, sum and difference problems using information presented in a line graph S2 Complete, read and interpret information in tables, including timetables
Week 8	Geometry	G2 Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles G3 Draw given angles, and measure them in degrees ($^\circ$) G4 Identify angles at a point and one whole turn (total 360°) G5 Identify angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°) G6 Identify other multiples of 90°

Week 9	Number: multiplication and division	N15 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 N18 Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 N20 Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
Week 10	Number: multiplication and division	N17 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 N18 Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000 N19 Recognise and use square numbers and cube numbers, and the notation for squared (²) and cubed (³) N20 Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes
Week 11	Geometry	G1 Identify 3-D shapes, including cubes and other cuboids, from 2-D representations G7 Use the properties of rectangles to deduce related facts and find missing lengths and angles G8 Distinguish between regular and irregular polygons based on reasoning about equal sides and angles G9 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
Week 12	Number: fractions	N24 Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths N25 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, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$]

Y5	Spring	
Week 1	Number: fractions	N23 Compare and order fractions whose denominators are all multiples of the same number N26 Add and subtract fractions with the same denominator and denominators that are multiples of the same number N32 Solve problems involving number up to three decimal places
Week 2	Number: fractions	N27 Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams N28 Read and write decimal numbers as fractions [e.g. $0.71 = \frac{71}{100}$] N29 Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents N32 Solve problems involving number up to three decimal places
Week 3	Number: fraction, multiplication and division	N22 Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates N33 Recognise the per cent 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
Week 4	Geometry	G1 Identify 3-D shapes, including cubes and other cuboids, from 2-D representations G7 Use the properties of rectangles to deduce related facts and find missing lengths and angles G8 Distinguish between regular and irregular polygons based on reasoning about equal sides and angles

Week 5	Geometry	<p>G2 Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles</p> <p>G3 Draw given angles, and measure them in degrees ($^{\circ}$)</p> <p>G4 Identify angles at a point and one whole turn (total 360°)</p> <p>G5 Identify angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°)</p> <p>G6 Identify other multiples of 90°</p>
Week 6	Number: addition, subtraction, multiplication and division	<p>N7 Add whole numbers with more than 4 digits, including using formal written methods (columnar addition)</p> <p>N8 Subtract whole numbers with more than 4 digits, including using formal written methods (columnar subtraction)</p> <p>N11 Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why</p> <p>N21 Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p>
Week 7	Number: multiplication and division	<p>N15 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</p> <p>N17 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</p> <p>N21 Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</p> <p>N22 Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</p>
Week 8	Measurement	<p>M1 Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre)</p> <p>M2 Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints</p> <p>M7 Use all four operations to solve problems involving measure [e.g. length, mass, volume, money] using decimal notation, including scaling</p>
Week 9	Measurement	<p>M3 Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres</p> <p>M4 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</p> <p>M6 Solve problems involving converting between units of time</p>
Week 10	Statistics Measurement	<p>M6 Solve problems involving converting between units of time</p> <p>S1 Solve comparison, sum and difference problems using information presented in a line graph</p> <p>S2 Complete, read and interpret information in tables, including timetables</p>
Week 11	Number: multiplication and division	<p>N12 Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers</p> <p>N13 Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers</p> <p>N14 Establish whether a number up to 100 is prime and recall prime numbers up to 19</p> <p>N19 Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)</p>
Week 12	Assess and review	

Y5	Summer	
Week 1	Number: Fractions	N34 Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25 Also recap fractions from spring weeks 1, 2 and 3
Week 2	Geometry Measurement	G9 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 M7 Use all four operations to solve problems involving measure [e.g. length, mass, volume, money] using decimal notation, including scaling
Week 3	Number: Place value	N1 Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit N2 Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 N3 Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero N4 Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 N5 Solve number problems and practical problems that involve all of the above
Week 4	Number: Fractions	N23 Compare and order fractions whose denominators are all multiples of the same number N25 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, $\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}$] N26 Add and subtract fractions with the same denominator and denominators that are multiples of the same number N27 Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams
Week 5	Number: Fractions	N28 Read and write decimal numbers as fractions [e.g. $0.71 = \frac{71}{100}$] N29 Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents N30 Round decimals with two decimal places to the nearest whole number and to one decimal place N31 Read, write, order and compare numbers with up to three decimal places N32 Solve problems involving number up to three decimal places
Week 6	Measurement	M1 Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre) M2 Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints M5 Estimate volume [for example, using 1 cm^3 blocks to build cuboids (including cubes)] and capacity [e.g. using water]
Week 7	Measurement	M3 Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres M4 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 M7 Use all four operations to solve problems involving measure [e.g. length, mass, volume, money] using decimal notation, including scaling
Week 8	Number	N5 Solve number problems and practical problems that involve all of the above N11 Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why N21 Solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign

		N22 Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates N34 Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{5}$, $\frac{2}{5}$, $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25
Week 9	Geometry	G3 Draw given angles, and measure them in degrees ($^{\circ}$) G4 Identify angles at a point and one whole turn (total 360°) G5 Identify angles at a point on a straight line and $\frac{1}{2}$ a turn (total 180°)
Week 10	Statistics	S1 Solve comparison, sum and difference problems using information presented in a line graph S2 Complete, read and interpret information in tables, including timetables
Week 11		Investigations relating to problems
Week 12		Investigations relating to problems