Pathway 4

Autumn Term

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13	Week 14	Week 15
Number Place value / Rounding		Number Addition / Subtraction		Number Multiplication / Division		Number Fractions		Number Place value / Rounding		Number Addition / Subtraction		Number Multiplication / Division		Number Fractions
Measurement Time				Geometry 2-D / 3- D Shape		Statistics Use and Interpret		Measurement Perimeter and Area				Geometry Lines and Angles		Statistics Use and Interpret

Spring Term

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 / Rounding		Number Addition / Subtraction		Number Multiplication / Division		Number Fractions		Number Place value / Rounding		Number Addition / Subtraction	
Measurement Using Measures				Geometry 2-D / 3- D Shape		Statistics Use and Interpret		Measurement Time		Geometry Position and direction	

Summer Term

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 / Division		Number Fractions		Number Place value / Rounding		Number Addition / Subtraction		Number Multiplication / Division		Number Fractions	
Measurement Perimeter and Area				Geometry 2-D / 3-D Shape		Statistics Use and Interpret		Measurement Using Measures		Geometry Lines and Angles	

Pathway 4

Number: Addition and Subtraction
- Use both mental and written methods with increasingly large numbers to aid fluency e.g. mentally calculate 540 + 270 or 900 – 365
- Add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate
- Estimate and use inverse operations to check answers to a calculation
- Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why e.g. Mr Smith sets out on a 619 mile journey; he drives 320 miles before lunch and 185 miles after lunch; how much farther does he need to drive?

Number: Fractions (including decimals)
- Know that decimals and fractions are different ways of expressing proportions
- Recognise and show, using diagrams, families of common equivalent fractions
- Count using simple fractions and decimal fractions, both forwards and backwards and represent fractions and decimals on a number line and add and subtract fractions with the same denominator
- Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten
- Identify, name and write equivalent fractions of a given fraction, including tenths and hundredths and write decimal equivalents of any number of tenths or hundredths 1/4; 1/2; 3/4
- Solve problems to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number.
- Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as units, tenths and hundredths
- Round decimals with one decimal place to the nearest whole number and 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 e.g. Ben buys a toy costing £4.55 and ¼ kg of sweets costing £3.20 per kilo; how much change does he receive from £10?

Number: Multiplication and Division
- 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 e.g. 640 ÷ 8 = 80; 4 × 6 × 20
- 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
- Use the formal written method for short division with exact answers when dividing by a one-digit number e.g. 736 ÷ 8
- Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit e.g.34 × 6 = (30 ×6) + (4 × 6), integer scaling problems and harder correspondence problems such as n objects are connected to m objects e.g. 3 cakes shared equally between 10 children.

Number: Place Value
- Count in multiples of 6, 7, 9, 25 and 1000
- Order and compare numbers beyond 1000 and find 1000 more or less than a given number
- Count backwards through zero to include negative numbers
- Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)
- use positive and negative numbers in context and position them on a number line; state inequalities using the symbols < and >
- Identify, represent and estimate numbers using different representations including measures and measuring instruments
- Round any number to the nearest 10, 100 or 1000
- Solve number and practical problems that involve place value and rounding and with increasingly large positive numbers
- Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. e.g. 49 = XLIX

Statistics; Use and interpret data
- Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs, using a greater range of scales
- Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs

Measurement
Using Measure
- Convert between different units of measure (*e.g. kilometre to metre; hour to minute*)
- Estimate, compare and calculate different measures, including money in pounds and pence *e.g. put in order: 4.2kg, 4700g, 4½kg, 490g*
Time
- 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.
Perimeter and Area
- Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres *e.g. find the perimeter of an L-shape where the lengths are given or can be measured*
- Find the area of rectilinear shapes by counting squares *e.g. find the area of an L-shape drawn on squared paper*

Geometry: Properties of Shape
- Compare and classify geometric shapes, including quadrilaterals (e.g. parallelogram, rhombus, trapezium) and triangles (e.g. isosceles, equilateral, scalene), based on their properties and sizes.
- Complete a simple symmetric figure with respect to a specific line of symmetry.
- Identify lines of symmetry in 2-D shapes presented in different orientations
Lines and angles
- Identify acute and obtuse angles and compare and order angles up to two right angles by size, without using a protractor
- Compare lengths and angles to decide if a polygon is regular or irregular. e.g. regular polygons have edges with the same lengths and angles all the same size e.g. a square is the only regular quadrilateral
Geometry: Position and Direction
- Describe positions on a 2-D grid as coordinates in the first quadrant
- Plot specified points and draw sides to complete a given polygon.
- Describe movements between positions as translations of a given unit to the left/right and up/down