Year 5 term 5&6

Points in italics are either where statements have been moved from other year groups or to support progression *where no statement is given*

Oral and Mental calculation

- Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.
- Read, write, order and compare numbers with up to three decimal places.
- Round decimals with two decimal places to the nearest whole number.
- Round decimals with two decimal places to one decimal place
- Round whole numbers and decimal numbers to the nearest 10, 100, 1000.
- Know what each digit represents in any number or decimal number
- Count forwards and backwards in steps of 0.01, 0.1, 1, 10, 100, and 1000 from any positive number or decimal
- Count forwards and backwards with positive and negative whole numbers, including through zero.
- Count forwards and backwards in equal steps
- Count on and back in fractional steps including mixed numbers such as $1\frac{1}{2}$.
- Count on and back in decimal steps.
- Order and compare numbers, negative numbers, fractions or decimal numbers up to two decimal places.
- Know by heart facts for all multiplication tables up to 12 x 12
- Find all the factors pairs of a number,
- Find the common factors of two numbers.
- Add and subtract numbers mentally
- Find related facts from known addition, subtraction , multiplication or division facts
- Use partitioning to double or halve any decimal number
- Multiply and divide whole numbers and decimals by 10, 100 or 1000 and apply this to converting units of measurement.

Week	Main focus of teaching	
1	Number and place valuator solve problems • *Identify, represent and estimate numbers using the number line and place value counters.* • *Identify the value of each digit from millions to numbers with at least two decimal places using place value counters.* • *Create, complete and extend number sequences including those with multiplication and division steps Continue to order temperatures including those below 0°C.* • Interpret negative numbers in context • Solve number problems and practical problems that involve number and/or place value	

Year 5 term 5&6

Points in italics are either where statements have been moved from other year groups or to support progression *where no statement is given*

2	Fractions-addition and subtraction to solve problems • Recognise mixed numbers and improper fractions and convert from one to another • Compare and order fractions whose denominators are all multiples of the same number *(including on a number line).* • Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. • Estimate answers • *Consider the most appropriate strategy to solve a calculation: calculate mentally, use a jotting or a written method* • Add fractions with the same denominator and denominators that are multiples of the same number *(using diagrams and/ or manipulatives)*. • Subtract fractions with the same denominator and denominators that are multiples of the same number *(using diagrams and/or manipulatives)*. • Solve problems involving addition and/or subtraction of fractions	
3	Fractions –multiplication to solve problems • Continue to recognise mixed numbers and improper fractions and convert from one from to another. • Continue to compare and order fractions whose denominators are all multiples of the same number *(including on a number line).* • Continue to identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths. • Estimate answers • *Consider the most appropriate strategy to solve a calculation: calculate mentally, use a jotting or a written method* • Multiply proper fractions by whole numbers, supported by materials and diagrams – *link to equivalent fractions and factors* • Multiply mixed numbers by whole numbers, supported by materials and diagrams – *link to equivalent fractions and factors* • Solve problems involving multiplications of fractions	
4	Percentages- to solve problems • Recognise the per cent symbol (%) • understand that per cent relates to 'number of parts per hundred' • *understand the link between key fractions , decimals and percentages e.g. ½ ,0.5 and 50%*	

Year 5 term 5&6

Points in italics are either where statements have been moved from other year groups or to support progression *where no statement is given*

	• write percentages as a fraction with denominator 100 • write percentages as a decimal • *solve problems with percentages' including those where it is necessary to work backwards and find 10%* • Solve problems which require knowing percentage and decimal equivalents of • ½, ¼, 1/5, 1/10 Solve problems which require knowing of the percentage and decimal equivalents of $\frac{1}{2}, \frac{1}{4}, \frac{1}{5}, \frac{2}{5}, \frac{4}{5}$ Solve problems which require knowledge of the decimal and percentage equivalent of and those fractions with a denominator of a multiple of 10 or 25	
5	Addition and subtraction to solve problems • Estimate answers • *Consider the most appropriate strategy to solve a calculation: calculate*. • *mentally, use a jotting or a written method* • Add whole numbers with more than 4 digits and decimals with two decimal places, including using a compact written method • Subtract whole numbers with more than 4 digits and decimals with two decimal places, including using a compact written method • Solve problems involving addition, subtraction, multiplication and division and combinations of these	
6	Multiplication and division to solve problems • Estimate answers • *Consider the most appropriate strategy to solve a calculation: calculate mentally, use a jotting or a written method* • Multiply numbers up to 4 digits by a one- digit number including using a compact written method • Multiply numbers up to 4 digits by a two-digit number including using a compact written method of long multiplication. • Divide numbers up to 4 digits by a one-digit number including using a written method of short division • Interpret remainders in line with the context of the question. • Solve problems involving multiplication and division, including ➢ scaling by *numbers* and simple fractions ➢ problems involving simple rates. • Solve problems involving addition, subtraction, multiplication and division and combinations of these.	

Year 5 term 5&6

Points in italics are either where statements have been moved from other year groups or to support progression *where no statement is given*

7	Measures –Time to solve problems • *Continue to read, write and convert time between analogue and digital 12 and 24-hour clocks.* • Complete, read and interpret information in tables, including timetables. • Solve problems involving converting between units of time. • Understand and use approximate equivalences between metric and common imperial units such as pints. • Solve comparison, sum and difference problems using information presented in *all types of graph and tables including* a line graphs	
8	Measures to solve problems • Recognise and use square numbers and cube numbers, and the notation for squared (^{2}) and cubed (^{3}). • Continue to calculate and compare the area of rectangles (including squares), using standard units, square centimetres (cm ^{2}) and square metres (m ^{2}) • Continue to estimate (*and find*) the area of irregular shapes. • Use all four operations to solve problems involving measure (for example, mass, capacity and volume) using decimal notation, including scaling. • Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints	
9	. Shape and position and direction to solve problems • Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes • Use the properties of rectangles to find missing lengths and/or angles. • Identify 3-D shapes, including cubes and other cuboids, from 2-D representations. • Describe positions on the first quadrant of a coordinate grid. • Plot specified points and complete shapes. • Continue to 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	
10	Assess and review	