

Year 5	1	2	3	4	5	6	7	8	9	10	11	12
Autumn	<p>Number: Place Value</p> <p>I can read, write and represent numbers to 100,000.</p> <p>I can round any number up to 100,000 to the nearest 10, 100 and 1,000.</p> <p>I can compare and order numbers to 100,000.</p> <p>I can round numbers to the nearest 10,000 and 100,000.</p> <p>I can read, write and represent numbers to 1,000,000.</p> <p>I can count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000</p> <p>E.g. count from 67 000 in 10000s</p> <p>I can compare and order numbers to 1,000,000.</p> <p>I can round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.</p> <p>I can interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero</p> <p>I can read Roman numerals to 1000 (M) and recognise years written in Roman numerals</p>			<p>Number: Addition and Subtraction</p> <p>I can add whole numbers with more than 4 digits, including using formal written methods.</p> <p>I can subtract whole numbers with more than 4 digits, including using formal written methods.</p> <p>I can round to estimate and approximate answers.</p> <p>I can add and subtract numbers mentally with increasingly large numbers.</p>		<p>Statistics</p>	<p>Number: Multiplication and Division</p> <p>I can identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers</p> <p>I know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers</p> <p>I know how to find primes up to 100 and recall primes up to 19.</p> <p>I can recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3).</p> <p>I can multiply and divide whole numbers by multiples of 10, 100 and 1000.</p>				<p>Measurement: Perimeter and Area</p>	

	<p>Representations and structure</p> <p>Part part whole, bar model, number track, number lines, place value chart</p> <p>Place value counters, base 10, double-sided colour counters for negative numbers.</p>	<p>Fluency</p> <p>Automaticity of number bonds to apply to larger numbers.</p> <p>Representations and structure</p> <p>Part part whole, bar model, number track, number lines, place value chart</p> <p>Place value counters, base 10, cubes.</p>		<p>Fluency</p> <p>Automaticity of multiplication and division facts up to 12 x 12.</p> <p>Representations and structure</p> <p>Hundred square, number lines, number tracks, arrays, place value chart.</p> <p>Numicon, digit cards, place value counters, base 10.</p> <p>*equal groups of representations</p>	
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Spring	Consolidate	<p>Number: Multiplication and Division</p> <p>I can 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 to solve problems.</p> <p>I can 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>Number: Fractions</p> <p>I can identify, name and write equivalent fractions of any given fraction.</p> <p>I can recognise mixed numbers and improper fractions and convert from one form to the other.</p> <p>I can compare and order fractions less than one, whose denominators are all multiples of the same number.</p> <p>I can compare and order fractions greater than one, whose denominators are all multiples of the same number.</p> <p>I can add fractions with the same denominator and denominators that are multiples of the same number.</p> <p>I can add mixed numbers.</p> <p>I can subtract fractions with the same denominator and denominators that are multiples of the same number.</p> <p>I can subtract, breaking the whole (e.g. $2\frac{3}{4} - \frac{7}{8}$ – children need to exchange from a whole amount).</p> <p>I can subtract two mixed numbers.</p> <p>I can multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</p> <p>I can find fractions of an amount.</p> <p>I can use fractions as operators.</p>									<p>Number: Decimals and Percentages</p> <p>I can read, write, order and compare decimal numbers to 2 decimal places.</p> <p>I can read, write, order and compare decimal numbers as fractions, including tenths and hundredths.</p> <p>I can understand thousandths.</p> <p>I can understand thousandths as decimals.</p> <p>I can round to 1 decimal place.</p> <p>I can read, write, order and compare decimal numbers.</p> <p>I can recognise and understand the percent symbol and write percentages as a fraction with denominator of a 100 & as a decimal (equivalence).</p>

		<p>Fluency Automaticity of multiplication and division facts up to 12 x 12.</p> <p>Representations and structure Hundred square, number lines, number tracks, arrays, place value chart. Numicon, digit cards, place value counters, base 10. *equal groups of representations</p>	<p>Fluency Can understand that when using equivalence, I must apply the same rule to the numerator as the denominator (and vice versa). In mixed numbers, I can understand that I add the wholes then the parts. When subtracting mixed numbers, I understand the number of parts that make the whole and that they can be used to support with subtraction when breaking the whole (e.g. $2\frac{3}{4} - \frac{7}{8}$ so the children would use equivalence to convert $\frac{3}{4}$ to $\frac{6}{8}$ and recognise that $\frac{6}{8} - \frac{7}{8}$ is not possible so they will need to use one of the one wholes and add it to the $\frac{6}{8}$ to get $\frac{14}{8}$ to complete the subtraction. The answer would be $1\frac{7}{8}$). Can count in fractions. Can understand that when the numerators and denominators are the same, this is equal to one whole. Can understand that when comparing unit fractions the smaller the denominator, the larger the fraction (e.g. $\frac{1}{2} > \frac{1}{3}$). Can understand that when the denominators are the same, normal rules of arithmetic apply (e.g. $\frac{3}{7} + \frac{2}{7} = \frac{5}{7}$)</p> <p>Representations and structure Bar model, shape, non-examples and examples (e.g. not two equal parts, compared to two equal parts), number line (with pictorial representations and fraction form), part part whole.</p>	<p>Fluency Know that the decimal place is a fixed point to the right of the ones. Can understand that tenths are larger than hundredths and hundredths are larger than thousandths (e.g. 0.1 is larger than 0.01, 0.001 is smaller than 0.01). Can understand that when comparing and ordering decimals they need to apply their knowledge of place value.</p> <p>Representations and structure Bar model, shape, non-examples and examples (e.g. not two equal parts, compared to two equal parts), number line (with pictorial representations and fraction form), part part whole, hundred grid, place value model, dienes, rods and flats, rulers and tape measures.</p>
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