

Term 1		
Unit	NC objectives	Content
Unit 1: Number and place value	<ul style="list-style-type: none"> <li>Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.</li> <li>Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.</li> </ul>	<p><b>Week 1: Representing integers with six or more digits</b></p> <ul style="list-style-type: none"> <li>Read and write numbers to at least 1 000 000 and determine the value of each digit.</li> <li>Read, write, order and compare numbers to at least 1 000 000.</li> <li>Count forwards or backwards in steps of powers of 10 for any multiple of a power of 10 up to 1 000 000.</li> <li>Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.</li> </ul>
Unit 2: Multiplication and division	<ul style="list-style-type: none"> <li>Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers.</li> <li>Multiply numbers up to four digits by a 1- or 2-digit number using a formal written method, including long multiplication for 2-digit numbers.</li> <li>Multiply and divide numbers mentally drawing upon known facts.</li> <li>Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes.</li> </ul>	<p><b>Week 2: Multiplicative properties of numbers: factors and multiples</b></p> <ul style="list-style-type: none"> <li>Identify multiples and factors, including finding all factor pairs of a number.</li> <li>Identify multiples and factors, including finding common factors of two numbers.</li> </ul>
		<p><b>Week 3: Efficient multiplication: mental and written methods</b></p> <ul style="list-style-type: none"> <li>Multiply numbers up to four digits by a 1- or 2-digit number using a formal written method, including long multiplication for 2-digit numbers.</li> <li>Multiply numbers mentally drawing upon known facts.</li> <li>Divide numbers mentally drawing upon known facts.</li> </ul>
		<p><b>Week 4: Solving problems involving multiplication and division</b></p> <ul style="list-style-type: none"> <li>Solve problems involving multiplication and division, including using their knowledge of factors and multiples, squares and cubes.</li> </ul>
Unit 3: Geometry: properties of shapes	<ul style="list-style-type: none"> <li>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.</li> <li>Draw given angles, and measure them in degrees (<math>^{\circ}</math>).</li> <li>Identify:</li> </ul>	<p><b>Week 5: Estimating, measuring, drawing and using angles</b></p> <ul style="list-style-type: none"> <li>Know angles are measured in degrees.</li> <li>Estimate and compare acute, obtuse and reflex angles.</li> <li>Draw given angles and measure them in degrees (<math>^{\circ}</math>).</li> </ul>

	<ul style="list-style-type: none"> <li>○ angles at a point and one whole turn (total 360°);</li> <li>○ angles at a point on a straight line and <math>\frac{1}{2}</math> a turn (total 180°);</li> <li>○ other multiples of 90°.</li> </ul>	<ul style="list-style-type: none"> <li>● Identify angles at a point and one whole turn (total 360°).</li> <li>● Identify angles at a point on a straight line and <math>\frac{1}{2}</math> a turn (total 180°).</li> <li>● Identify other multiples of 90°.</li> </ul> <p><b>Week 6: Reasoning and problem solving with angles</b></p> <ul style="list-style-type: none"> <li>● Know angles are measured in degrees.</li> <li>● Estimate and compare acute, obtuse and reflex angles.</li> <li>● Draw given angles and measure them in degrees (°).</li> <li>● Identify angles at a point and one whole turn (total 360°).</li> <li>● Identify angles at a point on a straight line and <math>\frac{1}{2}</math> a turn (total 180°).</li> </ul>
<p>Unit 4: Fractions (including decimals and percentages)</p>	<ul style="list-style-type: none"> <li>● Compare and order fractions whose denominators are all multiples of the same number.</li> <li>● Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.</li> <li>● Recognize mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt; 1</math> as a mixed number (e.g. <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}</math>).</li> <li>● Add and subtract fractions with the same denominator and denominators that are multiples of the same number.</li> <li>● Read and write decimal numbers as fractions (e.g. <math>0.71 = \frac{71}{100}</math>).</li> <li>● Recognize and use thousandths and relate them to tenths, hundredths and decimal equivalents.</li> </ul>	<p><b>Week 7: Fractions in different forms</b></p> <ul style="list-style-type: none"> <li>● Compare and order fractions whose denominators are all multiples of the same number.</li> <li>● Identify, name and write equivalent fractions of a given fraction, represented visually.</li> <li>● Recognize mixed numbers and improper fractions.</li> <li>● Convert mixed numbers and improper fractions from one form to the other and write mathematical statements <math>&gt; 1</math> as a mixed number (e.g. <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1 \frac{1}{5}</math>).</li> </ul> <p><b>Week 8: Adding and subtracting fractions</b></p> <ul style="list-style-type: none"> <li>● Add and subtract fractions with the same denominator.</li> <li>● Add and subtract fractions with denominators that are multiples of the same number.</li> </ul> <p><b>Week 9: Decimal fractions</b></p> <ul style="list-style-type: none"> <li>● Identify, name and write equivalent fractions, represented visually, including tenths and hundredths.</li> <li>● Read and write decimal numbers as fractions (e.g. <math>0.71 = \frac{71}{100}</math>).</li> <li>● Recognize and use thousandths and relate them to tenths, hundredths and decimal equivalents.</li> </ul>

<p>Unit 5: Addition and subtraction</p>	<ul style="list-style-type: none"> <li>• Add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction).</li> <li>• Add and subtract numbers mentally with increasingly large numbers.</li> <li>• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</li> <li>• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>	<p><b>Week 10: Adding and subtracting using different methods</b></p> <ul style="list-style-type: none"> <li>• Add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction).</li> <li>• Add and subtract numbers mentally with increasingly large numbers.</li> <li>• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</li> <li>• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>
<p>Unit 6: Measurement</p>	<ul style="list-style-type: none"> <li>• Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).</li> <li>• Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.</li> <li>• Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.</li> <li>• Estimate volume (e.g. using <math>1\text{ cm}^3</math> blocks to build cuboids including cubes) and capacity (e.g. using water).</li> <li>• Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation, including scaling.</li> </ul>	<p><b>Week 11: Estimate, measure and solve perimeter problems</b></p> <ul style="list-style-type: none"> <li>• Convert between different units of metric measure (e.g. centimetre and metre; centimetre and millimetre).</li> <li>• Understand and use approximate equivalences between metric units and common imperial units, e.g. feet, inches.</li> <li>• Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.</li> <li>• Use addition and subtraction to solve problems involving measure (e.g. length) using decimal notation.</li> <li>• Use all four operations to solve problems involving measure (e.g. length) including scaling.</li> </ul>
		<p><b>Week 12: Converting between units of measure for volume and capacity</b></p> <ul style="list-style-type: none"> <li>• Convert between different units of metric measure, e.g. litre and millilitre.</li> <li>• Understand and use approximate equivalences between metric units and common imperial units, e.g. pints.</li> <li>• Estimate volume (e.g. using <math>1\text{ cm}^3</math> blocks to build cuboids including cubes) and capacity (e.g. using water).</li> <li>• Use addition and subtraction to solve problems involving measure (e.g. volume) using decimal notation.</li> </ul>

		<ul style="list-style-type: none"><li>• Use all four operations to solve problems involving measure (e.g. volume) including scaling.</li></ul>
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Term 2		
Unit	NC objectives	Content
Unit 7: Number and place value	<ul style="list-style-type: none"> <li>Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit.</li> <li>Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.</li> <li>Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.</li> <li>Solve number problems and practical problems that involve all of the above.</li> </ul>	<p><b>Week 1: Large positive integers are all around us</b></p> <ul style="list-style-type: none"> <li>Read and write numbers to at least 1 000 000 and determine the value of each digit.</li> <li>Read, write, order and compare numbers to at least 1 000 000.</li> <li>Count forwards or backwards in steps of powers of 10 for any multiple of a power of 10 up to 1 000 000.</li> <li>Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000.</li> <li>Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000.</li> <li>Solve number problems that involve all of the above.</li> <li>Solve practical problems that involve all of the above.</li> </ul>
Unit 8: Multiplication and division	<ul style="list-style-type: none"> <li>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</li> <li>Establish whether a number up to 100 is prime and recall prime numbers up to 19.</li> <li>Multiply and divide numbers mentally drawing upon known facts.</li> <li>Divide numbers up to four digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context.</li> </ul>	<p><b>Week 2: Primes, composites, multiples and factors</b></p> <ul style="list-style-type: none"> <li>Know and use the vocabulary of prime numbers and composite (non-prime) numbers.</li> <li>Establish whether a number up to 100 is prime and recall prime numbers up to 19.</li> </ul>
		<p><b>Week 3: Calculating using mental and written methods for division</b></p> <ul style="list-style-type: none"> <li>Divide numbers mentally drawing upon known facts.</li> <li>Divide numbers up to four digits by a 1-digit number using the formal written method of short division and interpret remainders appropriately for the context.</li> </ul>
Unit 9: Geometry: properties of shapes	<ul style="list-style-type: none"> <li>Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.</li> <li>Draw given angles, and measure them in degrees (<math>^{\circ}</math>).</li> <li>Use the properties of rectangles to deduce related facts and find missing lengths and angles.</li> </ul>	<p><b>Week 4: Constructing shapes with given properties</b></p> <ul style="list-style-type: none"> <li>Use the properties of rectangles to deduce related facts.</li> <li>Find missing lengths and angles.</li> </ul>

	<ul style="list-style-type: none"> <li>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</li> </ul>	<ul style="list-style-type: none"> <li>Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.</li> <li>Estimate and compare acute, obtuse and reflex angles.</li> <li>Draw given angles, and measure them in degrees (<math>^{\circ}</math>).</li> <li></li> </ul>
Unit 10: Fractions (including decimals and percentages)	<ul style="list-style-type: none"> <li>Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.</li> <li>Recognize mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt; 1</math> as a mixed number (e.g. <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}</math>).</li> <li>Read and write decimal numbers as fractions (e.g. <math>0.71 = \frac{71}{100}</math>).</li> <li>Recognize and use thousandths and relate them to tenths, hundredths and decimal equivalents.</li> <li>Read, write, order and compare numbers with up to three decimal places.</li> <li>Recognize 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.</li> </ul>	<p><b>Week 5: Understanding equivalences</b></p> <ul style="list-style-type: none"> <li>Identify, name and write equivalent fractions, represented visually, including tenths and hundredths.</li> <li>Recognize mixed numbers and improper fractions.</li> <li>Convert mixed numbers and improper fractions from one form to the other and write mathematical statements <math>&gt; 1</math> as a mixed number (e.g. <math>\frac{2}{5} + \frac{4}{5} = \frac{6}{5} = 1\frac{1}{5}</math>).</li> <li>Read and write decimals numbers as fractions (e.g. <math>0.71 = \frac{71}{100}</math>).</li> <li>Recognize and use thousandths and relate them to tenths, hundredths and decimal equivalents.</li> <li>Read, write, order and compare numbers with up to three decimal places.</li> </ul>
		<p><b>Week 6: Percentages</b></p> <ul style="list-style-type: none"> <li>Recognize the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred'.</li> <li>Write percentages as a fraction with denominator 100, and as a decimal.</li> </ul>
Unit 11: Statistics	<ul style="list-style-type: none"> <li>Solve comparison, sum and difference problems using information presented in a line graph.</li> </ul>	<p><b>Week 7: Line graphs</b></p> <ul style="list-style-type: none"> <li>Solve comparison problems using information presented in a line graph.</li> <li>Solve sum and difference problems using information presented in a line graph.</li> </ul>
Unit 12: Addition and subtraction	<ul style="list-style-type: none"> <li>Add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction).</li> </ul>	<p><b>Week 8: Missing numbers and solving problems in context</b></p> <ul style="list-style-type: none"> <li>Add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction).</li> </ul>

	<ul style="list-style-type: none"> <li>• Add and subtract numbers mentally with increasingly large numbers.</li> <li>• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</li> <li>• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract numbers mentally with increasingly large numbers.</li> <li>• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</li> <li>• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>
Unit 13: Measurement	<ul style="list-style-type: none"> <li>• Calculate and compare the area of rectangles (including squares), including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes.</li> </ul>	<p><b>Week 9: Calculating, estimating and comparing areas</b></p> <ul style="list-style-type: none"> <li>• Calculate the area of rectangles (including squares), including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>).</li> <li>• Compare the area of rectangles (including squares), and including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>)</li> <li>• Estimate the area of irregular shapes.</li> </ul>
Unit 14: Geometry: position and direction	<ul style="list-style-type: none"> <li>• 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.</li> </ul>	<p><b>Week 10: Reflecting and translating shapes in the first quadrant</b></p> <ul style="list-style-type: none"> <li>• Identify, describe and represent the position of a shape following a reflection, using the appropriate language, and know that the shape has not changed.</li> <li>• Identify, describe and represent the position of a shape following a translation, using the appropriate language, and know that the shape has not changed.</li> </ul>

Term 3		
Unit	NC objectives	Content
Unit 15: Number and place value	<ul style="list-style-type: none"> <li>Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero.</li> <li>Solve number problems and practical problems that involve the above.</li> </ul>	<p><b>Week 1: Interpreting and solving problems involving negative numbers in context</b></p> <ul style="list-style-type: none"> <li>Interpret negative numbers in context.</li> <li>Count forwards and backwards with positive and negative whole numbers, including through zero.</li> <li>Solve number problems that involve all of the above.</li> <li>Solve practical problems that involve all of the above.</li> </ul>
Unit 16: Multiplication and division	<ul style="list-style-type: none"> <li>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</li> <li>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.</li> <li>Recognize and use square numbers and cube numbers, and the notation for squared (<sup>2</sup>) and cubed (<sup>3</sup>).</li> <li>Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.</li> <li>solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.</li> <li>Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</li> </ul>	<p><b>Week 2: Recognize and represent square and cube numbers</b></p> <ul style="list-style-type: none"> <li>Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers.</li> <li>Recognize and use square numbers and cube numbers, and the notation for squared (<sup>2</sup>) and cubed (<sup>3</sup>).</li> </ul>
		<p><b>Week 3: Multiply and divide whole and decimal numbers by 10, 100 and 1000</b></p> <ul style="list-style-type: none"> <li>Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000.</li> </ul>
		<p><b>Week 4: Solve problems strategically, using squares, cubes, equivalence, and including simple rates</b></p> <ul style="list-style-type: none"> <li>Recognize and use square numbers and cube numbers, and the notation for squared (<sup>2</sup>) and cubed (<sup>3</sup>).</li> <li>Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes.</li> <li>Solve problems, involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign.</li> <li>Solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates.</li> </ul>



Unit 17: Geometry: properties of shapes	<ul style="list-style-type: none"> <li>Identify 3D shapes, including cubes and other cuboids, from 2D representations.</li> </ul>	<p><b>Week 5: Identifying and naming 3D shapes from 2D representations</b></p> <ul style="list-style-type: none"> <li>Identify 3D shapes, including cubes and other cuboids, from 2D representations.</li> </ul>
Unit 18: Fractions (including decimals and percentages)	<ul style="list-style-type: none"> <li>Add and subtract fractions with the same denominator and denominators that are multiples of the same number.</li> <li>Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.</li> <li>Round decimals with two decimal places to the nearest whole number and to one decimal place.</li> <li>Read, write, order and compare numbers with up to three decimal places.</li> <li>Solve problems involving number up to three decimal places.</li> <li>Recognize the per cent symbol (%) and understand that per cent relates to 'number of parts per 100', and write percentages as a fraction with denominator 100, and as a decimal.</li> <li>Solve problems which require knowing percentage and decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{2}{5}</math>, <math>\frac{4}{5}</math> and those fractions with a denominator of a multiple of 10 or 25.</li> </ul>	<p><b>Week 6: Operating on fractions</b></p> <ul style="list-style-type: none"> <li>Add and subtract fractions with the same denominator.</li> <li>Add and subtract fractions with denominators that are multiples of the same number.</li> <li>Multiply proper fractions by whole numbers, supported by materials and diagrams.</li> <li>Multiply mixed numbers by whole numbers, supported by materials and diagrams.</li> </ul>
		<p><b>Week 7: Percentages and problem solving</b></p> <ul style="list-style-type: none"> <li>Round decimals with two decimal places to the nearest whole number and to one decimal place.</li> <li>Read, write, order and compare numbers with up to three decimal places.</li> <li>Solve problems involving number up to three decimal places.</li> <li>Recognize the per cent symbol (%) and understand that per cent relates to 'number of parts per 100'.</li> <li>Write percentages as a fraction with denominator 100, and as a decimal.</li> <li>Solve problems which require knowing percentage and decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{2}{5}</math>, <math>\frac{4}{5}</math> and those fractions with a denominator of a multiple of 10 or 25.</li> </ul>
Unit 19: Statistics	<ul style="list-style-type: none"> <li>Complete, read and interpret information in tables, including timetables.</li> </ul>	<p><b>Week 8: Presenting and interpreting data in tables</b></p> <ul style="list-style-type: none"> <li>Complete, read and interpret information in tables, including timetables.</li> </ul>
Unit 20: Addition and subtraction	<ul style="list-style-type: none"> <li>Add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction).</li> </ul>	<p><b>Week 9: Making decisions when calculating</b></p> <ul style="list-style-type: none"> <li>Add and subtract whole numbers with more than four digits, including using formal written methods (columnar addition and subtraction).</li> </ul>

	<ul style="list-style-type: none"> <li>• Add and subtract numbers mentally with increasingly large numbers.</li> <li>• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</li> <li>• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>	<ul style="list-style-type: none"> <li>• Add and subtract numbers mentally with increasingly large numbers.</li> <li>• Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.</li> <li>• Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.</li> </ul>
Unit 21: Measurement	<ul style="list-style-type: none"> <li>• Convert between different units of metric measure (e.g. kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).</li> <li>• Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.</li> <li>• Solve problems involving converting between units of time.</li> <li>• Use all four operations to solve problems involving measure (e.g. length, mass, volume, money) using decimal notation, including scaling.</li> </ul>	<p><b>Week 10: Metric and imperial units in everyday contexts</b></p> <ul style="list-style-type: none"> <li>• Convert between different units of metric measure (e.g. gram and kilogram).</li> <li>• Understand and use approximate equivalences between metric units and common imperial units such as pounds.</li> <li>• Solve problems involving converting between units of time.</li> <li>• Use addition and subtraction to solve problems involving measure (e.g. mass and money) using decimal notation.</li> <li>• Use all four operations to solve problems involving measure (e.g. mass and money) including scaling.</li> </ul>