

UNIT	Maths topic	Learning objectives/expected outcomes	NC Programmes of Study
1	Number and place value (1)	<ul style="list-style-type: none"> • Count reliably at least 20 objects, recognising that when rearranged the number of objects stays the same • Count to and across 20, forwards and backwards, beginning with 0 or 1, or from any given number • Read, write, compare and order numbers to 20, partitioning 'teen' numbers <p><i>I can count up to 20 objects</i></p> <p><i>I know that the number of objects does not change even if I move the objects around</i></p> <p><i>I can compare numbers up to 20 and say which number is bigger</i></p> <p><i>I know how to write numbers up to 20</i></p> <p><i>I can read numbers on a number track</i></p>	<ul style="list-style-type: none"> • count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens • identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least • read and write numbers from 1 to 20 in numerals and words.
2	Addition and subtraction (1)	<ul style="list-style-type: none"> • Say the number that is one more or less than any given number to 20 • Relate addition to counting on and recognise 	<ul style="list-style-type: none"> • given a number, identify one more and one less • read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs

		<p>that addition can be done in any order</p> <ul style="list-style-type: none"> Use practical and informal written methods to derive and recall number bonds to 10 and related subtraction facts <p><i>I can use counters or the number line to find the number that is one more or one less than a number</i></p> <p><i>I can use objects to take away a small number from any number up to 10</i></p> <p><i>I know some pairs of numbers that total ten</i></p> <p><i>I can use counters or blocks to add numbers with answers up to ten</i></p> <p><i>I know that if I add my numbers in any order I will get the same answer</i></p>	<ul style="list-style-type: none"> represent and use number bonds and related subtraction facts within 20 add and subtract one-digit and two-digit numbers to 20, including zero solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.
<p>3</p>	<p>Shapes and patterns (1)</p>	<ul style="list-style-type: none"> Describe and arrange simple patterns involving objects and shapes Recognise and name common 2-D and 3-D shapes and describe their features; use them to make patterns, pictures and models <p><i>I can use objects or shapes to copy and continue a simple pattern</i></p>	<ul style="list-style-type: none"> recognise and name common 2-D and 3-D shapes

		<p><i>I can use 2-D and 3-D shapes to make patterns, pictures and models</i></p> <p><i>I am beginning to picture a shape in my head</i></p>	
4	Measures (1)	<ul style="list-style-type: none"> Estimate, compare and describe length, height, mass and capacity Measure length, height, mass and capacity choosing and using suitable uniform non-standard or standard units and measuring instruments <p><i>I can compare the lengths/weights/capacities of more than two objects and put them in order</i></p> <p><i>I can use equipment to measure objects using non-standard units</i></p>	<ul style="list-style-type: none"> compare, describe and solve practical problems for: <ul style="list-style-type: none"> lengths and heights mass or weight capacity/volume time measure and begin to record the following: <ul style="list-style-type: none"> lengths and heights mass/weight capacity and volume time
5	Fractions, position and movement (1)	<ul style="list-style-type: none"> Recognise a half as one of two equal parts of an object, shape or quantity Group and share equally a small number of objects and relate to halves Visualise and use everyday language to describe the position, direction and movement of objects, including full and half-turns Sequence events in chronological order 	<ul style="list-style-type: none"> recognise, find and name a half as one of two equal parts of an object, shape or quantity sequence events in chronological order using language describe position, directions and movements, including half, quarter and three-quarter turns.

		<p><i>I can find half of a piece of paper or string, or half a shape</i></p> <p><i>I can find half of a small number of objects by sharing them into two equal groups</i></p> <p><i>I can describe where something is using words like 'next to', 'in front of', 'underneath', 'on top of' ...</i></p> <p><i>I can turn myself through a number of whole and half-turns</i></p> <p><i>I can remember the order of a favourite story</i></p>	
<p>6</p>	<p>Number and place value (2)</p>	<ul style="list-style-type: none"> • Count to 50, forwards and backwards, beginning with 0 or 1, or from any given number • Read, write, compare and order numbers to 50 • Say the number that is one more or less than any given number to 50 • Recognise and know the value of coins <p><i>I can order numbers up to 50 or more</i></p> <p><i>I know how to write numbers up to 50</i></p>	<ul style="list-style-type: none"> • count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens • given a number, identify one more and one less • identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least • read and write numbers from 1 to 20 in numerals and words.

		<p><i>I know where numbers of up to 50 or more belong on a number track</i></p> <p><i>I know the number that is one more or one less than any number up to 50 or more</i></p> <p><i>I recognise the coins we use</i></p>	<ul style="list-style-type: none"> recognise and know the value of different denominations of coins and notes
7	Addition and subtraction (2)	<ul style="list-style-type: none"> Use the addition (+), subtraction (-) and equals (=) signs Find the total by combining two groups Understand subtraction as take away Derive and recall number bonds to 10 and related subtraction facts <p><i>I can add pairs of numbers up to 10</i></p> <p><i>I can take away one amount from another up to 10</i></p> <p><i>I can use the +, - and = signs</i></p>	<ul style="list-style-type: none"> read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs represent and use number bonds and related subtraction facts within 20 add and subtract one-digit and two-digit numbers to 20, including zero solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.
8	Multiplication and division (1)	<ul style="list-style-type: none"> Describe simple patterns and relationships involving numbers Count on or back in ones, twos and tens 	<ul style="list-style-type: none"> solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

		<ul style="list-style-type: none"> Recall the doubles of all numbers to at least ten Group small quantities into twos and share equally <p><i>I can use numbers to copy and continue a simple pattern</i></p> <p><i>I can count on and back in ones and tens</i></p> <p><i>I am beginning to count in twos</i></p> <p><i>I can recall or work out doubles of numbers to 5+5</i></p> <p><i>I can put objects into equal groups of two and share them out equally</i></p>	
<p>9</p>	<p>Shapes and patterns (2)</p>	<ul style="list-style-type: none"> Describe and arrange simple patterns involving objects and shapes Recognise and name common 2-D and 3-D shapes and describe their features; use them to make patterns, pictures and models <p><i>I can use objects or shapes to copy and continue a simple pattern</i></p> <p><i>I know the names of familiar 2-D and 3-D shapes</i></p>	<ul style="list-style-type: none"> recognise and name common 2-D and 3-D shapes

<p>10</p>	<p>Measures (2)</p>	<p><i>and I can picture these shapes in my head</i></p> <ul style="list-style-type: none"> Estimate, compare and describe length, height, mass and capacity Measure length, height, mass and capacity choosing and using suitable uniform non-standard or standard units and measuring instruments <p><i>I can estimate how many straws I need to measure this table</i></p> <p><i>I can use equipment to measure objects using non-standard and standard units</i></p>	<ul style="list-style-type: none"> compare, describe and solve practical problems for: <ul style="list-style-type: none"> lengths and heights mass or weight capacity/volume time measure and begin to record the following: <ul style="list-style-type: none"> lengths and heights mass/weight capacity and volume time
	<p>11</p>	<p>Fractions, position and movement (2)</p>	<ul style="list-style-type: none"> Recognise and name a half as one of two equal parts of an object, shape or quantity Recognise and name a quarter as one of four equal parts of an object, shape or quantity Group and share equally a small number of objects and relate to halves Visualise and use everyday language to describe the position, direction and movement of objects Identify objects that turn; recognise and make whole, half and quarter-turns

		<ul style="list-style-type: none"> • Use vocabulary related to time; order days of the week and months; read the time to the hour <p><i>I can fold a piece of paper into halves and quarters</i></p> <p><i>I can find half or quarter of a number of objects by sharing them into two or four equal groups</i></p> <p><i>I can tell you some objects that turn, such as windmill sails or a water tap</i></p> <p><i>I can turn myself through a number of whole and half-turns</i></p> <p><i>I know the days of the week and can say them in order</i></p> <p><i>I know that it is 3 o'clock when the big hand points to the 12 and the small hand points to the 3</i></p>	
<p>12</p>	<p>Multiplication and division (2)</p>	<ul style="list-style-type: none"> • Count on or back in ones, twos, fives and tens and use this knowledge to derive the multiples of two, five and ten • Recall the doubles of all numbers to at least ten • Group small quantities into 2s, 5s and 10s and 	<ul style="list-style-type: none"> • solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.

		<p>share them equally</p> <p><i>I can count on and back in ones, fives and tens</i></p> <p><i>I can share objects into equal groups and work out how many in one group</i></p> <p><i>I can recall or work out doubles of all numbers to ten</i></p>	
<p>13</p>	<p>Number and place value (3)</p>	<ul style="list-style-type: none"> • Count to 100, forwards and backwards from any given number • Read, write, compare and order numbers to 100 • Read and write number words to 20 • Say the number that is one more or less than any given number to 100 • Recognise and know the value of different denominations of coins and notes <p><i>I know the order of numbers up to 100</i></p> <p><i>I can write numbers up to 100 and more</i></p> <p><i>I can find numbers on a number line/100-square</i></p>	<ul style="list-style-type: none"> • count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number • count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens • given a number, identify one more and one less • identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least • read and write numbers from 1 to 20 in numerals and words. • recognise and know the value of different denominations of coins and notes

		<p><i>I can say the number that is one more or one less than any number up to 100</i></p> <p><i>I know the coins and notes we use</i></p>	
14	Addition and subtraction (3)	<ul style="list-style-type: none"> • Represent and use number bonds to 20 and related subtraction facts • Use the addition (+), subtraction (-) and equals (=) signs • Add and subtract one-digit and two-digit numbers to 20 ($9 + 9$, $18 - 9$), including zero <p><i>I know the pairs of numbers that total 20</i></p> <p><i>I can remember or work out add and take away calculations with answers to 20.</i></p> <p><i>I can add using counting on</i></p> <p><i>I can subtract by taking away and by counting up to find the difference between the numbers</i></p>	<ul style="list-style-type: none"> • read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs • represent and use number bonds and related subtraction facts within 20 • add and subtract one-digit and two-digit numbers to 20, including zero • solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems.
15	Shapes and patterns (3)	<ul style="list-style-type: none"> • Describe and arrange simple patterns involving objects and shapes • Recognise and name common 2-D and 3-D shapes and describe their features; use them 	<ul style="list-style-type: none"> • recognise and name common 2-D and 3-D shapes

		<p>to make patterns, pictures and models</p> <p><i>I can use objects or shapes to make patterns of my own and explain what comes next</i></p> <p><i>I can describe and match a shape and talk about sides, corners, faces</i></p> <p><i>I can work with a partner to picture a shape in my mind</i></p> <p><i>I can name most of the 2-D and 3-D shapes I see in my classroom and playground</i></p>	
<p>16</p>	<p>Measures (3)</p>	<ul style="list-style-type: none"> • Estimate, compare and describe length, height, mass and capacity • Measure length, height, mass and capacity choosing and using suitable uniform non-standard or standard units and measuring instruments <p><i>I can compare two lengths and say which is longer or two weights and say which is heavier</i></p> <p><i>I can estimate by looking and feeling</i></p> <p><i>I know how to measure objects giving the measurements correctly</i></p>	<ul style="list-style-type: none"> • compare, describe and solve practical problems for: <ul style="list-style-type: none"> lengths and heights mass or weight capacity/volume time • measure and begin to record the following: <ul style="list-style-type: none"> lengths and heights mass/weight capacity and volume time

		<i>I can use metres to measure lengths</i>	
17	Multiplication and division (3)	<ul style="list-style-type: none"> Count on or back in ones, twos, fives and tens and use this knowledge to derive the multiples of 2, 5 and 10 to the tenth multiple Solve practical problems that involve combining groups of 2, 5 or 10, or sharing into equal groups Recall the doubles of all numbers to at least 10 <p><i>I can count on from or back to zero in ones, twos, fives or tens</i></p> <p><i>I can find how many there are in several groups of 2, 5 or 10</i></p> <p><i>I can share objects into equal groups and tell you how many there are in one group</i></p> <p><i>I can recall or work out doubles of numbers to at least 10</i></p> <p><i>I can use doubles I know to help me work out other doubles</i></p>	<ul style="list-style-type: none"> solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.
18	Fractions, position	<ul style="list-style-type: none"> Recognise, find and name a half as one of two 	<ul style="list-style-type: none"> recognise, find and name a half as one of two equal parts

	<p>and movement (3)</p>	<p>equal parts of an object, shape or quantity</p> <ul style="list-style-type: none"> Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity Visualise and use everyday language to describe the position, direction and movement of objects Recognise and make whole, half, quarter and three-quarter turns Order days of the week and months and read the time to the hour and half hour <p><i>I can find half of the water in a jug by pouring it into two glasses so that each glass has the same amount</i></p> <p><i>I can find a quarter of a number of objects by sharing them into four equal groups</i></p> <p><i>I know how to turn right and to turn left</i></p> <p><i>I can make whole, half, quarter and three-quarter turns</i></p> <p><i>I can tell you when the clock says half past 2</i></p>	<p>of an object, shape or quantity</p> <ul style="list-style-type: none"> recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. describe position, directions and movements, including half, quarter and three-quarter turns. recognise and use language relating to dates, including days of the week, weeks, months and years tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.
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