

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

10	Measures (2)	<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: lengths and heights mass or weight capacity/volume time • measure and begin to record the following: lengths and heights mass/weight capacity and volume time
11	Fractions, position and movement (2)	<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"> • recognise, find and name a half as one of two equal parts of an object, shape or quantity • 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.

		<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: lengths and heights mass or weight capacity/volume time • measure and begin to record the following: 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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