## **MATHS Number & Algebra**

Default statuses	Weighting
Taught	0
Almost/Approaching	1
Achieved	2
Mastered	3

	Number & Algebra
Stage 0	<ul> <li>Knows that things exist, even when out of sight.</li> <li>Beginning to organise and catagorise objects, e.g. putting all the teddy bears together or teddies and cars in separate piles.</li> <li>Says some counting words randomly.</li> <li>Creates and experiments with symbols and marks representing ideas of number,</li> <li>Begins to make comparisons between quantities</li> <li>Uses some language of quantities, such as 'more' and 'a lot'.</li> </ul>
Stage 1	<ul> <li>I can pay attention to, and watch counting activities.</li> <li>I can follow a counting sequence indicated by an adult.</li> <li>I can give you objects.</li> <li>I can add more to a group of objects.</li> </ul>

	<ul> <li>I can point to each object as we count them, with support.</li> <li>I can indicate 'gone' or 'all gone' (through speech, signs, gesture).</li> </ul>
Stage 2	<ul> <li>I can say, or sign a number.</li> <li>I can indicate 1 and 2 in my own way.</li> <li>I can make a group of 'one'.</li> <li>I can rote count to 3.</li> <li>I can point to each object as we count them.</li> <li>I can match object to object.</li> <li>I can recognise 1 and 2 items.</li> <li>I can show up to five fingers with assistance.</li> <li>I can recognise and relate the numerals 1, 2 and 3 during a range of activities.</li> <li>I can say, sign/represent number names to five.</li> <li>I can count 5 objects reliably when they are presented in a line.</li> <li>I can use the last number in a count to represent the number of objects in a set.</li> </ul>
Stage 3	<ul> <li>I can say, or sign, number names to ten.</li> <li>I can recognise and relate the numerals 1 to 5.</li> <li>I can count at least five objects reliably when randomly placed on the table.</li> <li>I can count five objects reliably when presented in a line.</li> <li>I can indicate which set of objects has less.</li> <li>I can add one more and count how many there are now, in practical situations.</li> </ul>
Stage 4	<ul> <li>I can join in with counting to beyond 10.</li> <li>I can add/ take away one to a number of objects up to 10 and then say/sign how many there are now.</li> <li>I can compare two given numbers of objects saying which is more and which is less.</li> <li>I can recognise numerals 1 to 9 and relate each numeral to the correct quantity, understanding that the numeral always represents that quantity.</li> <li>I can use ordinal numbers e.g. first; second, third, when describing position in a familiar activity (objects, people or events).</li> <li>I can estimate a small number up to ten and check by counting.</li> </ul>
Stage 5	I can understand and relate zero to the concept of an empty set.

- I can use on to one correspondence to count sets of objects up to 20.
- I can count to 20 forwards and backwards starting from any number.
- I can read and write number to 10.
- I can compare numbers up to 20 and say which is bigger indicating that I understand the concept of more.
- I can order written numerals up to 20.
- I can use language of addition 'altogether makes', 'put together', 'add', 'total' and 'plus' in practical activities.
- I can use practical resources to make addition/subtraction sums up to 20.
- I can use language of subtraction including 'take away' in practical activities.
- I can recognise the addition/ take away sign.
- I can use addition and subtraction facts to five to solve 'real life' problems.
- I can communicate my understanding of the word 'share' when splitting objects between two e.g. people, plates, teddy bears (not necessarily accurately).
- I can show my understanding of the word 'share' when splitting a whole object into parts.
- I can communicate my understanding of the word 'share' when splitting a whole object into parts.

## Stage 6

- I can show that the number of objects in a set does not change even if the objects are moved around.
- I can compare numbers up to 20 and say which is smaller/less/before indicating that I understand the concept of less.
- I can order numbers from 0 to 20 in ascending and descending order.
- I can show that the number that is one more and one less than any number up to 20.
- I can count from 0 to 50 forwards and backwards starting with any number.
- I can solve addition calculations involving zero, with numbers up to five in practical activities.
- I can solve subtraction calculations involving zero, with numbers up to 20 in practical activities.
- I can use practical resources to solve calculations up to ten using addition (two numbers).
- I can record calculations up to 10 using numerals and signs e.g. +, -, =
- I can solve addition calculations using a number line.
- I can recognise even numbers to 20 in practical activities.
- I can understand the concept of 'whole' in practical demonstration e.g. 1 bar of chocolate, 1 cake.
- I can recognise the symbol of 1/2 meaning two equal parts.
- I can name and match two halves in practical activities when given halved resources and no other fractional parts.
- I can double numbers with totals up to 20.
- I can answer questions involving multiplication facts in the 10 times table.

## Stage 7 I can compare numbers to 20 using the language of 'more than', 'less than' and 'equal to'. I can recognise and write numbers from 0 to 100. I can count to and across 100, forwards and backwards, starting with any number. I can say/indicate the number that is 10 more than 20, 30, 40 +. I can show the number that is one more or one less than any number up to 100. I can show that I understand that numbers up to 20 can be made in different ways. I can add and subtract single and two digit numbers together to a total of 20, in a given calculation (using practical resources). I can count on from the largest number to find the total when given two numbers totalling up to 50 (using a number line or square). I can count back from the largest number to find the total when given two numbers from 0 to 20 (using a number line or square). I can solve subtraction calculations using a number line. I can recall the multiplication/ division facts for the 2 times table. I can write mathematical symbols x, /, and = from verbal instruction. I can recognise even/odd numbers to 50. I can double numbers up to a total of 50. I can halve even numbers or sets of objects to 50. I can find odd numbers to 50 from a random collection of numbers. I can solve simple problems involving 1/2. Stage 8 I can solve problems with numbers to 20 using the language 'more than' 'less than' and 'equal to'. I can read and write (in own phonetic form) number words up to twenty. I can extend a number sequence counting on in twos and fives. I can show that I understand the place value of numbers up to 99 using practical resources (e.g. Hundreds, Tens and Units board). I can read and write numbers from 1 to 100 in numerals. I can add/ subtract a two digit and a one digit number mentally using numbers totalling up to twenty. I can solve addition/ subtraction calculations with a missing number e.g. 4+? = 6 with numbers totalling up to 50. I can solve addition and subtraction calculations with a missing number when operations are mixed with numbers to 50. I can add three single digit numbers up to a total of 50. I can use my knowledge of counting in 2s to complete given addition and subtraction calculations. I can recall the multiplication and division facts for the 2 times table with mixed calculations. I can use a variety of language to describe multiplication and division - times, share, divide, multiply. I can recognise the symbol of 1/4 meaning four equal pieces. • I can solve simple problems involving 1/2 and 14 using objects, standard and non-standard units of length.

Stage 9	<ul> <li>I can write/represent number words up to fifty.</li> <li>I can order non-consecutive from 0 to 100.</li> <li>I can solve problems with numbers up to 50 using the language 'more than', less than' and 'equal to'.</li> <li>I can extend a number sequence counting back in twos or fives.</li> <li>I can use a columnar method to add/ subtract 2 digit and 1 digit numbers to 50.</li> <li>I can identify the number of units/ones/tens in a two digit number.</li> <li>I can use my knowledge of counting in 5s and 10s to complete given addition and subtraction calculation to 100.</li> <li>I can count forwards and backwards in steps of 2, 5 and 10 starting from any number including 0.</li> <li>I can recall the multiplication and division facts for the 2, 5 and 10 times table.</li> <li>I can recognise and name the fractions 1/3, 1/4, 2/4, 3/4 when related to length, shape, set of objects or quantity.</li> <li>I can calculate the fractions 1/4, 2/4 and 3/4 of a length, shape, set of objects or quantity.</li> <li>I can show that I understand which numbers are odd and even up to 100 using my knowledge of multiples.</li> <li>I can write fraction symbols from verbal instruction.</li> </ul>
Stage 10	<ul> <li>I can compare and order numbers from 0 to 50 using the &lt; or &gt; symbol.</li> <li>I can represent on a number line up to 100, using a blank number line.</li> <li>I can use zero as a place holder in a two digit number when using tens and units (ones).</li> <li>I can write two and three digit numbers in figures.</li> <li>I can use a columnar method to add 2 two digit numbers, with numbers to 50, including 0, without carriers.</li> <li>I can use a columnar method to add a two digit and a one digit number, with numbers to 50, including 0, without carriers.</li> <li>I can use my knowledge of addition calculations to check answers to my subtraction calculations.</li> <li>I can write a two digit plus one/ two digit sum from verbal instruction, showing my understanding of tens and units/ones.</li> <li>I can group objects into 2s, 5s or 10s to count them - numbers to 100.</li> <li>I can count forwards and backwards in steps of 2, 3, 5 and 10 starting from any number including 0.</li> <li>I can write mathematical statements using the multiplication, division and equals sign.</li> <li>I can count up in halves to ten starting from any number and using the 1/2.</li> <li>I can calculate the fraction 1/4 or 1/3 of a length, shape, small set of objects or quantity.</li> </ul>
Stage 11	<ul> <li>I can use fractions such as 1/2, 1/4, 3/4, 1/6, 1/5, 2/5 and 4/10 in shapes.</li> <li>I can read, write, order and count numbers to 1000.</li> <li>I can round 2 and 3 digit numbers to the nearest 10/100.</li> <li>I can multiply/ divide whole numbers by 10.</li> </ul>

	<ul> <li>I know the value of the digits and can partition numbers.</li> <li>I can recognise negative numbers and continue positive/negative number sequences and find missing numbers.</li> <li>I can use fractions such as 1/2, 1/4, 3/4 and 1/6 for sets of objects.</li> <li>I can recognise some fractions that are equivalent to 1/2.</li> <li>I am beginning to use decimal notation in context.</li> </ul>
Stage 12	<ul> <li>I can find a division fact from a multiple fact.</li> <li>I know number pairs that total 100.</li> <li>I can add and subtract two, two digit numbers using a column method, including carrying down and borrowing.</li> <li>I know the multiplication tables: 2x, 3x, 4x, 5x, 6x, 10x.</li> <li>I understand that to find a quarter of a number I have to half it and half it again.</li> <li>I can add and subtract 2 and 3 digit numbers using a column method, including carrying down and borrowing.</li> <li>I can add and subtract decimals in context.</li> <li>I can multiply 2 digit numbers by 2, 3, 4, 5, 6, 10.</li> <li>I can understand the = side in balancing equations.</li> <li>I know the multiplication tables: 7x, 8x and 9x.</li> <li>I can add/subtract two, two digit numbers mentally.</li> <li>I can solve two step problems that involve any of the four operations and remainders.</li> <li>I can divide two digit numbers by 2, 3, 4, 5, 10 with whole number answers and remainders.</li> <li>I can use a calculator when appropriate and know that 1.50 is £1.50 in the context of money.</li> <li>I can read and plot coordinates in the first quadrant.</li> </ul>
Stage 13	<ul> <li>I can read, write, count and order numbers 10,000 and know the value of the digits.</li> <li>I can round four digit numbers to the nearest 10/100/1000.</li> <li>I can multiply/divide integers by 10/100/1000.</li> <li>I can recognise equivalent fractions in diagrams.</li> <li>I can use and order decimals to 1 d.p. or 2 d.p. and continue a decimal number sequence including negative numbers.</li> <li>I understand and know simple percentages and know their fraction equivalents.</li> <li>I know multiples, factors, square numbers and prime numbers.</li> <li>I can recognise simple equivalence between fractions, decimals and percentages.</li> <li>I can find simple percentages/ fractions of quantities.</li> </ul>

## Stage 14

- I can multiply/divide a 4 or 5 digit numbers by a single digit.
- I can do simple calculations using negative numbers.
- I can complete balancing equations with all four operations.
- I can halve decimals.
- I can read and plot coordinates in the two upper quadrants.
- I can read and plot coordinates in the two upper quadrants.
- I can use brackets in simple calculations.
- I can find equivalent fractions.
- I can reduce a fraction to its simplest form.
- I can convert fractions, decimals, percentages and place them in order.
- I can order fractions with different denominators.
- I can order decimals with mixtures of 1.d.p, 2.d.p. and 3.d.p.
- I can understand simple ratio and can solve problems involving direct proportion by scaling up/down.
- I have a sound understanding of the number system including fractions, decimals and percentages.
- I can reduce a ratio to simplest form and use it in problem solving by multiplying.
- I can expand brackets.