

**Fluency Development (Key Instant Recall Facts and Skills)**

**Key Skills**

<b>Autumn</b>	<b>Spring</b>	<b>Summer</b>
Counting forwards and backwards Counting in 10s Doubling and halving Partitioning numbers Number bonds to 20	Counting forwards and backwards Counting in 10s and 5s Doubling and halving Partitioning numbers One more, One less Recall of 10 and 5 times tables Mental addition and subtraction	Counting forwards and backwards Counting in 10s, 5s and 2s Doubling and halving Partitioning numbers One more, One less Recall of 2, 5, 10 times tables Mental addition and subtraction Compare numbers (<, > or =) Order numbers

**Key Instant Recall Facts**

<b>Autumn 1</b>	<b>Spring 1</b>	<b>Summer 1</b>
Mastering Number	10 times tables	5 times table
<b>Autumn 2</b>	<b>Spring 2</b>	<b>Summer 2</b>
Mastering Number	2 times tables	Problem of the day

**Mastering Number Year 1**

<b>Autumn</b>	<b>Spring</b>	<b>Summer</b>
<ul style="list-style-type: none"> <li>Subitise within 5, using a rekenrek, and re-cap the composition of 5</li> <li>Understand numbers 6 to 9 using the '5 and a bit' structure</li> <li>Compare numbers within 10 and use precise mathematical language</li> <li>Order of numbers within 10 and connect this to '1 more' and '1 less' than a given number</li> <li>Explore the structure of even numbers (including that even numbers can be composed by doubling any number, and can be composed of 2s)</li> <li>Explore the structure of the odd numbers as being composed of 2s and 1 more</li> <li>Explore the composition of each of the numbers 6, 8, and 10</li> <li>Explore number tracks and number lines and identify the differences between them</li> </ul>	<ul style="list-style-type: none"> <li>Composition of each of the numbers 7 and 9</li> <li>Composition of odd and even numbers, seeing that even numbers can be made of two odd or two even parts, and that odd numbers can be composed of one odd part and one even part</li> <li>Identify the number that is two more or two less than a given odd or even number, identifying that two more/ less than an odd number is the next/ previous odd number, and two more/ less than an even number is the next/ previous even number</li> <li>explore the aggregation and partitioning structures of addition and subtraction through systematically partitioning and re-combining numbers within 10 and connecting this to the part-part-whole diagram, including using the language of parts and wholes</li> <li>Explore the augmentation and reduction structures of addition and reduction using number stories, including introducing the 'first, then, now' language structure</li> </ul>	<ul style="list-style-type: none"> <li>explore the composition of the numbers 11 to 19 as '10 and a bit' and compare numbers within 20</li> <li>connect the composition of the numbers 11 to 19 to their position in the linear number system, including identifying the midpoints of 5, 10 and 15</li> <li>compare numbers within 20 · understand how addition and subtraction equations can represent previously explored structures of addition and subtraction (aggregation/ partitioning/ augmentation/ reduction)</li> <li>Practise retrieving previously taught facts and reason about these</li> </ul>

## Topic Progression

 One Excellence

Pictorial and abstract representations can be used alongside each other.

 One Excellence

Refer to the calculation policy for representations.

 One Excellence

Children expected to draw representations in books.

 One Excellence

Teach one representation at a time.

 One Excellence

Use real life experiences/data collection to support understanding.

Autumn 1	Spring 1	Summer 1
<p><b>Number (Application of measure where applicable)</b> Place Value, Positioning and Counting (3 weeks) Numbers to 100 Possible apparatus: dienes and place value counters, tens frames, cubes</p> <p><b>Number (Application of measure where applicable)</b> Addition and Subtraction (4 weeks) Numbers within 100 (incl. money) Possible apparatus: dienes and place value counters, tens frames,</p> <p><b>(7 weeks)</b></p>	<p><b>Number (4 weeks) (Application of measure where applicable)</b> Multiplication and Division Possible apparatus: dienes and place value counters, tens frames, cubes</p> <p><b>Measure (1 weeks)</b> Time</p> <p><b>Number</b> Addition and Subtraction (2 weeks) (Application of measure where applicable) Numbers within 100 Possible apparatus: dienes and place value counters, tens frames, cubes</p> <p><b>(7 Weeks)</b></p>	<p><b>Number (1 week) (Application of time where applicable)</b> Fractions Possible apparatus: dienes and place value counters, tens frames, cubes</p> <p><b>Measure (Application of number (PV, A&amp;S and M&amp;D) where applicable)</b> Length and Height Mass, Capacity and Temperature (3 weeks)</p> <p><b>(4 Weeks)</b></p>
Autumn 2	Spring 2	Summer 2
<p><b>Measure (Application of number (PV, A&amp;S) where applicable)</b> Money (2 weeks)</p> <p><b>Measure (Application of number (PV, A&amp;S and M&amp;D) where applicable)</b> Mass, Capacity and Temperature (3 weeks)</p> <p><b>Number (2 weeks)</b> Addition and Subtraction (2 weeks) Numbers within 100 (incl. money) Possible apparatus: dienes and place value counters, tens frames, cubes</p> <p><b>(7 Weeks)</b></p>	<p><b>Number (3 weeks) (Application of time where applicable)</b> Fractions Possible apparatus: dienes and place value counters, tens frames, cubes</p> <p><b>Geometry (2 weeks)</b> Properties of Shape</p> <p><b>Measure (1 weeks) (Application of fractions where applicable)</b> Time</p> <p><b>(6 Weeks)</b></p>	<p><b>Geometry (2 weeks)</b> Position and Direction</p> <p><b>Number (1 weeks) (Application of measure where applicable)</b> Multiplication and Division Possible apparatus: dienes and place value counters, tens frames, cubes</p> <p><b>Measure (1 weeks) (Application of fractions where applicable)</b> Time</p> <p><b>Number/ Statistics (2 weeks) (Application of measure where applicable)</b> Statistics Possible apparatus: dienes and place value counters, tens frames, cubes Consolidation and Retrieval (1 week)</p> <p><b>(7 weeks)</b></p>

	Year 2 objectives
<p><b>Number and Place Value</b>  <b>3 weeks - some of these lessons may take longer than one lesson or may be practical</b></p> <p>Teacher notes</p> <ul style="list-style-type: none"> <li>Ensure you are always using place value hats on all work presented in books.</li> </ul> <p>Place value hats...</p> <p>M 100 10 th h t o .  Th th</p>	To recognise the value of all of the digits in numbers up to 1,000,000 – pictorial/concrete
	To recognise the value of all of the digits in numbers upto 10,000,000
	To identify which digit has a certain value in numbers up to 10,000,000.
	To use pictorial representations to represent the same number in digits and words numbers up to 10,000,000.
	To use the less than, greater than and equals symbols to compare numbers and pictorial representations of numbers - 2 numbers up to 10,000,000
	To use the less than, greater than and equals symbols to compare numbers and pictorial representations of numbers - 2 numbers up to 3 decimal places
	To order numbers and pictorial representations of numbers- 4 numbers including decimals up to 10,000,000
	To order numbers - 4 numbers including decimals up to 10,000,000
	To round any number up to 1,000,000 to the nearest 10, 100 or 1000.
	To round any number up to 10,000,000 to the nearest 10,000, 100,000 or 1,000,000
	To round to the nearest whole number and tenth (including in context e.g. nearest pound).
	To place numbers with a range of intervals including negative numbers on a number line
To use negative numbers in context	

Year Two	
Strand	Suggested Small Steps (Not all small steps need to be taught as lessons and multiple could be taught in a lesson)
<b>Number and Place Value</b>	<p>Counting forwards and backwards within 20</p> <p>Tens and ones within 20</p> <p>Counting forwards and backwards within 50</p> <p>Tens and ones within 50</p> <p>Compare numbers within 50</p> <p>Count objects to 100</p> <p>Read and write numbers to 100 in numerals and words</p> <p>Identify, represent and estimate numbers to 100 using a number line</p> <p>Tens and ones using a part-whole</p> <p>Tens and ones using addition</p> <p>Use a place value Chart</p>

Year Two	
Strand	Suggested Small Steps (Not all small steps need to be taught as lessons and multiple could be taught in a lesson)
	<p>Compare objects</p> <p>Compare numbers <math>\lt</math> <math>\gt</math> <math>=</math></p> <p>Order objects and numbers</p> <p>Count in 2s</p> <p>Count in 5s</p> <p>Count in 10s</p>
<p>Number Facts/ Addition and Subtraction</p>	<p>Fact families - addition and subtraction bonds to 20</p> <p>Check calculations inverse, commutative</p> <p>Compare number sentences</p> <p>Know your bonds</p> <p>Related facts</p> <p>Bonds to 100 (tens)</p> <p>Add and subtract 1s</p> <p>10 more 10 less</p> <p>Add and subtract 10s</p> <p>Add by making 10</p> <p>Add a 2-digit and 1-digit number - crossing ten</p> <p>Subtraction - crossing 10</p> <p>Subtract a 1-digit number from a 2-digit number - crossing ten</p> <p>Add two 2-digit numbers - not crossing ten - add ones and add tens</p> <p>Add two 2-digit numbers - crossing ten - add ones and add tens</p> <p>Subtract a 2-digit number from a 2-digit number - not crossing ten</p> <p>Subtract a 2-digit number from a 2-digit number - crossing ten subtract ones and subtract tens</p> <p>Mixed addition and subtraction activity</p> <p>Find and make number bonds</p> <p>Add three 1-digit numbers</p>

Year Two	
Strand	Suggested Small Steps (Not all small steps need to be taught as lessons and multiple could be taught in a lesson)
<b>Number Facts/ Multiplication and Division</b>	<p>Make equal groups activity</p> <p>Make equal groups</p> <p>Redistribute from unequal to equal groups activity</p> <p>Add equal groups</p> <p>Make arrays</p> <p>Recognise equal groups</p> <p>Make equal groups</p> <p>Add equal groups</p> <p>Multiplication and division sentences Using the <math>\times</math> and <math>\div</math> symbol (Commutative)</p> <p>Multiplication sentences from pictures</p> <p>Use arrays</p> <p>Make doubles</p> <p>2 times-table</p> <p>5 times-table</p> <p>10 times-table</p> <p>Make equal groups- sharing</p> <p>Make equal groups - grouping</p> <p>Sharing and grouping problem solving</p> <p>Divide by 2</p> <p>Odd and even numbers</p> <p>Divide by 5</p> <p>Divide by 10</p>

Year Two	
Strand	Suggested Small Steps (Not all small steps need to be taught as lessons and multiple could be taught in a lesson)
Geometry: Shape	<p>Recognise 2-D and 3-D shapes</p> <p>Make 2-D and 3-D shapes activity</p> <p>Count sides on 2-D shapes</p> <p>Count vertices on 2-D shapes</p> <p>Draw 2-D shapes</p> <p>Lines of symmetry</p> <p>Compare and Sort 2-D shapes</p> <p>Make patterns with 2-D shapes</p> <p>Count faces on 3-D shapes</p> <p>Count edges on 3-D shapes</p> <p>Count vertices on 3-D shapes</p> <p>Compare and Sort 3-D shapes and objects</p> <p>Make patterns with 3-D shapes</p>
Measurement: Length/	<p>Estimate and measure length and height m/cm</p> <p>Compare length and height <math>\leftrightarrow</math></p>
Measurement: Weight/Volume	<p>Introduce capacity and volume</p> <p>Estimate and Measure capacity</p> <p>Compare volume <math>\leftrightarrow</math></p> <p>Millilitres</p> <p>Litres</p> <p>Four operations with mass</p> <p>Four operations with volume</p> <p>Temperature activity Introduce weight and mass</p> <p>Estimate and Measure mass</p> <p>Compare mass <math>\leftrightarrow</math></p> <p>Measure mass in grams</p> <p>Measure mass in kilograms</p>

Year Two	
Strand	Suggested Small Steps (Not all small steps need to be taught as lessons and multiple could be taught in a lesson)
Measurement: money	<ul style="list-style-type: none"> <li>Recognising coins and notes</li> <li>Count money - pence</li> <li>Count money - pounds (notes and coins)</li> <li>Count money - notes and coins</li> <li>Select money</li> <li>Make the same amount</li> <li>Compare money</li> <li>Find the total</li> <li>Find the difference</li> <li>Find change</li> <li>Two-step problems</li> </ul>
Measurement: Time	<ul style="list-style-type: none"> <li>Telling time to the hour</li> <li>Telling time to the half hour</li> <li>O'clock and half past</li> <li>Quarter past and quarter to</li> <li>Telling time to 5 minutes</li> <li>Writing time</li> <li>Hours and days</li> <li>Find durations of time</li> <li>Compare durations of time</li> </ul>
Fractions	<ul style="list-style-type: none"> <li>Working with parts and wholes activity</li> <li>Make equal parts</li> <li>Recognise a half</li> <li>Find a half</li> <li>Recognise a quarter</li> <li>Find a quarter</li> <li>Recognise a third</li> <li>Find a third</li> <li>Unit fractions</li> <li>Non-unit fractions</li> <li>Equivalence of a half and 2 quarters</li> <li>Find three quarters</li> <li>Count in fractions</li> <li>Problem solving with fractions</li> </ul>

Year Two	
Strand	Suggested Small Steps (Not all small steps need to be taught as lessons and multiple could be taught in a lesson)
Position and Direction	<p>Describe position</p> <p>Problem solving with position</p> <p>Describe movement eg straight line</p> <p>Describe turns half, quarter, clockwise, anticlockwise</p> <p>Describe movement and turns</p> <p>Making patterns and sequences with shapes and objects</p>
Statistics: Graphs and Charts	<p>Make tally charts</p> <p>Draw pictograms (1-1)</p> <p>Interpret pictograms (1-1)</p> <p>Draw pictograms (2, 5 and 10)</p> <p>Interpret pictograms (2, 5 and 10)</p> <p>Block diagrams</p> <p>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</p> <p>Ask-and-answer questions about totalling and comparing categorical data</p>