

## MATHS TREES OF KNOWLEDGE AND SKILLS PROGRESSION

### KS1 – NUMBER – PLACE VALUE AND FRACTIONS

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KS1 – NUMBER – PLACE VALUE AND FRACTIONS						
	Year 1			Year 2		
	Autumn Term	Spring Term	Summer Term	Autumn Term	Spring Term	Summer Term
<b>Knowledge</b>	<ul style="list-style-type: none"> <li>• Know how numbers to 10 are represented</li> <li>• Know one more and one less than any number to 10</li> <li>• Know and understand the language of: equal to, more than, less than (fewer), most, least</li> <li>• Know what the words 'order' and 'compare' mean</li> <li>• Know what the signs <math>G</math> <math>q</math> and <math>=</math> represent</li> <li>• Know what is meant by a 'part-whole' model</li> <li>• Know how to represent values to 10 within a part-whole model</li> </ul>	<ul style="list-style-type: none"> <li>• Know how numbers to 20, and then to 50, are represented</li> <li>• Know one more and one less than any number to 20, then to 50</li> <li>• Know how to represent values to 50 within a part-whole model</li> <li>• Revisit knowledge and understanding of the language of; equal to, more than, less than (fewer), most, least</li> <li>• Revisit knowledge of what the signs <math>G</math> <math>q</math> and <math>=</math> represent</li> <li>• Know how many 'Tens' and how many 'Ones' are in a number up to 20, then up to 50</li> <li>• Know how to represent values to 20 within a part-whole model</li> </ul>	<ul style="list-style-type: none"> <li>• Know how numbers to 100 are represented in numerals and in words</li> <li>• Know one more and one less than any number to 100</li> <li>• Know how many 'Tens' and how many 'Ones' are in a number up to 50, then up to 100</li> <li>• Know that a whole can be divided into equal parts and that these are called 'fractions'</li> <li>• Know what is meant by a half and a quarter and that each part must be equal</li> </ul>	<ul style="list-style-type: none"> <li>• Re-visit knowledge of how numbers to 100 are represented in numerals and in words</li> <li>• Revisit knowledge of how many Tens and how many Ones are in a number, up to 100</li> <li>• Know how to represent values to 100 within a part-whole model</li> <li>• Know how to use a place value chart</li> </ul>	<ul style="list-style-type: none"> <li>• Know how to partition two digit numbers in different ways (with different combinations of tens and ones)</li> <li>• Know that on a scale numbers can be presented in different divisions - ones, twos, fives, tens and hundreds</li> <li>• Re-visit knowledge of <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math></li> <li>• Know what is meant by a third (<math>\frac{1}{3}</math>)</li> <li>• Know that <math>\frac{1}{2}</math> and <math>\frac{2}{4}</math> are equivalent fractions</li> <li>• Know the difference between a unit fraction and a non-unit fraction</li> </ul>	<ul style="list-style-type: none"> <li>• Know the place value of each digit in a two digit number (Tens, Ones)</li> </ul>

<p style="text-align: center;"><b>Skills</b></p>	<ul style="list-style-type: none"> <li>Count to and across 20, forwards and backwards, beginning with 0 or 1</li> <li>Count to and across 20, forwards and backwards, from any number</li> <li>Count in multiples of tens to 100</li> <li>Identify and represent numbers using objects and pictorial representation, including the number line to 10</li> <li>Use the language of; equal to, more than, less than (fewer), most, least</li> <li>Use <math>&gt;</math>, <math>&lt;</math> and <math>=</math> signs to compare and order numbers to 10</li> <li>Read and write numbers 1 to 10 in numerals.</li> <li>Read and write numbers 1 to 10 in words</li> </ul>	<ul style="list-style-type: none"> <li>Count to and across 50, forwards and backwards, starting from 0 or 1</li> <li>Count in 2s to 50</li> <li>Count in multiples of fives and tens, to 100 and back</li> <li>Identify and represent numbers using objects and pictorial representation, including the number line to 50</li> <li>Re-visit use of the language of; equal to, more than, less than (fewer), most, least</li> <li>Use <math>&gt;</math>, <math>&lt;</math> and <math>=</math> signs to compare and order numbers to 20, then to 50</li> <li>Read and write numbers 1 to 50 in numerals</li> <li>Read and write numbers 1 to 20 in words</li> </ul>	<ul style="list-style-type: none"> <li>Count to and across 100, forwards and backwards, beginning with 0 or 1</li> <li>Count to and across 100, forwards and backwards, from any number</li> <li>Count in multiples of twos, fives and tens</li> <li>Identify and represent numbers using objects and pictorial representation, including the number line to 100</li> <li>Read and write numbers 1 to 100 in numerals</li> <li>Re-visit reading and writing numbers 1 to 20 in words</li> <li>Use <math>&gt;</math>, <math>&lt;</math> and <math>=</math> signs to compare and order numbers to 50, then to 100</li> <li>Halving shapes and objects</li> <li>Finding half of a quantity</li> <li>Making, finding and recognising a quarter of a shape or object</li> <li>Find a quarter of a quantity</li> </ul>	<ul style="list-style-type: none"> <li>Revisit counting forwards &amp; backwards, to and across 100, from any number</li> <li>Count in 2s, 5s and 10s</li> <li>Compare numbers within 50</li> <li>Count in 3s</li> <li>Count objects to 100</li> <li>Revisit reading and writing numbers in numerals to 100</li> <li>Write numerals in words to 50</li> <li>Use a place value chart</li> <li>Compare sets of up to 100 objects</li> <li>Compare numbers, to 100, using <math>&gt;</math>, <math>&lt;</math> and <math>=</math> signs</li> <li>Order objects and numbers within 100</li> </ul>	<ul style="list-style-type: none"> <li>Revisit counting forwards &amp; backwards, to and across 100, from any number</li> <li>Revisit counting in 2s, 3s, 5s and 10s – forwards and backwards</li> <li>Re-visit reading and writing numbers in numerals to 100</li> <li>Write numbers to 100, in words</li> <li>Read scales in divisions of ones, twos, fives and tens</li> <li>Partition two digit numbers into different combinations of tens and ones, explaining their thinking verbally, in pictures or using apparatus</li> <li>Use concrete manipulatives and real life objects to make, find and recognise a half</li> <li>Use concrete manipulatives and real life objects to make, find and recognise a quarter</li> <li>Use concrete manipulatives and real life objects to find and recognise a third</li> <li>Count in fractions</li> </ul>	<ul style="list-style-type: none"> <li>Identify, represent and estimate numbers using different representations including the number line</li> <li>Compare and order numbers from 0 up to 100</li> <li>Use <math>&gt;</math>, <math>&lt;</math> and <math>=</math> signs to compare and order numbers to at least 100</li> <li>Use place value and number facts to solve problems</li> <li>Count in steps of 2, 3 and 5 from 0, and in tens from any number, forwards and backwards</li> </ul>
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