

Year 3 Maths				highlighted objectives → DfE Ready-to-Progress Criteria
Place Value	Key Vocabulary			
		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">hundreds (100s)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">tens (10s)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">ones (1s)</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">place value</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">more</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">less</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">greater than (&gt;)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">less than (&lt;)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">equal to</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">order</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">compare</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">estimate</div> </div> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">exchange</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">ascending</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 2px;">descending</div> </div>		
End of Year Objective	'I know' statements	'I can' statements	Suggested manipulatives	
To read and write numbers to 1000, <b>recognising the place value of each digit</b>	<ul style="list-style-type: none"> <li>I know the value of each digit in a given number</li> <li>I know how many hundreds; tens and ones are in a given number</li> <li>I know that ten tens are equivalent to one hundred</li> <li>I know that zero is sometimes used as a placeholder</li> </ul>	<ul style="list-style-type: none"> <li>I can represent numbers to 1000 in different ways</li> <li>I can partition numbers to 1000 using standard partitioning (100s, 10s, 1s)</li> <li>I can partition numbers to 1000 using non-standard partitioning</li> </ul>	base 10/dienes  place value grids (PV counters should not be used until children secure with base 10)  part whole models	
<b>To compare and order numbers to 1000</b>	<ul style="list-style-type: none"> <li>I know that ascending means going from smallest to greatest</li> <li>I know that descending means going from greatest to smallest</li> <li>I know what the symbols &lt;, &gt; and = mean</li> </ul>	<ul style="list-style-type: none"> <li>I can compare two numbers by looking first at the 100s, then the 10s, then the 1s</li> <li>I can order three or more three-digit numbers</li> </ul>	base 10/dienes  place value grids (PV counters should not be used until children secure with base 10)	
To count in multiples of 50 and 100	<ul style="list-style-type: none"> <li>I know that ten hundreds makes 1000</li> <li>I know that all multiples of 100 end in 00</li> <li>I know that all multiples of 50 end in 50 or 00</li> </ul>	<ul style="list-style-type: none"> <li>I can count forwards and backwards in 50s or 100s</li> <li>I can start counting on/back from any multiple in the sequence</li> <li>I can make links between the 5x and 50x tables</li> <li>I can make links between the 10x and 100x tables</li> </ul>	numicon (for 50s, link to 5x)  base 10 (for 100s)	
To find 100, 10 or 1 more or less than a given number	<ul style="list-style-type: none"> <li>I know the value of each digit in a given number</li> <li>I know which digits will change when I add 100, 10 or 1 to a number</li> <li>I know which digits will change when I subtract 100, 10 or 1 from a number</li> </ul>	<ul style="list-style-type: none"> <li>I can represent numbers to 1000</li> <li>I can find 100, 10 or 1 more than a given number</li> <li>I can find 100, 10 or 1 less than a given number</li> <li>I can cross the hundreds or tens boundary when needed</li> </ul>	base 10/dienes  place value grids (PV counters should not be used until children secure with base 10)  100 squares/1000 squares	
<b>To place numbers to 1000 on a number line, estimating where appropriate</b>	<ul style="list-style-type: none"> <li>I know that the gaps on a number line are called intervals</li> <li>I know that not all number lines use the same intervals</li> <li>I know that estimating means having a sensible guess, and that my estimate may not be exactly the same as someone else's.</li> </ul>	<ul style="list-style-type: none"> <li>I can count in 10s, 50s and 100s</li> <li>I can work out what intervals a number line is counting up in</li> <li>I can identify values on a numberline and mark given values</li> <li>I can estimate the position of numbers on a number line</li> </ul>	blank number lines  Cuisenaire rods	

Addition and Subtraction	Key Vocabulary			
	<div style="display: flex; flex-wrap: wrap; justify-content: space-around; padding: 5px;"> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">estimate</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">mental method</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">multiple</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">subtract</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">difference</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">plus</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">column method</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">sum</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">digit</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">approximate</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">add</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">minus</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">total</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">place value</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">exchange</div> <div style="border: 1px solid purple; border-radius: 10px; padding: 5px; margin: 5px;">bonds</div> </div>			
End of Year Objective	'I know' statements	'I can' statements	Suggested manipulatives	
To add ones, tens or hundreds to a 3-digit number mentally	<ul style="list-style-type: none"> <li>I know the value of each digit in a given number up to 1000</li> <li>I know which digits will change when adding 1, 10 or 100 to a number</li> <li>I know when a calculation will require an exchange</li> </ul>	<ul style="list-style-type: none"> <li>I can derive facts using number bonds (e.g. <math>8+2=10</math> so <math>80+20=100</math> and <math>800+200=1000</math>)</li> <li>I can use the 'make 10/100 and then...' strategy to add across a boundary</li> <li>I can add ones, tens or hundreds to a number</li> <li>I can exchange mentally when appropriate</li> </ul>	base 10/dienes  place value grids (PV counters should not be used until children secure with base 10)  blank number lines	
To subtract ones, tens or hundreds to a 3-digit number mentally	<ul style="list-style-type: none"> <li>I know the value of each digit in a given number up to 1000</li> <li>I know which digits will change when subtracting 1, 10 or 100 from a number</li> <li>I know when a calculation will require an exchange</li> </ul>	<ul style="list-style-type: none"> <li>I can derive facts using number bonds (e.g. <math>10-8=2</math>, <math>100-80=20</math>, <math>1000-800=200</math>)</li> <li>I can use the 'make 10/100 and then...' strategy to subtract across a boundary</li> <li>I can subtract ones, tens or hundreds from a number</li> <li>I can exchange mentally when appropriate</li> </ul>	base 10/dienes  place value grids (PV counters should not be used until children secure with base 10)  blank number lines	
To add numbers with up to 3-digits using formal written methods	<ul style="list-style-type: none"> <li>I know that the digits must be lined up correctly when using column methods</li> <li>I know that addition is commutative, meaning I can add numbers in any order to get the same answer</li> <li>I know when a calculation will require an exchange</li> </ul>	<ul style="list-style-type: none"> <li>I can set out calculations correctly when using column method</li> <li>I can add two two-digit numbers using column method</li> <li>I can add a two-digit number and a three-digit number using column method</li> <li>I can add two three-digit numbers using column method</li> <li>I can exchange into the next column when appropriate</li> </ul>	base 10/dienes, moving on to place value counters as children become more secure	
To subtract numbers with up to 3-digits using formal written methods	<ul style="list-style-type: none"> <li>I know that the digits must be lined up correctly when using column methods</li> <li>I know that the greatest number must be written at the top when using column subtraction</li> <li>I know that the bottom number must be subtracted from the top number when using column subtraction</li> <li>I know when a calculation will require an exchange</li> </ul>	<ul style="list-style-type: none"> <li>I can set out calculations correctly when using column method</li> <li>I can subtract two two-digit numbers using column method</li> <li>I can subtract a two-digit number from a three-digit number using column method</li> <li>I can subtract two three-digit numbers using column method</li> <li>I can exchange from the next column when appropriate</li> </ul>	base 10/dienes, moving on to place value counters as children become more secure	

## Parkside Maths Curriculum

To use checking strategies such as estimating and <b>using the inverse</b>	<ul style="list-style-type: none"> <li>I know that estimating helps to get a quick idea of what the answer to a calculation is near to</li> <li>I know whether the actual answer would be greater or less than my estimate</li> <li>I know that addition and subtraction can be described as 'inverse operations'</li> <li>I know that fact families contain related addition and subtraction facts (e.g. <math>2+3=5</math>, <math>3+2=5</math>, <math>5-3=2</math>, <math>5-2=3</math>)</li> </ul>	<ul style="list-style-type: none"> <li>I can identify the multiple of 10 or 100 that a number is near to</li> <li>I can use estimation to decide if an answer is likely to be correct</li> <li>I can represent addition and subtraction calculations using part whole or bar models</li> <li>I can use inverse calculations to ensure my calculations are accurate</li> <li>I can use inverse calculations to solve missing number problems</li> </ul>	part whole/bar models (for inverse)
To solve problems involving addition and subtraction, including those with two steps	<ul style="list-style-type: none"> <li>I know that there are different methods that can be used for addition and subtraction (mental and written strategies)</li> <li>I know that bar models can be useful for understanding problems</li> </ul>	<ul style="list-style-type: none"> <li>I can identify whether I need to add or subtract to solve a problem</li> <li>I can identify the calculation needed to solve a problem</li> <li>I can choose the appropriate method to carry out a calculation</li> <li>I can use addition and subtraction in different contexts</li> </ul>	bar models  various (depending on skills/knowledge required for problem)
<b>Multiplication and division</b>	<b>Key Vocabulary</b>		
	<div style="display: flex; flex-wrap: wrap; justify-content: space-around;"> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">equal</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">multiply</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">divide</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">multiple</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">multiplication sentence</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">multiplication fact</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">times-tables</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">sharing</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">grouping</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">division sentence</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">division fact</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">remainder</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">array</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">bar model</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">repeated addition</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">commutative</div> </div>		
<b>End of Year Objective</b>	<b>'I know' statements</b>	<b>'I can' statements</b>	<b>Suggested manipulatives</b>
To use arrays to derive and represent multiplication and division facts	<ul style="list-style-type: none"> <li>I know that arrays are organised into rows and columns of equal amounts/groups</li> <li>I know that multiplication can be described as 'repeated addition'</li> <li>I know that multiplication follows the 'commutative law', meaning it can be done in any order</li> </ul>	<ul style="list-style-type: none"> <li>I can use arrays to represent multiplication and division facts</li> <li>I can say which multiplication facts are represented by a given array</li> <li>I can write multiplication facts as repeated additions (e.g. <math>2 \times 4 = 2 + 2 + 2 + 2</math>)</li> </ul>	Counters  Cuisenaire rods
To multiply and divide by 3, 4 and 8, writing the related multiplication and division sentences	<ul style="list-style-type: none"> <li>I know that division is the inverse of multiplication</li> <li>I know that multiplying by four is the same as doubling and doubling again</li> <li>I know that the each multiple of eight is double the equivalent multiple of four</li> <li>I know that multiplication follows the 'commutative law', meaning it can be done in any order</li> </ul>	<ul style="list-style-type: none"> <li>I can calculate multiples of 3</li> <li>I can calculate multiples of 4</li> <li>I can calculate multiples of 8</li> <li>I can work to identify patterns and links in the 3, 4- and 8-times tables</li> </ul>	Numicon  Cuisenaire rods  Counters (for arrays)  100 squares

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To multiply 2-digits by 1-digit using mental methods such as partitioning or known facts	<ul style="list-style-type: none"> <li>I know, and can recall facts from, the 2-, 5-, 10-, 3-, 4- and 8- times tables</li> <li>I know that multiplication follows the 'distributive law', meaning that multiplying the sum of two numbers is the same as multiplying the numbers separately</li> </ul>	<ul style="list-style-type: none"> <li>I can derive multiplication and division statements from known facts (e.g. <math>3 \times 4 = 12</math>, so <math>30 \times 4 = 120</math>)</li> <li>I can partition two-digit numbers in order to multiply them (e.g. <math>34 \times 5 = (30 \times 5) + (4 \times 5)</math>)</li> </ul>	Part whole models  Base 10/dienes
To solve problems involving multiplication and division, including those with two steps	<ul style="list-style-type: none"> <li>I know that multiplication follows the 'commutative law', meaning it can be done in any order</li> <li>I know that multiplication follows the 'distributive law', meaning that multiplying the sum of two numbers is the same as multiplying the numbers separately</li> </ul>	<ul style="list-style-type: none"> <li>I can reason about multiplication statements, for example recognising that <math>3 \times 6 &gt; 2 \times 6</math></li> <li>I can represent worded problems as bar models</li> <li>I can work systematically to find all possible answers in correspondence questions</li> </ul>	Various, depending on problem and the skills/knowledge required
<b>Fractions</b>	<b>Key Vocabulary</b>		
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>equivalent   numerator   denominator</p> <p>compare   add   fraction</p> <p>whole   equivalent fraction   greater than (&gt;)</p> </div> <div style="text-align: center;"> <p>less than (&lt;)   equal to   multiply</p> <p>inequality statement   divide</p> <p>divide   parts   set of objects</p> </div> </div>		
<b>End of Year Objective</b>	<b>'I know' statements</b>	<b>'I can' statements</b>	<b>Suggested manipulatives</b>
To count up and down in tenths	<ul style="list-style-type: none"> <li>I know that dividing a whole into ten equal parts creates tenths</li> <li>I know that, when counting on in fractions, the numerator changes but the denominator stays the same</li> <li>I know that when the numerator and denominator are equal, the fraction is equivalent to one whole</li> </ul>	<ul style="list-style-type: none"> <li>I can count up and down in tenths</li> <li>I know that ten tenths are equivalent to one whole</li> </ul>	Counting sticks/bead strings  Tens frames
To write and represent unit and non-unit fractions with small denominators	<ul style="list-style-type: none"> <li>I know that fractions represent part of a whole</li> <li>I know that the top digit in a fraction is the numerator, and this tells us the number of equal parts that are shaded/represented</li> <li>I know that the bottom digit in a fraction is the denominator, and this tells us how many equal parts make up the whole</li> <li>I know that unit fractions are any fractions with a numerator of one</li> <li>I know that non-unit fractions are any fractions with a numerator of more than one</li> </ul>	<ul style="list-style-type: none"> <li>I know how to write fractions using both words and the standard fraction layout</li> <li>I can represent unit fractions using practical objects and drawings</li> <li>I can represent non-unit fractions using practical objects and drawings</li> </ul>	Children should be exposed to a variety of representations for fractions (counters, folded paper/shapes, number lines, fraction foods etc)

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To find equivalent fractions for fractions with small denominators, supported by representations	<ul style="list-style-type: none"> <li>I know that equivalent fractions have the same value/are the same size</li> </ul>	<ul style="list-style-type: none"> <li>I can use number lines to find equivalent fractions</li> <li>I can use bar models/paper strips to find equivalent fractions</li> </ul>	<p>Folded paper strips/shapes</p> <p>Fraction walls</p>
To compare and order unit fractions	<ul style="list-style-type: none"> <li>I know that unit fractions are any fractions with a numerator of one</li> <li>I know that, in unit fractions, the greater the denominator the smaller the fraction</li> </ul>	<ul style="list-style-type: none"> <li>I can compare unit fractions using inequality symbols (&lt;, &gt; and =)</li> </ul>	<p>Numicon</p> <p>Folded paper/bar models</p>
To compare and order fractions with the same denominator	<ul style="list-style-type: none"> <li>I know that non-unit fractions are any fractions with a numerator of more than one</li> <li>I know that, if the denominator is the same, the greater the numerator the greater the fraction</li> </ul>	<ul style="list-style-type: none"> <li>I can compare non-unit fractions with the same denominator using inequality symbols (&lt;, &gt; and =)</li> </ul>	<p>Numicon</p> <p>Folded paper/bar models</p>
To add and subtract fractions with the same denominators (less than one whole)	<ul style="list-style-type: none"> <li>I know that adding unit fractions with the same denominator creates a non-unit fraction</li> <li>I know that, when adding and subtracting fractions, the numerator changes but the denominator stays the same</li> </ul>	<ul style="list-style-type: none"> <li>I can partition a whole into unit and non-unit fractions</li> <li>I can add fractions with the same denominator</li> <li>I can subtract fractions with the same denominator</li> </ul>	<p>Numicon</p>
To find fractions of a set of objects ( <i>Ready-to-progress criteria</i> → unit fractions only)		<ul style="list-style-type: none"> <li>I can find unit fractions of a set of objects by dividing by the denominator</li> <li>I can find simple non-unit fractions of a set of objects</li> </ul>	<p>Counters/cubes</p>
To solve problems involving fractions, including those with two steps	<ul style="list-style-type: none"> <li>I know that when the numerator and denominator are equal, the fraction is equivalent to one whole</li> <li>I know that bar models can help when understanding a problem</li> <li>I know that some problems might need more than one step</li> </ul>	<ul style="list-style-type: none"> <li>I can find the whole when given a unit fraction of an amount or shape</li> <li>I can use bar models to represent problems</li> <li>I can solve fraction problems with more than one step</li> </ul>	<p>Various, depending on problem and skills/knowledge required</p>

Measurement	Key Vocabulary			
	<div style="display: flex; flex-wrap: wrap; justify-content: space-around; text-align: center;"> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">millilitre (ml)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">length</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">height</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">width</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">perimeter</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">numerals</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">month</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">year</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">midnight</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">distance</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">centimetres (cm)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">millimetres (mm)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">capacity</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">midday</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">am</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">pm</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">metres (m)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">measure</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">unit of measurement</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">duration</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">hour</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">minute</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">litre (l)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">second</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">past</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">to</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">pence (p)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">add</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">subtract</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">multiply</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">equivalent</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">start</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">end</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">digital clock</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">total</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">convert</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">greater than (&gt;)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">less than (&lt;)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">mass</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">measure</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">kilograms (kg)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">convert</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">change</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">ruler</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">metre stick</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">pounds (£)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">scale</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">interval</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">grams (g)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 5px; margin: 2px;">difference</div> </div>			
End of Year Objective	'I know' statements	'I can' statements	Suggested manipulatives	
To measure length, mass or capacity accurately using appropriate metric units of measure	<ul style="list-style-type: none"> <li>I know that there are 10mm in 1cm, and 100cm in 1m</li> <li>I know that, when measuring, I need to line up with the 0 and not the end of the ruler</li> <li>I know that there are 1000g in 1kg</li> <li>I know that capacity is the maximum amount a container can hold</li> <li>I know volume is the exact amount of liquid in a container</li> <li>I know that there are 1000ml in 1l</li> </ul>	<ul style="list-style-type: none"> <li>I can use a ruler to measure in metres, centimetres or millimetres (accurate to 2mm)</li> <li>I can use scales to measure in grams and kilograms</li> <li>I can measure volume and capacity in litres and millilitres</li> <li>I can begin to choose the most appropriate unit of measure</li> </ul>	Various measuring tools – rulers, trundle wheels, jugs and other containers, balances, scales etc.	
To compare lengths, masses or capacities accurately	<ul style="list-style-type: none"> <li>I know that there are 10mm in 1cm, and 100cm in 1m</li> <li>I know that there are 1000g in 1kg, 500g in ½kg and 250g in ¼kg</li> <li>I know that there are 1000ml in 1l, 500ml in ½l and 250ml in ¼l</li> <li>I know that, to compare accurately, we need to ensure all measurements are shown in the same units</li> </ul>	<ul style="list-style-type: none"> <li>I can convert millimetres into centimetres and centimetres into millimetres (no use of decimals)</li> <li>I can convert metres into centimetres and centimetres into metres (no use of decimals)</li> <li>I can compare mass by looking at kilograms first and then grams</li> <li>I can compare capacities by sight/without measuring</li> <li>I can compare measurements using inequality symbols (&lt; and &gt;), as well as comparative language (e.g. shorter, taller, longer, heavier, lighter)</li> </ul>	Various measuring tools – rulers, trundle wheels, jugs and other containers, balances, scales etc.	
To add and subtract lengths, masses and capacities accurately, using appropriate metric units of measure	<ul style="list-style-type: none"> <li>I know that, to add and subtract lengths with different units, we first need to find equivalents</li> </ul>	<ul style="list-style-type: none"> <li>I can add and subtract lengths given in the same unit</li> <li>I can add and subtract lengths given in different units</li> <li>I can add and subtract masses by partitioning into kilograms and grams</li> </ul>		

## Parkside Maths Curriculum

To calculate different intervals on simple scales	<ul style="list-style-type: none"> <li>I know that the gaps on a scale are known as intervals</li> <li>I know that scales do not always use the same intervals</li> </ul>	<ul style="list-style-type: none"> <li>I can count in 10s, 20s, 50s and 100s</li> <li>I can work out what intervals a scale is counting up in</li> <li>I can identify values on a scale and mark given values</li> </ul>	<p>Blank number lines/number lines with different intervals</p> <p>Cuisenaire rods</p>
To measure the perimeter of simple 2D shapes	<ul style="list-style-type: none"> <li>I know that perimeter is the total distance around the outside of a closed 2D shape</li> </ul>	<ul style="list-style-type: none"> <li>I can measure and calculate the perimeter of simple 2D shapes</li> <li>I can work systematically to ensure I measure the lengths of all the sides</li> <li>I can use properties of shapes to identify which sides I need to measure before calculating perimeter</li> </ul>	<p>2D shapes</p> <p>Match sticks/lollypop sticks</p>
To describe amounts of money in pounds or pence, including in practical contexts	<ul style="list-style-type: none"> <li>I know the value of different coins and notes</li> <li>I know that different combinations of coins/notes can equal the same amount</li> <li>I know that £1 = 100p</li> </ul>	<ul style="list-style-type: none"> <li>I can compare amounts of money using inequality symbols (&lt;, &gt; and =)</li> <li>I can convert pence into pounds and pence, and vice versa</li> </ul>	Money
To add or subtract amounts of money, including to give change	<ul style="list-style-type: none"> <li>I know that £1 = 100p</li> <li>I know to add/subtract the pounds first and then pence</li> </ul>	<ul style="list-style-type: none"> <li>I can add and subtract amounts of money, using efficient strategies</li> <li>I can either count on or count back to find change from a given amount</li> </ul>	Money
To read and write the time to the nearest minute, using an analogue clock	<ul style="list-style-type: none"> <li>I know the Roman numerals for the numbers 1-12</li> <li>I know that there are 60 minutes in an hour, and a clock face is divided into five-minute intervals</li> <li>I know that if the minute hand is positioned before 6, we use 'past the hour', and if it is positioned after, we use 'to the hour'</li> </ul>	<ul style="list-style-type: none"> <li>I can read the time on an analogue clock to the nearest minute</li> <li>I can draw hands on an analogue clock face to show the time to the nearest minute</li> <li>I can read the time on clock faces using Roman numerals</li> </ul>	Clocks
To compare times and durations recorded in seconds, minutes or hours	<ul style="list-style-type: none"> <li>I know that there are 60 seconds in a minute, and 60 minutes in an hour</li> <li>I know that there are 24 hours in a day</li> <li>I know that the duration of an event means how long it lasts</li> </ul>	<ul style="list-style-type: none"> <li>I can measure and record durations using different units</li> <li>I can calculate how many hours in a given number of days</li> <li>I can calculate how many minutes there are until the next hour</li> <li>I can calculate the duration of an event</li> <li>I can calculate the start or end time of an event when I know the duration</li> </ul>	<p>Stop watches</p> <p>Bar models</p>
To know the number of days in a month, year and leap year	<ul style="list-style-type: none"> <li>I know that there are 7 days in a week</li> <li>I know that there are 12 months in a year</li> <li>I know that the number of days in a month varies, and rhymes and patterns can help me to remember this</li> <li>I know that there are 365 days in a year, but 366 days in a leap year</li> </ul>	<ul style="list-style-type: none"> <li>I can calculate how many days are in a given number of weeks</li> <li>I can state how many days are in a given month</li> </ul>	

<b>Geometry: Shapes and angles</b>	<b>Key Vocabulary</b>		
<b>End of Year Objective</b>	<b>'I know' statements</b>	<b>'I can' statements</b>	<b>Suggested manipulatives</b>
<p>To draw and name 2D shapes, describing their properties</p>	<ul style="list-style-type: none"> <li>I know the names of different 2D shapes</li> <li>I know that 2D shapes are flat</li> <li>I know that not all shapes with the same number of sides/vertices look the same</li> </ul>	<ul style="list-style-type: none"> <li>I can identify a shape from a description of its properties</li> <li>I can describe the properties of a given shape</li> <li>I can describe the angles and lines in a shape (right angles, parallel and perpendicular, horizontal and vertical)</li> <li>I can identify horizontal and vertical lines of symmetry in a shape</li> <li>I can draw 2D shapes accurately</li> </ul>	<p>2D shapes</p> <p>Geoboards</p>
<p>To make and name 3D shapes, describing their properties, and recognising them in different orientations</p>	<ul style="list-style-type: none"> <li>I know that 3D shapes are not flat but solid, and occupy space</li> <li>I know the names of different 3D shapes</li> <li>I know what the faces, edges and vertices refer to in a 3D shape</li> <li>I know that curved surfaces (as in a cylinder or sphere) are not classed as faces</li> </ul>	<ul style="list-style-type: none"> <li>I can recognise 3D shapes in different orientations</li> <li>I can say how many faces, edges and vertices a shape has</li> <li>I can identify a shape from a description of its properties</li> <li>I can construct 3D shapes</li> </ul>	<p>3D shapes</p>
<p>To identify and draw horizontal and vertical lines</p>	<ul style="list-style-type: none"> <li>I know that horizontal lines go straight across</li> <li>I know that vertical lines go straight up</li> </ul>	<ul style="list-style-type: none"> <li>I can identify horizontal on vertical lines in shapes and in the world around me</li> <li>I can draw horizontal and vertical lines</li> </ul>	
<p>To identify and draw perpendicular and parallel lines</p>	<ul style="list-style-type: none"> <li>I know that parallel lines stay the same distance apart and never meet (like train tracks)</li> <li>I know that perpendicular lines will meet at a right angle</li> </ul>	<ul style="list-style-type: none"> <li>I can identify parallel and perpendicular lines in shapes and in the world around me</li> <li>I can mark parallel lines using arrow symbols &gt;</li> <li>I can mark perpendicular lines using right angle symbols</li> <li>I can draw examples of parallel and perpendicular lines</li> </ul>	<p>Right angle checker</p>
<p>To identify right angles as a quarter of a turn and in shapes</p>	<ul style="list-style-type: none"> <li>I know that angles can be used to describe the size of a turn</li> <li>I know that a quarter of a turn can be described as a right angle</li> <li>I know that turns can be completed in a clockwise or anticlockwise direction</li> <li>I know that angles are created where two lines meet</li> </ul>	<ul style="list-style-type: none"> <li>I can make and describe quarter, half, three quarter and full turns</li> <li>I can identify right angles and mark them with the right angle symbol</li> </ul>	<p>Right angle checker</p>

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To compare angles by stating if they are greater than or less than a right angle	<ul style="list-style-type: none"> <li>I know that a quarter of a turn can be described as a right angle</li> <li>I know that angles smaller than a right angle can be described as acute</li> <li>I know that angles greater than a right angle (but less than two right angles) can be described as obtuse</li> </ul>	<ul style="list-style-type: none"> <li>I can describe a turn as greater or less than a right angle</li> <li>I can compare angles that are less than two right angles in size</li> </ul>	Right angle checker
<b>Statistics</b>	<b>Key Vocabulary</b>		
	<span style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">pictogram</span> <span style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">key</span> <span style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">bar chart</span> <span style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">scale</span> <span style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">table</span> <span style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">row</span> <span style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">column</span> <span style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">vertical axis</span>		
<b>End of Year Objective</b>	<b>'I know' statements</b>	<b>'I can' statements</b>	<b>Suggested manipulatives</b>
To present and interpret information in pictograms, bar charts or tables	<ul style="list-style-type: none"> <li>I know that the same information can be represented in different ways</li> <li>I know that the key in a pictogram states the value of each symbol.</li> </ul>	<ul style="list-style-type: none"> <li>I can interpret information in pictograms, understanding what it means when a half, quarter or full symbol is used</li> <li>I can draw pictograms to represent data</li> <li>I can interpret information in bar charts, including with scales counting in steps of 2, 5 and 10</li> <li>I can draw bar charts to represent data, choosing an appropriate scale with support</li> </ul>	counters (for pictograms)
To solve problems using information presented in bar charts, pictograms or tables, including those with two steps.	<ul style="list-style-type: none"> <li>I know how to interpret information in pictograms, bar charts, pictograms or tables</li> <li>I know that some problems require more than one operation</li> </ul>	<ul style="list-style-type: none"> <li>I can use information presented in pictograms or bar charts to solve one or two step problems</li> <li>I can use information presented in two-way tables to solve one or two step problems</li> </ul>	