



# Caedmon Primary Ready to Progress Document

# EYFS

		Mathematics	
		Number	Numerical patterns
Birth to 3	6 Months		<ul style="list-style-type: none"> <li>-Combine objects like stacking blocks and cups. Put objects inside others and take them out again.</li> <li>-Can use a simple shape sorter.</li> <li>-Can stack cups- building them into a tower, nesting or lining them up.</li> <li>-Explores differently sized and shaped objects</li> <li>-Beginning to put objects of similar shapes inside others and take them out again</li> <li>-Responds to size, reacting to very big or very small items that they see or try to pick up</li> </ul>
	12 Months	<ul style="list-style-type: none"> <li>-Takes part in finger rhymes with numbers.</li> <li>-React to changes of amount in a group of up to three items.</li> <li>-Looks for things which have moved out of sight</li> </ul>	<ul style="list-style-type: none"> <li>-Initiates and continues repeated actions</li> <li>-Shows an interest in objects of contrasting sizes in meaningful contexts</li> <li>-Gets to know and enjoys daily routine</li> <li>-Shows an interest in emptying containers</li> </ul>
	18 Months	<ul style="list-style-type: none"> <li>-Compare amounts, saying 'lots', 'more' or 'same'.</li> <li>-Counting-like behaviour, such as making sounds, pointing or saying some numbers in sequence.</li> <li>-Develops an awareness of number names through their enjoyment of action rhymes and songs that relate to their experience of numbers.</li> <li>Says some counting words</li> </ul>	<ul style="list-style-type: none"> <li>-Climbs and squeezes into different types of spaces.</li> <li>-Builds with a range of resources.</li> <li>-Completes inset puzzles.</li> <li>-Enjoys filling and emptying containers</li> <li>-Investigates fitting themselves inside and moving through spaces</li> <li>-Pushes objects through different shaped holes, and attempts to fit shapes into spaces on inset boards or puzzles</li> <li>-Beginning to select a shape for a specific space</li> <li>-Enjoys using blocks to create their own simple structures and arrangements</li> <li>Becoming familiar with patterns in daily routines</li> <li>-Beginning to arrange items in their own patterns, e.g. lining up toys</li> <li>-Shows an interest in size and weight</li> </ul>
	2 Years Old	<ul style="list-style-type: none"> <li>-Selects a small group of objects from a group when asked 'please can you give me one.'</li> <li>-Begins to say numbers in order, some of which are in the right order (ordinality)</li> <li>-Beginning to notice numerals (number symbols)</li> <li>-Beginning to count on their fingers.</li> </ul>	<ul style="list-style-type: none"> <li>-Notices patterns and arranges things in patterns.</li> <li>-Counts in everyday contexts, sometimes skipping numbers - '1-2-3-5.'</li> <li>-Compare sizes, weights etc. using gesture and language- 'bigger/little/smaller', 'high/low', 'tall', 'heavy'</li> <li>-Makes simple constructions</li> <li>-Beginning to understand some talk about immediate past and future</li> <li>-Beginning to anticipate times of the day such as mealtimes or home time</li> </ul>

Nursery 1 (3-4)	3 Years Old	<ul style="list-style-type: none"> <li>-Has fast recognition of up to 3 objects, without having to count them individually ('subitising').</li> <li><b>-Knows that a group of things changes in quantity when something is added or taken away.</b></li> <li>-Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, I've got two. Same!</li> <li>-Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle)</li> <li>Separates a group of three or four objects in different ways, beginning to recognise that the total is still the same</li> <li>-Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers</li> </ul>	<ul style="list-style-type: none"> <li>-Recites numbers past 5.</li> <li>-Knows that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').</li> <li>-Begins to link numerals and amounts: E.g. showing the right number of objects to match the numeral, up to 5.</li> <li>Responds to and uses language of position and direction</li> <li>Shows awareness of shape similarities and differences between objects</li> </ul>
Nursery 2 (3-4)	4 Years Old	<ul style="list-style-type: none"> <li>-Says one number for each item in order: 1,2,3,4,5.</li> <li>-Experiments with their own symbols and marks as well as numerals.</li> <li>-Solves real world mathematical problems with numbers up to 5.</li> <li>-Compares quantities using language: 'more than', 'fewer than'.</li> <li>-Recalls some number bonds to 5.</li> <li><b>-Recognises numerals 1 to 5.</b></li> <li><b>-Counts actions or objects which cannot be moved</b></li> </ul>	<ul style="list-style-type: none"> <li>-Begins to count forwards and backwards up to 5.</li> <li>-Rote counts to higher numbers.</li> <li>-Show 'finger numbers' up to 5.</li> <li>-Links numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</li> <li>-Talks about and explores 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'.</li> <li>-Understands position through words alone – EG: "The bag is under the table," – with no pointing.</li> <li>-Describes a familiar route.</li> <li>-Discusses routes and locations, using words like 'in front of' and 'behind'.</li> <li>-Talks about and identifies the patterns around them. EG: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc.</li> <li>-Extends and creates ABAB patterns – stick, leaf, stick, leaf.</li> <li>-Notices and corrects an error in a repeating pattern.</li> <li>-Begins to describe a sequence of events, real or fictional, using words such as 'first', 'then...'</li> </ul>
Reception	5 Years Old	<ul style="list-style-type: none"> <li>-Can subitise up to 5 objects.</li> <li>-Links the number symbol (numeral) with its cardinal number value.</li> <li>-Children compare numbers, using the vocabulary 'more than', 'less than', 'fewer', 'the same as', 'equal to'.</li> <li>-Understands the 'one more than/one less than' relationship between consecutive numbers.</li> <li>-Begins to estimate how many they can see and checks by counting.</li> <li>-Explores the composition of numbers to 10.</li> <li>-Recalls number bonds for numbers 0–10.</li> <li>-Can compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.</li> <li><b>-Selects the correct numeral to represent 1 to 5, then 1 to 10 objects.</b></li> <li><b>-Finds the total number of items in two groups by counting all of them.</b></li> <li><b>-Says the number that is one more than a given number</b></li> <li><b>-In practical activities begin to use the vocabulary involved in addition and subtraction.</b></li> <li><b>-Solve single digit addition and subtraction problems.</b></li> <li>In practical activities, adds one and subtracts one with numbers to 10</li> </ul>	<ul style="list-style-type: none"> <li>-Count objects, actions and sounds.</li> <li>-Play card games such as snap or matching pairs where the children identify similarities and differences.</li> <li>-Counts verbally beyond 10.</li> <li>-Begins to identify when items haven't been distributed evenly.</li> <li>-Can select, rotate and manipulate shapes in order to develop spatial reasoning skills.</li> <li>-Continue, copy and create repeating patterns.</li> <li>-Compare length, weight and capacity.</li> <li>-Is able to identify errors in a repeating pattern.</li> <li>-Finds 2D shapes within 3D shapes, including through printing or shadow play.</li> <li><b>-Order numbers 1-20</b></li> <li><b>-Practically solve halving, doubling and problems.</b></li> <li>Investigates turning and flipping objects in order to make shapes fit and create models; predicting and visualising how they will look (spatial reasoning)</li> <li>Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build</li> <li>Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy</li> </ul>

# Year 1

Ready to progress statements	Year 1 objectives		
<p>By the end of Reception, the children will be expected to:</p> <ul style="list-style-type: none"> <li>• Have a deep understanding of numbers to 10, including the composition of each number.</li> <li>• Subitise (recognise quantities without counting) up to 5.</li> <li>• Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.</li> <li>• Verbally count beyond 20, recognising the pattern of the counting system</li> <li>• Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.</li> <li>• Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</li> </ul>	<p><b>Place Value</b></p> <ul style="list-style-type: none"> <li>• Count to and across 100 - forwards and back from any given number</li> <li>• Given a number, identify one more and one less</li> <li>• Identify and represent numbers using objects and pictures</li> <li>• Read and Write numerals in numbers and words 1-20</li> <li>• Use mathematical language: equal to, more/less than, most, least</li> <li>• Read and write numbers to 100 in numerals</li> </ul> <p><b>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>• Confidently recall number bonds to 10</li> <li>• Recall doubles and halves to 10</li> <li>• Confidently recall number bonds to 20</li> <li>• Add and subtract 1-digit from a 2digit number up to 20 - including 0</li> <li>• Solve 1-step problems involving addition and subtraction, using resources</li> </ul>	<p><b>Fractions, Decimals and Percentages</b></p> <ul style="list-style-type: none"> <li>• Recognise, find and name fractions - <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math></li> <li>• Find <math>\frac{1}{2}</math> and <math>\frac{1}{4}</math> of shapes and quantities</li> <li>• Use reasoning when discussing fractions, using correct mathematical language e.g. equal parts</li> </ul> <p><b>Geometry</b></p> <ul style="list-style-type: none"> <li>• Describe position using language: left, right, on top of, under, forwards, backwards, near, around etc.</li> <li>• Recognise and name common 2D shapes</li> <li>• Recognise and name common 3D shapes</li> <li>• Describe movement using language: whole turn, half turn, three-quarter turn, clockwise</li> <li>• Begin to identify some of the properties of 2D shapes</li> <li>• Begin to identify some of the properties of 3D shapes</li> <li>• Make connections between movement language and the movement on the face of a clock e.g. turning clockwise</li> </ul>	<p><b>Measure</b></p> <ul style="list-style-type: none"> <li>• Compare and describe practical problems for: length and height, mass/weight, capacity and volume, time</li> <li>• Recognise different denominations of coins and notes</li> <li>• Measure and begin to record: length and height, mass/weight, capacity and volume, time</li> <li>• Solve practical problems for: length and height, mass/weight, capacity and volume, time</li> <li>• Sequence events in chronological order</li> <li>• Recognise and use language relating to dates</li> <li>• Tell the time to 1 hour / half past the hour, and be able to demonstrate by drawing hands on a clock</li> </ul> <p><b>Multiplication and Division</b></p> <ul style="list-style-type: none"> <li>• Solve 1-step problems involving multiplication and division, using resources</li> <li>• Count in multiples of 2, 5 and 10</li> </ul>

# Year 2

Ready to progress statements	Year 2 objectives		
<p>By the end of Year 1 the children are expected to be able to:</p> <ul style="list-style-type: none"> <li>Count within 100, forwards and backwards, starting with any number.</li> <li>Reason about the location of numbers to 20 within the linear number system, including comparing using <math>&lt;</math> and <math>&gt;</math> and <math>=</math>.</li> <li>Develop fluency in addition and subtraction facts within 10.</li> <li>Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.</li> <li>Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.</li> <li>Read, write and interpret equations containing addition (<math>+</math>), subtraction (<math>-</math>) and</li> </ul>	<p><b>Place Value</b></p> <ul style="list-style-type: none"> <li>I can demonstrate an understanding of place value, using apparatus to support me</li> <li>I can read and write numbers correctly in numerals up to 100</li> <li>I can count in twos, fives and tens from 0 and use counting strategies to solve problems</li> <li>I can partition two-digit numbers into different combinations of tens and ones, using resources if needed</li> </ul> <p><b>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>I can use number bonds and related subtraction facts within 20</li> <li>I can recall doubles and halves to 20</li> <li>I can add and subtract a 2-digit number and ones and a 2-digit number and tens, where no regrouping is required</li> <li>I can subtract mentally a two-digit number from another two-digit number when there is no regrouping required</li> </ul> <p>I can recognise the inverse relationships between addition and subtraction and use this to check</p>	<p><b>Fractions, Decimals and Percentages</b></p> <ul style="list-style-type: none"> <li>I can identify <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{2}</math>, <math>\frac{2}{4}</math>, <math>\frac{3}{4}</math> and knows that all parts must be equal parts of the whole</li> <li>I can find and compare fractions of amounts (e.g. <math>\frac{1}{4}</math> of £20 = £5 and <math>\frac{1}{2}</math> of £8 = £4)</li> </ul> <p><b>Geometry</b></p> <ul style="list-style-type: none"> <li>I can recognise and name common 2D shapes, including for example, rectangles, squares, circles and triangles and name some differences</li> <li>I can recognise and name common 3D shapes, including for example, cuboids, cubes, pyramids and spheres and name some differences</li> <li>I can describe properties of 2-D and 3-D shapes</li> </ul> <p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>I can read and interpret tally charts, pictograms and bar charts</li> </ul>	<p><b>Measure</b></p> <ul style="list-style-type: none"> <li>I can compare, measure, describe and solve practical problems for: mass/weight using scales and mathematical language</li> <li>I can compare, measure, describe and solve practical problems for: capacity and volume using containers and mathematical language</li> <li>I can recognise and know the value of different denominations of coins and notes</li> <li>I can read scales in divisions of ones, twos, fives and tens in a practical situation where all numbers on the scale are given</li> <li>I can use different coins to make the same amount</li> <li>I can compare and sequence intervals of time: tell and write the time to fifteen minutes, including quarter past/to the hour and draw the hands on a clock face to show these times</li> <li>I know the number of minutes in an hour and the number of hours in a day</li> </ul>

<ul style="list-style-type: none"> <li>• equals (=) symbols, and relate additive expressions and equations to real-life contexts.</li> <li>• Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another.</li> <li>• Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.</li> </ul>	<p>calculations and work out missing number problems e.g. <math>\Delta - 14 = 28</math> • I can add 2 two-digit numbers within 100 (e.g. <math>48 + 35</math>) and can demonstrate my method using concrete apparatus or pictorial representations</p> <ul style="list-style-type: none"> <li>• I can use estimation to check that my answers to a calculation are reasonable</li> </ul> <p><b>Multiplication and Division</b></p> <ul style="list-style-type: none"> <li>• I can recall and use multiplication and division facts for the 2, 3, 5 and 10 multiplication tables to solve simple problems, demonstrating an understanding of commutativity as necessary</li> <li>•</li> </ul>		

# Year 3

Ready to progress statements	Year 3 objectives		
<p>By the end of Year 2, the children are expected to be able to:</p> <ul style="list-style-type: none"> <li>Recognise the place value of each digit in two-digit numbers, and compose and decompose two-digit numbers using standard and nonstandard partitioning.</li> <li>Reason about the location of any two digit number in the linear number system, including identifying the previous and next multiple of 10.</li> <li>Secure fluency in addition and subtraction facts within 10, through continued practice.</li> <li>Add and subtract across 10.</li> <li>Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?".</li> <li>Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract only</li> </ul>	<p><b>Place Value</b></p> <ul style="list-style-type: none"> <li>Find 10 or 100 more / less than any given number</li> <li>Read and write numbers up to 1000 in numerals</li> <li>Recall number bonds within 100</li> <li>Recognise the value of each digit in numbers up to 1000</li> <li>Compare and order numbers to 1000</li> <li>Write, in word, any number to 1000</li> <li>Solve number problems and practical problems involving place value</li> <li>Count in groups of 4, 8, 50 and 100 from 0</li> </ul>	<p><b>Fractions, Decimals and Percentages</b></p> <ul style="list-style-type: none"> <li>Count up and down in tenths</li> <li>Recognise, find and write fractions of a discrete set of objects - small denominators</li> <li>Recognise and show equivalent fractions with the same denominator</li> <li>Solve problems involving fractions</li> </ul> <p><b>Geometry</b></p> <ul style="list-style-type: none"> <li>Recognise and name common 2D shapes and list properties</li> <li>Recognise and name common 3D shapes and list properties</li> <li>Draw 2D shapes</li> <li>Recognise angles as a property of a shape / description of a turn</li> <li>Identify right angles within 2D shapes</li> <li>Understand and recognise perpendicular / parallel lines</li> </ul>	<p><b>Measure</b></p> <ul style="list-style-type: none"> <li>Know the number of seconds in an hour, hours in a day, days in each month, days in a year / leap year</li> <li>Measure and compare: length and height, mass/weight, capacity and volume, time</li> <li>Measure the perimeter of 2D shapes</li> <li>Add and subtract amounts of money to give change</li> <li>Measure time from analogue clock as well as 12-hour and 24-hour clocks</li> </ul> <p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>Represent and interpret data from bar charts, pictograms and tables, and solve 1-step problems associated with the data</li> <li>Solve 2-step problems associated with the data</li> </ul>
	<p><b>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>Mentally subtract: 3-digit - 1-digit, 3-digit - tens, 3-digit - hundreds</li> <li>Calculate missing number problems</li> <li>Use column addition and column subtraction with numbers up to 4digits</li> <li>Use the inverse operation to check answers</li> <li>Solve complex addition and subtraction problems</li> </ul>	<p><b>Multiplication and Division</b></p> <ul style="list-style-type: none"> <li>Recall 3, 4, 8 times tables</li> <li>Use formal method to multiply 2digit by 1-digit - short multiplication</li> <li>Use formal method to divide 2-digit by 1-digit - short division</li> </ul>	

<p>ones or only tens to/from a two digit number.</p> <ul style="list-style-type: none"><li>• Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two digit numbers.</li><li>• Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables.</li><li>• Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotative division).</li><li>• Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties.</li></ul>		<ul style="list-style-type: none"><li>• Solve 2-step multiplication and division problems</li></ul> <p><b>Fractions, Decimals and Percentages</b></p> <ul style="list-style-type: none"><li>• Recognise fractions and use mathematical language e.g. numerator, denominator, equal parts</li><li>• Calculate fractions of quantities</li><li>• Compare and order fractions</li></ul>	
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# Year 4

Ready to progress statements	Year 4 objectives		
<p>By the end of Year 3, the children are expected to:</p> <ul style="list-style-type: none"> <li>Know that 10 tens are equivalent to 1 hundred, and that 100 is 10 times the size of 10; apply this to identify and work out how many 10s there are in other three digit multiples of 10.</li> <li>Recognise the place value of each digit</li> <li>in three-digit numbers, and compose and decompose three-digit numbers using standard and non-standard partitioning.</li> <li>Reason about the location of any three digit number in the linear number system, including identifying the previous and next multiple of 100 and 10.</li> <li>Divide 100 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 100 with 2, 4, 5 and 10 equal parts.</li> <li>Secure fluency in addition and subtraction facts that bridge 10, through continued practice.</li> </ul>	<p><b>Place Value</b></p> <ul style="list-style-type: none"> <li>Recognise the value of each digit in numbers up to 10,000</li> <li>Compare and order numbers beyond 1000</li> <li>Write, in words, 4-digit numbers beyond 1000</li> <li>Solve number problems and practical problems involving place value</li> <li>Recognise Roman numerals to 100</li> <li>Count forward and back through 0, to include negative numbers</li> <li>Round numbers to the nearest 10, 100, 1000</li> </ul> <p><b>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>Use column addition and column subtraction with numbers up to 4 digits</li> <li>Use the inverse operation to check answers</li> <li>Solve complex 2-step addition and subtraction problems</li> </ul> <p><b>Multiplication and Division</b></p> <ul style="list-style-type: none"> <li>Count in multiples of 6, 7, 8, 9, 25 and 1000</li> </ul>	<p><b>Fractions, Decimals and Percentages</b></p> <ul style="list-style-type: none"> <li>Count up and down in hundredths</li> <li>Recognise and write decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{3}{4}</math>, <math>\frac{1}{10}</math>.</li> <li>Divide two digit numbers by 10 and 100</li> <li>Round decimals to 1dp and nearest whole numbers</li> <li>Solve problems involving fractions</li> </ul> <p><b>Geometry</b></p> <ul style="list-style-type: none"> <li>Compare and classify quadrilaterals and triangles based on size and properties</li> <li>Describe positions on a 2-D grid as coordinates in the first quadrant</li> <li>Identify acute and obtuse angles</li> <li>Identify lines of symmetry in 2D shapes</li> <li>Complete a simple symmetric figure with respect to a specific line of symmetry</li> <li>Describe movements between positions as translations of a given unit to the left/right and up/down</li> </ul>	<p><b>Measure</b></p> <ul style="list-style-type: none"> <li>Read and write the time on analogue, digital 12/24 hour clocks</li> <li>Convert units of measure - hours to minutes, km to m</li> <li>Measure the perimeter of rectilinear shapes in cm and m</li> <li>Calculate the area of squares and rectangles</li> <li>Convert between analogue and digital times</li> </ul> <p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>Represent and interpret data from bar charts and time graphs, and solve 1-step problems associated with the data</li> <li>Solve 2-step problems associated with the data - comparisons, sum, difference</li> </ul>

<ul style="list-style-type: none"> <li>Recall multiplication facts, and corresponding division facts, in the 10, 5, 2, 4 and 8 multiplication tables, and recognise products in these multiplication tables as multiples of the corresponding number.</li> <li>Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 10).</li> <li>Calculate complements to 100.</li> <li>Add and subtract up to three-digit numbers using columnar methods.</li> <li>Manipulate the additive relationship:</li> <li>Understand the inverse relationship between addition and subtraction, and how both relate to the part-part-whole structure. Understand and use the commutative property of addition, and understand the related property for subtraction.</li> <li>Apply known multiplication and division facts to solve contextual problems with different structures, including quotative and partitive division.</li> <li>Interpret and write proper fractions to represent 1 or</li> </ul>	<ul style="list-style-type: none"> <li>Recall factors and understand commutativity</li> <li>Multiply 3 numbers e.g. <math>10 \times 6 \times 4</math></li> <li>Use formal method to multiply 2digit by 1-digit – short multiplication</li> <li>Use formal method to multiply 3digit by 1-digit – short multiplication</li> <li>Use formal method to divide 2-digit by 1-digit – short division</li> <li>Solve 2-step multiplication and division problems</li> <li>Recall all multiplication and division facts up to <math>12 \times 12</math></li> </ul>	<ul style="list-style-type: none"> <li>Plot specified points and draw sides to complete a given polygon</li> </ul> <p><b>Fractions, Decimals and Percentages</b></p> <ul style="list-style-type: none"> <li>Recognise fractions and use mathematical language e.g. numerator, denominator, equal parts</li> <li>Calculate fractions of quantities</li> <li>Recognise and show common equivalent fractions</li> <li>Add and subtract fractions which have the same denominator</li> </ul> <p>Order and compare decimals to 2dp</p>	
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<p>several parts of a whole that is divided into equal parts.</p> <ul style="list-style-type: none"><li>• Find unit fractions of quantities using known division facts (multiplication tables fluency).</li><li>• Reason about the location of any fraction within 1 in the linear number system.</li><li>• Add and subtract fractions with the same denominator, within 1.</li><li>• Recognise right angles as a property of shape or a description of a turn, and identify right angles in 2D shapes presented in different orientations.</li><li>• Draw polygons by joining marked points, and identify parallel and perpendicular sides.</li></ul>			
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# Year 5

Ready to progress statements	Year 5 objectives		
<p>By the end of Year 4, the children are expected to:</p> <ul style="list-style-type: none"> <li>• Know that 10 hundreds are equivalent to 1 thousand, and that 1,000 is 10 times the size of 100; apply this to identify and work out how many 100s there are in other four-digit multiples of 100.</li> <li>• Recognise the place value of each digit in four-digit numbers, and compose and decompose four-digit numbers using standard and nonstandard partitioning.</li> <li>• Reason about the location of any four digit number in the linear number system, including identifying the previous and next multiple of 1,000 and 100, and rounding to the nearest of each.</li> <li>• Divide 1,000 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in multiples of 1,000 with 2, 4, 5 and 10 equal parts.</li> <li>• Recall multiplication and division facts up to, and</li> </ul>	<p><b>Place Value</b></p> <ul style="list-style-type: none"> <li>• Recognise the value of each digit in numbers up to 1,000,000</li> <li>• Order and compare number to at least 1,000,000</li> <li>• Count forward and back from any given number, in powers of 10, up to 1,000,000</li> <li>• Round to the nearest 10, 100, 1000, 10,000, 100,000</li> <li>• Solve number problems for place value</li> <li>• Recognise Roman numerals to 1000</li> </ul> <p><b>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>• Use column addition and column subtraction with numbers beyond 4digits</li> <li>• Solve multi-step problems involving addition and subtraction</li> </ul> <p><b>Multiplication and Division</b></p> <ul style="list-style-type: none"> <li>• Recall multiples and factors up to 12x12</li> <li>• Recall prime numbers to 100</li> </ul>	<p><b>Fractions, Decimals and Percentages</b></p> <ul style="list-style-type: none"> <li>• Convert mixed numbers to improper fractions and vice versa</li> <li>• Multiply fractions, including multiplying fractions by whole numbers</li> <li>• Round decimals with 2dp to the nearest whole number and 1dp</li> <li>• Read, write, order and compare decimals</li> <li>• Recognise % and write percentages as decimals and fractions</li> <li>• Solve problems involving fractions, decimals and percentages</li> </ul> <p><b>Geometry</b></p> <ul style="list-style-type: none"> <li>• Recognise 3D shapes from 2D representations</li> <li>• Estimate acute, obtuse and reflex angles</li> <li>• Measure angles using a protractor</li> <li>• Draw angles using a protractor</li> <li>• Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed</li> </ul>	<p><b>Measure</b></p> <ul style="list-style-type: none"> <li>• Convert units of measure - km/m, cm/m, g/kg, l/ml</li> <li>• Measure the perimeter of composite rectilinear shapes in cm and m</li> <li>• Estimate volume and capacity</li> <li>• Calculate the area of squares and rectangles</li> <li>• Solve problems involving converting measures, including time</li> </ul> <p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>• Complete, read and interpret data using a range of graphs / charts, including time tables</li> <li>• Solve 2-step problems associated with the data - comparisons, sum, difference</li> </ul>

<p>recognise products in multiplication tables as multiples of the corresponding number.</p> <ul style="list-style-type: none"> <li>• Solve division problems, with two-digit dividends and one-digit divisors, that involve remainders, and interpret remainders appropriately according to the context.</li> <li>• Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 100)</li> <li>• Multiply and divide whole numbers by 10 and 100 (keeping to whole number quotients); understand this as equivalent to making a number 10 or 100 times the size.</li> <li>• Manipulate</li> <li>• multiplication and division equations, and understand and apply the commutative property of multiplication.</li> <li>• Understand and</li> <li>• apply the distributive property of multiplication.</li> <li>• Convert mixed numbers to improper fractions and vice versa.</li> <li>• Add and subtract improper and mixed fractions with the same denominator, including bridging whole numbers.</li> </ul>	<ul style="list-style-type: none"> <li>• Understand and be able to recall factor pairs and common factors</li> <li>• Multiply 4-digit numbers by 1-digit numbers - short multiplication</li> <li>• Be able to square and cube numbers to 10</li> <li>• Multiply numbers with up to 4-digits by 2-digits - long multiplication</li> <li>• Divide 4-digit numbers by 1-digit - short division</li> <li>• Multiply and divide numbers by 10, 100 and 1000, including decimal numbers</li> <li>• Solve multiplication problems involving 2-steps</li> </ul>	<p><b>Fractions, Decimals and Percentages</b> •</p> <p>Compare fractions of the same denominator</p> <ul style="list-style-type: none"> <li>• Identify, name and write equivalent fractions, representing visually</li> <li>• Read and write decimal numbers as fractions e.g. <math>\frac{1}{2} = 0.5</math></li> <li>• Add and subtract fractions with the same denominator</li> </ul>	
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<ul style="list-style-type: none"><li>• Draw polygons, specified by coordinates in the first quadrant, and translate within the first quadrant.</li><li>• Identify regular polygons, including equilateral triangles and squares, as those in which the side-lengths are equal and the angles are equal. Find the perimeter of regular and irregular polygons.</li><li>• Identify line symmetry in 2D shapes presented in different orientations. Reflect</li><li>• shapes in a line of symmetry and complete a symmetric figure or pattern with respect to a specified line of symmetry.</li></ul>			
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# Year 6

Ready to progress statements	Year 6 objectives		
<p>By the end of Year 5, the children are expected to be able to:</p> <ul style="list-style-type: none"> <li>Know that 10 tenths are equivalent to 1 one, and that 1 is 10 times the size of 0.1. Know that 100 hundredths are equivalent to 1 one, and that 1 is 100 times the size of 0.01.</li> <li>Know that 10 hundredths are equivalent to 1 tenth, and that 0.1 is 10 times the size of 0.01.</li> <li>Recognise the place value of each digit in numbers with up to 2 decimal places, and compose and decompose numbers with up to 2 decimal places using standard and nonstandard partitioning.</li> <li>Reason about the location of any number with up to 2 decimals places in the linear number system, including identifying the previous and next multiple of 1 and 0.1 and rounding to the nearest of each.</li> <li>Divide 1 into 2, 4, 5 and 10 equal parts, and read scales/number lines marked in</li> </ul>	<p><b>Place Value</b></p> <ul style="list-style-type: none"> <li>I can order and compare numbers up to 10,000,000, as well as 3-digit numbers with up to 3 decimal places</li> <li>I can round any given number to the nearest 10, 100, 1000</li> <li>I can use negative numbers in context, and calculate intervals across zero</li> <li>I can read Roman numerals to 100 (IC)</li> </ul> <p><b>Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>I can add and subtract numbers beyond 4-digits using the formal written method, learning how to estimate first</li> <li>I can calculate mentally, using efficient strategies</li> <li>I can use formal methods to solve multi-step problems involving addition and subtraction</li> </ul> <p><b>Multiplication and Division</b></p> <ul style="list-style-type: none"> <li>Rapidly recall multiplication and division facts up to 12x12</li> <li>I can identify common multiples, common factors and prime numbers</li> <li>Multiply numbers with up to 4-digits by</li> </ul>	<p><b>Fractions, Decimals and Percentages</b></p> <ul style="list-style-type: none"> <li>Recognise % and write percentages as decimals and fractions</li> <li>I can calculate using fractions, decimals and percentages (addition, subtraction, multiplication and division) and use apply these skills to problem solving</li> </ul> <p><b>Geometry</b></p> <ul style="list-style-type: none"> <li>I can draw regular and irregular polygons using given angles</li> <li>I can measure angles in degrees using a protractor</li> <li>I can use my mathematical reasoning to calculate missing angles, including vertically opposite angles</li> <li>I can use rotation and translation, using a four-quadrant grid</li> <li>Recall properties of 3D shapes and be able to recognise 3D shapes from 2D representations</li> <li>Build simple 3D shapes, including making nets</li> <li>I can compare and classify geometric shapes based on their properties and sizes</li> </ul>	<p>Consolidation of skills and knowledge which may not have appeared secure during SAT's. This will be personalised learning to different ability groups.</p> <p>Deepening understanding of previously taught concepts. This will be done through a series of investigative activities, allowing children to demonstrate and develop their application of mathematical skills.</p> <p>Financial Education Enterprise project - preparing children for managing money later in life.</p>

<p>units of 1 with 2, 4, 5 and 10 equal parts.</p> <ul style="list-style-type: none"> <li>• Convert between units of measure, including using common decimals and fractions.</li> <li>• Secure fluency in multiplication table facts, and corresponding division facts, through continued practice.</li> <li>• Apply place-value knowledge to known additive and multiplicative number facts (scaling facts by 1 tenth or 1 hundredth).</li> <li>• Multiply and divide numbers by 10 and 100; understand this as equivalent to making a number 10 or 100 times the size, or 1 tenth or 1 hundredth times the size.</li> <li>• Find factors and multiples of positive whole numbers, including common factors and common multiples, and express a given number as a product of 2 or 3 factors.</li> <li>• Multiply any whole number with up to 4 digits by any one-digit number using a formal written method.</li> <li>• Divide a number with up to 4 digits by a one-digit number using a formal written method,</li> </ul>	<p>1-digit numbers - short multiplication and division</p> <ul style="list-style-type: none"> <li>• Multiply 4-digit numbers by 2-digit - long multiplication</li> <li>• Divide 4-digit numbers by 2-digit - long division</li> <li>• Solve multiplication and division problems involving 2-steps</li> </ul> <p><b>Fractions, Decimals and Percentages</b></p> <ul style="list-style-type: none"> <li>• I can recognise and show, using diagrams, families of common equivalent fractions</li> <li>• I can compare and order fractions greater than 1</li> <li>• I can use common factors to write fractions in their simplest forms</li> <li>• Convert mixed numbers to improper fractions and vice versa</li> <li>• Multiply fractions, including multiplying fractions by whole numbers</li> <li>• I can write fractions as decimals</li> </ul>	<ul style="list-style-type: none"> <li>• I can illustrate and name parts of circles, including radius, diameter and circumference, knowing that the diameter is twice the radius</li> </ul> <p><b>Measure</b></p> <ul style="list-style-type: none"> <li>• I can calculate and compare the area of parallelograms and triangles and estimate the area of irregular shapes</li> <li>• I can substitute values into a simple formula to solve problems</li> <li>• I can use, read and convert between units of measure</li> <li>• I can use all four operations to solve multi-step word problems involving measure</li> </ul> <p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>• Complete, read and interpret data using a range of graphs / charts, including time tables, line graphs and pie charts</li> <li>• I can solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</li> <li>• I can calculate and interpret the mean as an average</li> <li>• Solve 2-step problems associated with the data - comparisons, sum, difference, using reasoning to justify answers</li> </ul>	
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<p>and interpret remainders appropriately for the context.</p> <ul style="list-style-type: none"><li>• Find non-unit fractions of quantities.</li><li>• Find equivalent fractions and understand that they have the same value and the same position in the linear number system.</li><li>• Recall decimal fraction equivalents for, and for multiples of these proper fractions.</li><li>• Compare angles, estimate and measure angles in degrees (<math>^{\circ}</math>) and draw angles of a given size.</li><li>• Compare areas and calculate the area of rectangles (including squares) using standard units.</li></ul>		<ul style="list-style-type: none"><li>• In Algebra, I can:<ul style="list-style-type: none"><li>- use simple formulae</li><li>- generate and describe linear sequences</li><li>- express missing number problems algebraically</li><li>- find pairs of numbers that satisfy an equation with two unknowns</li></ul></li></ul>	
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