

Year 4 Maths			
highlighted objectives → DfE Ready-to-Progress Criteria			
Place Value	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: 5px; margin: 5px;">tens</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">hundreds</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">thousands</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">thousands</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">ascending</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">descending</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">partition</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">place value</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">round</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">order</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;">round up</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">round down</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">number line</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">multiples</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">digit</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">greater than (>)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 5px; margin: 5px;">less than (<)</div> </div>	
End of Year Objective	'I know' statements	'I can' statements	Suggested manipulatives
To read and write four-digit numbers, recognising the place value of each digit	<ul style="list-style-type: none"> I know the value of each digit in a given number I know how many thousands, hundreds; tens and ones are in a given number I know that ten hundreds are equivalent to one thousand I know that zero is sometimes used as a placeholder 	<ul style="list-style-type: none"> I can represent numbers to 10,000 in different ways I can partition numbers to 10,000 using standard partitioning (1000s, 100s, 10s, 1s) I can partition numbers to 10,000 using non-standard partitioning 	Base 10/dienes Place value grids/place value counters Part whole models/bar models
To order and compare numbers to 10,000	<ul style="list-style-type: none"> I know that ascending means going from smallest to greatest I know that descending means going from greatest to smallest I know what the symbols <, > and = mean 	<ul style="list-style-type: none"> I can compare two numbers by looking first at the 1000s, then the 100s, then the 10s, then the 1s I can order three or more three-digit numbers I can suggest a missing number that fulfils < or > statements (e.g. 3430 < _____?) 	Base 10/dienes Place value grids/place value counters Digit cards
To find 10, 100 or 1000 more or less than a given number	<ul style="list-style-type: none"> I know the value of each digit in a given number I know which digits will change when I add 1000, 100 or 10 to a number I know which digits will change when I subtract 1000, 100 or 10 from a number 	<ul style="list-style-type: none"> I can represent numbers to 10,000 I can find 1000, 100 or 10 more than a given number I can find 1000, 100 or 10 less than a given number I can cross the thousands, hundreds or tens boundary when needed 	Place value grids/place value counters Gattegno charts
To place numbers on various number lines accurately, or estimating where appropriate	<ul style="list-style-type: none"> I know that the gaps on a number line are called intervals I know that not all number lines use the same intervals I know that estimating means having a sensible guess, and that my estimate may not be exactly the same as someone else's. 	<ul style="list-style-type: none"> I can work out what intervals a number line is counting up in I can identify values on a numberline and mark given values I can identify the midpoint between two intervals I can estimate the position of numbers on a number line 	Blank number lines Cuisenaire rods

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<p>To round any whole number to the nearest 10, 100 or 1000</p>	<ul style="list-style-type: none"> I know that rounding means saying which multiple of 10/100/1000 a number is closest to I know that rounding is useful for estimating and simplifying calculations I know that when the digit to the right is 4 or less, we round down I know that when the digit to the right is 5 or higher, we round up 	<ul style="list-style-type: none"> I can identify the multiple of 10, 100 or 1000 before and after a given number I can round any number to the nearest 10 I can round any number to the nearest 100 I can round any number to the nearest 1000 I can suggest possible numbers that would round to a given number (e.g. numbers that would round to 230 when rounding to the nearest 10) 	<p>Blank number lines</p> <p>Place value grids</p>
<p>To read and write Roman numerals to 100</p>	<ul style="list-style-type: none"> I know what the symbols I, V, X, L and C represent in Roman numerals I know that Roman numerals cannot include more than three of the same symbol I know that if a numeral with a smaller value is written before a numeral with a greater value, we must subtract it. 	<ul style="list-style-type: none"> I can read Roman numerals up to 100 I can write Roman numerals up to 100 I can use Roman numerals in context (e.g. on a clock, kings and queens) 	<p>Lolly pop sticks</p>
<p>To solve problems involving the place value of increasingly larger numbers (up to 10,000)</p>	<ul style="list-style-type: none"> I know what it means to work systematically, and why this is important I know that some problems may have more than one possible answer 	<ul style="list-style-type: none"> I can apply my knowledge of place values to solve problems I can solve problems with more than one step 	<p>Various, depending on problem and skills/knowledge required</p>
<h3 style="text-align: center;">Addition and Subtraction</h3>	<h3 style="margin: 0;">Key Vocabulary</h3>		
<h3 style="text-align: center;">End of Year Objective</h3>	<h3 style="text-align: center;">‘I know’ statements</h3>	<h3 style="text-align: center;">‘I can’ statements</h3>	<h3 style="text-align: center;">Suggested manipulatives</h3>
<p>To use mental methods where appropriate, including to add and subtract 1s, 10s, 100s and 1000s</p>	<ul style="list-style-type: none"> I know which digits will change when adding 1, 10, 100 or 1000 to a number I know when a calculation will require an exchange I know which method is appropriate for different calculations 	<ul style="list-style-type: none"> I can use partitioning to support addition and subtraction I can use ‘make 10/100/1000 and then then’ strategies to add and subtract I can use adjustment strategies to add and subtract I can use a number line to represent/support my calculations 	<p>Blank number lines</p> <p>Place value counters</p>
<p>To add numbers up to 4-digits using formal written methods</p>	<ul style="list-style-type: none"> I know that the digits must be lined up correctly when using column methods I know that addition is commutative, meaning I can add numbers in any order to get the same answer I know when a calculation will require an exchange 	<ul style="list-style-type: none"> I can set out calculations correctly when using column method I can add two four-digit numbers using column method I can add a three-digit number and a four-digit numbers using column method I can exchange into the next column when appropriate 	<p>Place value grid/place value counters</p>

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To subtract numbers up to 4-digits using formal written methods	<ul style="list-style-type: none"> I know that the digits must be lined up correctly when using column methods I know that the greatest number must be written at the top when using column subtraction I know that the bottom number must be subtracted from the top number when using column subtraction I know when a calculation will require an exchange 	<ul style="list-style-type: none"> I can set out calculations correctly when using column method I can subtract two four-digit numbers using column subtraction I can subtract a three-digit number from a four-digit number using column subtraction I can exchange from the next column when appropriate 	Place value grid/place value counters
To use checking strategies such as estimating and using the inverse to determine levels of accuracy	<ul style="list-style-type: none"> I know that estimating helps to get a quick idea of what the answer to a calculation is near to I know whether the actual answer would be greater or less than my estimate I know that addition and subtraction can be described as 'inverse operations' I know that fact families contain related addition and subtraction facts (e.g. $2+3=5$, $3+2=5$, $5-3=2$, $5-2=3$) 	<ul style="list-style-type: none"> I can round numbers to the nearest 10, 100 or 1000 I can use estimation to decide if an answer is likely to be correct I can represent addition and subtraction calculations using part whole or bar models I can use inverse calculations to ensure my calculations are accurate I can use inverse calculations to solve missing number problems 	Bar models/part whole models (for inverse)
To solve problems involving addition and subtraction, including those with more than one step	<ul style="list-style-type: none"> I know that there are different methods that can be used for addition and subtraction (mental and written strategies) 	<ul style="list-style-type: none"> I can identify whether I need to add or subtract to solve a problem I can identify the calculation needed to solve a problem I can choose the appropriate method to carry out a calculation I can use addition and subtraction in different contexts 	Various, depending on problem and skills/knowledge required
Multiplication and division	Key Vocabulary		
	<div style="display: flex; flex-wrap: wrap; justify-content: space-around; gap: 10px;"> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">multiply (x)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">divide (÷)</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">multiplication fact</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">division fact</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">factor</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">groups of</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">times-table</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">array</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">remainder</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">bar model</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">factor pair</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">product</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">fact family</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px;">related fact</div> </div>		
End of Year Objective	'I know' statements	'I can' statements	Suggested manipulatives
To count in multiples of 6, 7, 9, 25 and 100	<ul style="list-style-type: none"> I know that all multiples of 100 end in 00 	<ul style="list-style-type: none"> I can count in multiples of 25 or 100 I can count in multiples of 6, 7 or 9 	Numicon Counters (for arrays) 100-squares Cuisenaire rods

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<p>To recall all multiplication and division facts up to $12 \times 12 / 144 \div 12$</p>	<ul style="list-style-type: none"> I know that division is the inverse of multiplication I know that multiplication follows the 'commutative law', meaning it can be done in any order I know that multiplication can be described as 'repeated addition' I know that there are many patterns and links in times tables, and this can help me recall them 	<ul style="list-style-type: none"> I can recall multiplication facts up to 12×12 I can recall division facts up to $144/12$ I can determine patterns and links in times tables up to 12×12 	<p>Numicon</p> <p>Counters (for arrays)</p> <p>Bar models</p> <p>Cuisenaire rods</p>
<p>To identify factor pairs for a given number</p>	<ul style="list-style-type: none"> I know that a number is a factor of another number if it divides the number without a remainder (e.g. 5 is a factor of 35) I know that two numbers that multiply together to make a given number are known as a factor pair (e.g. 5 and 7 are a factor pair of 35) 	<ul style="list-style-type: none"> I can create arrays to derive and identify factors/factor pairs of a given number I can find all the factors of a given number by working systematically 	<p>Counters (for arrays)</p>
<p>To multiply and divide by 10 and 100</p>	<ul style="list-style-type: none"> I know that multiplying by 10 makes a number '10 times the size', while dividing by 10 makes a number '10 times smaller' I know that multiplying a number by 100 makes a number '100 times the size', while dividing by 100 makes a number '100 times smaller' I know that multiplying and dividing by 10 is not as simple as adding or removing zeros I know that zero can be used as a placeholder 	<ul style="list-style-type: none"> I can multiply and divide by 10, including decimals I can multiply and divide by 100, including decimals I can explain mistakes when multiplying and dividing by 10 and 100 	<p>Place value grids and either base 10 or PV counters</p>
<p>To multiply and divide by 0 and 1</p>	<ul style="list-style-type: none"> I know that when a number is multiplied or divided by 1, the result is the number itself I know that when a number is divided by itself, the result is 1 I know that when a number is multiplied by 0, the result is 0 	<ul style="list-style-type: none"> I can multiply and divide by 0 and 1 	
<p>To apply known facts in order to multiply and divide mentally (commutativity, multiplying by multiples of 10, partitioning)</p>	<ul style="list-style-type: none"> I know, and can recall times table facts I know that multiplication follows the 'distributive law', meaning that multiplying the sum of two numbers is the same as multiplying the numbers separately I know that multiplication is commutative, meaning it can be done in any order 	<ul style="list-style-type: none"> I can derive multiplication and division statements from known facts (e.g. $3 \times 4 = 12$, so $30 \times 4 = 120$) I can partition two-digit numbers in order to multiply them (e.g. $34 \times 5 = (30 \times 5) + (4 \times 5)$) 	<p>Base 10 or place value counters</p> <p>Part whole models</p>
<p>To multiply three numbers together</p>	<ul style="list-style-type: none"> I know that multiplication follows the 'commutative law', meaning it can be done in any order 	<ul style="list-style-type: none"> I can multiply three numbers in any order I can select the most efficient order to multiply three numbers 	<p>Counters (for arrays) – pencils or lolly sticks can be used to split arrays</p>

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<p>To multiply 2-digit and 3-digit numbers by 1-digit using formal written methods</p>	<ul style="list-style-type: none"> • I know that the digits must be lined up correctly when using column methods • I know to first multiply the ones, then tens, then hundreds 	<ul style="list-style-type: none"> • I can set out calculations correctly when using column method • I can multiply a 2-digit number by 1-digit • I can multiply a 3-digit number by 1-digit • I can exchange when appropriate 	<p>Place value counters</p>
<p>To divide three-digit numbers by 1-digit using known facts and partitioning</p>	<ul style="list-style-type: none"> • I know that numbers can be partitioned into hundreds, tens and ones 	<ul style="list-style-type: none"> • I can partition numbers in order to divide them • I can partition flexibly so that division is efficient • I can exchange when appropriate 	<p>Place value counters</p> <p>Part whole models</p>
<p>To solve division calculations that involve remainders, interpreting them correctly</p>	<ul style="list-style-type: none"> • I know how to divide larger numbers using partitioning • I know that remainders are the amount left over after a division • I know that the remainder cannot be greater than or equal to the number I am dividing by 	<ul style="list-style-type: none"> • I can calculate divisions which leave remainders • I can interpret problems correctly, knowing when to give the whole answer or just the remainder 	
<p>To solve problems involving multiplication and division, including those with more than one step</p>	<ul style="list-style-type: none"> • I know that some problems include more than one step 	<ul style="list-style-type: none"> • I can select efficient methods for multiplying and dividing • I can identify the appropriate operation(s) for solving a problem • I can solve correspondence problems, working out the number of possible combinations • I can work systematically to ensure I find all the possible answers 	<p>Various, depending on problem and skills/knowledge required</p>

Fractions	Key Vocabulary				
	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; margin: 2px;">mixed number</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; margin: 2px;">improper fraction</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; margin: 2px;">numerator</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; margin: 2px;">simplify</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; margin: 2px;">simplest fraction</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: 2px 10px; margin: 2px;">denominator</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; margin: 2px;">fraction</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; margin: 2px;">equivalent</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; margin: 2px;">subtract</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; margin: 2px;">add</div> <div style="border: 1px solid black; border-radius: 10px; padding: 2px 10px; margin: 2px;">fraction of an amount</div> </div>				
End of Year Objective	'I know' statements	'I can' statements	Suggested manipulatives		
To recognise and represent common equivalent fractions	<ul style="list-style-type: none"> I know that equivalent fractions have the same value/are the same size I know that fractions are parts of a whole, and can be represented in many different ways 	<ul style="list-style-type: none"> I can represent and find equivalent fractions on a number line I can represent and find equivalent fractions using bar models I can identify equivalent fractions from different representations 	Bar models/folded paper strips Fraction walls		
To add and subtract fractions with the same denominator	<ul style="list-style-type: none"> I know that adding unit fractions with the same denominator creates a non-unit fraction I know that, when adding and subtracting fractions, the numerator changes but the denominator stays the same 	<ul style="list-style-type: none"> I can partition a whole into unit and non-unit fractions I can add two or more fractions with the same denominator I can subtract fractions with the same denominator 	Numicon Folded paper strips/bar models		
To convert between mixed numbers and improper fractions	<ul style="list-style-type: none"> I know that fractions with a numerator greater than the denominator are greater than one, and are known as improper fractions I know that wholes and fractions can be combined to form mixed numbers 	<ul style="list-style-type: none"> I can count on in fractions beyond one I can partition a mixed number into wholes and parts I can convert improper fractions to mixed numbers I can convert mixed numbers to improper fractions 	Numicon Bar models/Cuisenaire rods Part whole models		
To subtract a fraction from a whole number	<ul style="list-style-type: none"> I know that fractions with the same numerator and denominator are equivalent to one whole I know that, when subtracting fractions, the numerator changes but the denominator doesn't 	<ul style="list-style-type: none"> I can partition a whole into unit and non-unit fractions I can subtract a fraction from a whole number 	Numicon		
To find fractions of amounts	<ul style="list-style-type: none"> I know that fractions represent part of a whole 	<ul style="list-style-type: none"> I can find unit fractions of an amount by dividing by the denominator I can find non-unit fractions of an amount by adding unit fractions 	Counters Bar models		

Decimals	Key Vocabulary		
	<div style="display: flex; justify-content: space-around; text-align: center;"> <div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; justify-content: space-around;">tensonesdecimal point</div> <div style="display: flex; justify-content: space-around;">tenthshundredthsequivalent</div> <div style="display: flex; justify-content: space-around;">decimalcentimetremillimetre</div> </div> <div style="display: flex; flex-direction: column; gap: 5px;"> <div style="display: flex; justify-content: space-around;">equivalentwhole numberround</div> <div style="display: flex; justify-content: space-around;">greater than (>)less than (<)equal to (=)</div> <div style="display: flex; justify-content: space-around;">ordercomparedecimal place</div> <div style="display: flex; justify-content: space-around;">ascendingdescending</div> </div> </div>		
End of Year Objective	'I know' statements	'I can' statements	Suggested manipulatives
To count backwards and forwards in tenths or hundredths	<ul style="list-style-type: none"> I know that tenths are created when a whole is split into ten equal parts I know that one tenth can be represented as a fraction (1/10) or decimal (0.1) I know that hundredths are created when a whole is split into one hundred equal parts I know that one hundredth can be represented as a fraction (1/100) or decimal (0.01) 	<ul style="list-style-type: none"> I can count forwards and backwards in tenths I can count forwards and backwards in hundredths 	Counting sticks (for tenths) Tens frames (for tenths) Base 10
To recognise and write decimal equivalents for any number of tenths or hundredths, recognising the place value of each digit	<ul style="list-style-type: none"> I know that tenths are created when a whole is split into ten equal parts I know that one tenth can be represented as a fraction (1/10) or decimal (0.1) I know that hundredths are created when a whole is split into one hundred equal parts I know that one hundredth can be represented as a fraction (1/100) or decimal (0.01) 	<ul style="list-style-type: none"> I can represent tenths on a place value grid I can partition decimals using standard partitioning I can partition decimals using flexible partitioning I can represent hundredths on a place value grid I can represent tenths and hundredths on a number line 	Place value grids/place value counters Tens frames (for tenths) Numicon peg boards (for hundredths)
To recognise and write decimal equivalents of common fractions (1/4, 1/2, 3/4)	<ul style="list-style-type: none"> I know that $\frac{1}{4}$ is equivalent to 0.25 I know that $\frac{1}{2}$ is equivalent to 0.5 I know that $\frac{3}{4}$ is equivalent to 0.75 	<ul style="list-style-type: none"> I can use resources to represent decimal and fraction equivalents I can recall common fraction and decimal equivalents 	Numicon peg boards/numicon
To divide 1-digit and 2-digit numbers by 10 or 100	<ul style="list-style-type: none"> I know that when I divide a one-digit number by ten, the answer will be a decimal I know that, when dividing by ten, all the digits move one place to the right I know that, when dividing by one hundred, all the digits move two places to the right I know that zero can sometimes act as a placeholder 	<ul style="list-style-type: none"> I can divide one-digit numbers by 10 and 100 I can divide two-digit numbers by 10 and 100 I can recognise mistakes when dividing by 10 and 100 	Place value grids

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<p>To round decimals with one decimal place to the nearest whole</p>	<ul style="list-style-type: none"> I know that, to round to the nearest whole, we need to look at the tenths column I know that .1-.4 rounds down, while .5 to .9 rounds up I know that decimal numbers can round to zero 	<ul style="list-style-type: none"> I can identify which integers a decimal lies between I can round decimals to the nearest whole 	<p>Blank number lines</p>
<p>To compare and order numbers with the same number of decimal places</p>	<ul style="list-style-type: none"> I know the value of each digit in numbers with up to two decimal places I know to first compare the digits with the greatest place value I know that ascending means lowest to highest, while descending means highest to lowest 	<ul style="list-style-type: none"> I can compare decimals using inequality symbols (<, > and =) I can place decimals in ascending or descending order 	<p>Place value grids/place value counters</p>
<h3 style="text-align: center;">Measurement</h3>	<h3 style="text-align: center;">Key Vocabulary</h3>		
<h3>End of Year Objective</h3>	<h3>'I know' statements</h3>	<h3>'I can' statements</h3>	<h3>Suggested manipulatives</h3>
<p>To convert between different metric units of length</p>	<ul style="list-style-type: none"> I know that there are 100cm in 1m, and 1000m in 1km 	<ul style="list-style-type: none"> I can choose an appropriate unit of measurement to match a given context I can convert between metres and kilometres 	<p>Place value grids (to support multiplying and dividing by 10,100,1000)</p> <p>Examples of different measurements (rulers/jugs)</p>
<p>To measure, calculate and compare the perimeter of rectilinear shapes and regular polygon, including finding missing lengths</p>	<ul style="list-style-type: none"> I know that perimeter is the total distance around the outside of a closed 2D shape I know that a shape is 'rectilinear' if all the sides meet at right angles (e.g squares, rectangles) I know that different shapes can have the same perimeter I know that a regular polygon has sides of equal length 	<ul style="list-style-type: none"> I can measure and calculate the perimeter of rectilinear shapes, including compound shapes I can measure and calculate the perimeter of regular polygons I can work systematically to ensure I measure the lengths of all the sides I can calculate missing lengths of a shape when given the perimeter I can draw different shapes with a specified perimeter 	<p>Geometric peg boards</p> <p>Match sticks</p>

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To find and compare the area of rectilinear shapes by counting squares	<ul style="list-style-type: none"> I know that area is the amount of space taken up by a 2D shape I know that a shape is 'rectilinear' if all the sides meet at right angles (e.g squares, rectangles) 	<ul style="list-style-type: none"> I can find the area of a shape by counting squares inside it I can work systematically and mark squares I've already counted to ensure accuracy I can find/create different rectilinear shapes with the same area I can use inequality symbols (<, > or =) to compare and order shapes by area 	Centicubes
To convert between analogue and digital times (both 12-hour and 24-hour)	<ul style="list-style-type: none"> I know that 'am' refers to times in the morning, and 'pm' refers to times in the afternoon I know that times can be given in either 12-hour or 24-hour formats 	<ul style="list-style-type: none"> I can read and record the time on analogue clocks to the nearest minute I can read and record the time on digital clocks to the nearest minute I can convert between 12-hour and 24-hour formats I can convert between analogue and digital formats 	Clocks
To convert different units of time (hours to minutes; minutes to seconds; years to months; weeks to days)	<ul style="list-style-type: none"> I know that there are 60 seconds in a minute, 60 minutes in an hour and 24 hours in a day and 7 days in a week I know that there are roughly 4 weeks in a month I know that there are 12 months, or 365 days in a year (except leap years which have 366 days) 	<ul style="list-style-type: none"> I can use multiplication and division to convert between different units of time I can state how many days are in a given month (using rhymes to support) 	Bar models
To convert between pounds and pence	<ul style="list-style-type: none"> I know that amounts of money can be written as £__ . __ (decimal notation) I know that £1 = 100p 	<ul style="list-style-type: none"> I can write amounts of money in different ways (e.g. 423p, £4 and 23p, 423p) I can convert from pounds to pence and vice versa 	Money Part whole models/bar models
To compare and order amounts shown in pounds or pence	<ul style="list-style-type: none"> I know that, in order to compare more easily, we must ensure amounts are shown in the same units I know that 'ascending' means from lowest to highest I know that 'descending' means from highest to lowest 	<ul style="list-style-type: none"> I can use inequality symbols (<, > or =) to compare amounts of money I can order a set of amounts in ascending or descending order 	Money
To add and subtract amounts of money, including to find change	<ul style="list-style-type: none"> I know that £1 = 100p I know that there are different methods for addition and subtraction, and some are more efficient in different contexts 	<ul style="list-style-type: none"> I can add and subtract amounts of money, using efficient strategies I can find change from a given amount, using efficient strategies I can calculate with amounts to solve problems with real world contexts 	Money Bar models (for problem solving)

Geometry: Shapes and angles	Key Vocabulary		
End of Year Objective	'I know' statements	'I can' statements	Suggested manipulatives
<p>To compare and classify 2D shapes based on their properties, including different quadrilaterals and triangles</p>	<ul style="list-style-type: none"> I know that 2D shapes are flat I know that not all shapes with the same number of sides/vertices look the same I know that regular polygons have sides equal in length and angles equal in size I know that three-sided shapes are triangles, and can be described as equilateral (all equal sides and angles), isosceles (two equal sides and two equal angles) or scalene (no equal sides or angles) I know that four-sided shapes are quadrilaterals, and have different names depending on their properties (e.g. square, rhombus, trapezium) 	<ul style="list-style-type: none"> I can describe the properties of a given shape I can describe the angles and lines in a shape (right angles, parallel and perpendicular, horizontal and vertical) I can sort shapes to say if they are regular or irregular I can classify triangles based on their properties I can classify quadrilaterals based on their properties I can recognise and name shapes shown in different orientations 	<p>2D shapes</p> <p>Right angle checkers</p> <p>Lolly sticks/match sticks</p>
<p>To recognise and identify right angles as 90°, acute angles as less than 90° and obtuse angles as greater than 90° (but less than 180°)</p>	<ul style="list-style-type: none"> I know that angles describe a part of a turn or where two lines meet I know that a quarter turn can be described as a right angle, or 90° I know that angles less than 90° are acute I know that angles more than 90° (but less than 180°) are described as obtuse 	<ul style="list-style-type: none"> I can identify if an angle is a right angle, or acute or obtuse 	<p>Right angle checkers</p>
<p>To compare and order angles up to 180° by size</p>	<ul style="list-style-type: none"> I know that angles less than 90° are acute I know that angles more than 90° (but less than 180°) are described as obtuse 	<ul style="list-style-type: none"> I can compare and order angles I can draw angles that are greater than or less than a given angle 	
<p>To identify lines of symmetry in 2D shapes shown in different orientations</p>	<ul style="list-style-type: none"> I know that a line of symmetry divides a shape in half, so that each half is the mirror image of the other I know that lines of symmetry can be horizontal, vertical or diagonal I know that, in regular polygons, the number of lines of symmetry is equal to the number of sides 	<ul style="list-style-type: none"> I can identify lines of symmetry in any orientation I can sort shapes by the number of lines of symmetry 	<p>Mirrors</p> <p>Paper shapes (for folding)</p>
<p>To complete a simple symmetric figure when given a specific line of symmetry</p>	<ul style="list-style-type: none"> I know that a line of symmetry divides a shape in half, so that each half is the mirror image of the other I know that lines of symmetry can be horizontal, vertical or diagonal I know to reflect one vertex at a time when reflecting a shape 	<ul style="list-style-type: none"> I can complete symmetric figures with horizontal or vertical lines of symmetry I can complete symmetric figures with diagonal lines of symmetry I can complete symmetric figures with more than one line of symmetry 	<p>Mirrors</p>

Geometry: Position and direction	Key Vocabulary			
	<div style="display: flex; justify-content: space-around; text-align: center;"> <div>position</div> <div>horizontal</div> <div>vertical</div> <div>coordinate</div> <div>plot</div> <div>vertex</div> </div> <div style="display: flex; justify-content: space-around; text-align: center;"> <div>translate</div> <div>up</div> <div>down</div> <div>left</div> <div>right</div> <div>vertices</div> <div>point</div> <div>grid</div> </div>			
End of Year Objective	'I know' statements	'I can' statements	Suggested manipulatives	
To describe the position on a 2D grid as co-ordinates (first quadrant only)	<ul style="list-style-type: none"> I know that the horizontal axis is known as the x-axis and the vertical axis is known as the y-axis I know that where the x and y axes meet (0,0) is known as the origin I know that co-ordinates state the x-axis value and then the y-axis value 	<ul style="list-style-type: none"> I can use co-ordinates to describe where a point is on a grid I can find the co-ordinates of a shape's vertices 	Counters (to act as points which can be moved)	
To plot points on a 2D grid to complete a polygon	<ul style="list-style-type: none"> I know that the horizontal axis is known as the x-axis and the vertical axis is known as the y-axis I know that co-ordinates state the x-axis value and then the y-axis value I know that points should be plotted where lines intersect, and not in middle of the squares 	<ul style="list-style-type: none"> I can plot points on a grid to match given co-ordinates I can identify points needed to complete a polygon, and plot these on a grid 	Counters (to act as points which can be moved)	
To describe and carry out translations on a 2D grid	<ul style="list-style-type: none"> I know that, in geometry, 'translate' means 'move'. I know that points can be translated left, right, up or down I know that a translated shape should look identical to the original, but be in a different position 	<ul style="list-style-type: none"> I can describe how a point or shape has been translated using left, right, up or down I can translate a point on a grid following given instructions I can translate a shape on a grid by translating one vertex at a time 	Tracing paper Counters (to act as points which can be moved)	
Statistics	Key Vocabulary			
	<div style="display: flex; justify-content: space-around; text-align: center;"> <div>data</div> <div>line graph</div> <div>pictogram</div> <div>bar chart</div> <div>table</div> <div>altogether</div> <div>more than</div> <div>compare</div> </div>			
End of Year Objective	'I know' statements	'I can' statements	Suggested manipulatives	
To present and interpret information in pictograms, bar charts or tables	<ul style="list-style-type: none"> I know that the same information can be represented in different ways I know that the key in a pictogram states the value of each symbol. 	<ul style="list-style-type: none"> I can interpret information in pictograms, tables or bar charts I can draw bar charts to represent data, choosing an appropriate scale 		
To solve comparison, sum and difference problems using information in pictograms, bar charts or tables	<ul style="list-style-type: none"> I know what the terms 'sum' and 'difference' mean 	<ul style="list-style-type: none"> I can make comparisons to say 'how many more...' or 'how many fewer...' using bar charts, tables or pictograms I can calculate the total number of data entries shown in bar charts, pictograms or tables 		



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To present and interpret information in simple line graphs	<ul style="list-style-type: none">• I know that line graphs can be used to represent continuous data• I know that the data between plotted points on a line graph is only an estimate/trend, and not an exact value	<ul style="list-style-type: none">• I can interpret information represented in line graphs• I can draw line graphs, labelling the axes and scales accurately	
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