

Review of Learning

In order to ensure that the curriculum meets the learning needs of the class, it is vital that there is an accurate picture of previous teaching and coverage. Last year's class teacher and the new teacher (including the maths subject leader or SLT where appropriate/possible) should work together to look at which objectives from the maths curriculum were taught during the previous year and were understood fully. It may be decided that some objectives from the previous year's curriculum may need to be consolidated and so an additional column has been added to the Gateshead Core Curriculum containing the previous year's objectives. These can be highlighted accordingly to indicate if further consolidation is required throughout the next academic year. Following discussion as to how these objectives will need to be consolidated, they can then be inserted into an appropriate place in the new year's curriculum.

Additional objectives have been included in this document. These are the Ready to Progress Criteria from the DfE June 2020 Non-Statutory Guidance for the National Curriculum in England (<https://www.gov.uk/government/publications/teaching-mathematics-in-primary-schools>). For ease of identification, these are in a red font colour.

In some instances, objectives may appear in all three terms. It is not the intention that these objectives are to be taught in each term but for the class teacher to consider the appropriateness of them. It may be that the teacher has taught the objective in the autumn and spring terms and assessment demonstrates that the children have a deep understanding of the objective. In this case, the class teacher may choose not to dedicate a full lesson of teaching but may choose a "lighter touch" to ensure retrieval of this objective is strong. Conversely, the class teacher may choose not to teach an objective in the autumn term due to focusing on other areas. In this case it would be imperative that the objectives were taught fully in the next two terms. Again, class teachers may identify that children require the objectives to be taught in all three terms and further consolidation of learning.

These documents are intended to be flexible and support class teachers in designing a flexible and personalised curriculum for their class.

Reasoning and Problem Solving

There is the expectation that **all** units of mathematics will include elements of reasoning and problem solving. Therefore, the following objectives have been removed from the progression grid as they could be equally applied to all areas of mathematics

- *Apply understanding to solve problems and puzzles involving numbers, money, shape or measures.*
- *Explain methods and reasoning orally and in writing, including using diagrams and symbol.*
- *Develop lines of enquiry through conjecturing relationships and generalisations and testing ideas.*
- *Identify examples for which a statement is true or false.*
- *Explore and discuss patterns, properties and relationships that arise using appropriate mathematical vocabulary.*
- *Solve calculation problems using information from a range of pictograms, tally charts, block diagrams and simple tables*
- *Use a variety of language to describe multiplication and division.*
- *Use all four operations to solve problems including scaling problems involving measure (e.g. length, mass, volume, money). Information required to solve a problem is often drawn from tables, and charts*
- *Apply measuring skills to an appropriate degree of accuracy, alongside the skills of thinking mathematically to solve problems. These should include practical problems and might involve construction of shapes or artefacts, often in a cross curricular context.*
- *Make and explain connections between number, measures and shape*
- *Solve problems, involving reasoning about shapes and their properties. Explain solutions orally or using writing, drawings or practical materials.*
- *Apply the skills of collecting, representing and interpreting statistical data across the curriculum within and beyond mathematic, sometimes in response to an enquiry of interest to and suggested by pupils.*

educationGateshead Core Curriculum for Primary Mathematics Progression Grid Year 2

Consolidation from Year 1	Year 2 Autumn	Year 2 Spring	Year 2 Summer
<p>These are the objectives from Year 1. Some of these objectives may need consolidation in Year 2 depending on discussion with sending teacher.</p>	<p>Understanding and investigating with numbers 3 weeks</p>	<p>Understanding and investigating with numbers 3 weeks</p>	<p>Understanding and investigating with numbers 3 weeks</p>
<p>Place value, ordering and rounding</p>	<p>Place value, ordering and rounding</p>	<p>Place value, ordering and rounding</p>	<p>Place value, ordering and rounding</p>
<ul style="list-style-type: none"> • Count up to 100, forwards and backwards, beginning with 0 or 1, or from any given number. • 1NPV-1 Count within 100, forwards and backwards, starting with any number. • Practise counting as reciting numbers and enumerating objects and to identify order (1st, 2nd, 3rd...). • Read and write numbers from 1 to 20 in numerals and words. • Count, read and write numbers to 100 in numerals. • Identify and represent numbers using objects and pictorial representations including the number line. • Given a number, identify one more and one less. 	<ul style="list-style-type: none"> • <i>Continue to count forwards and backwards in ones and tens from any number to 100 and beyond to establish fluency, especially across boundaries of 10s and 100s.</i> • Read and write numbers to at least 100 in numerals and words. • Compare and order numbers from 0 up to 100; use >, < and = signs. • Recognise the place value of each digit in a two-digit number (tens, ones). • Partition numbers in different ways e.g. $23 = 20 + 3$ and $23 = 10 + 13$ to support subtraction. 	<ul style="list-style-type: none"> • <i>Continue to count forwards and backwards in ones and tens from any number to 100 and beyond to establish fluency, especially across boundaries of 10s and 100s.</i> • Read and write numbers to at least 100 in numerals and words • Identify, represent and estimate numbers using different representations, including the number line and spatial representations. • Recognise the place value of each digit in a two-digit number (tens, ones). • 2NPV-1 Recognise the place value of each digit in two-digit numbers, and compose 	<ul style="list-style-type: none"> • <i>Continue to count forwards and backwards in ones and tens from any number to 100 and beyond to establish fluency, especially across boundaries of 10s and 100s.</i> • Compare and order numbers from 0 up to 100; use >, < and = signs. • Identify, represent and estimate numbers using different representations, including the number line and spatial representations. • Recognise the place value of each digit in a two-digit number (tens, ones). • 2NPV-2 Reason about the location of any two-digit number in the linear number

<ul style="list-style-type: none"> • Given a number <i>within range pupils are working on</i>, identify one more and one less, relating this to adding and subtracting one. • Use the language of: equal to, more than, less than (fewer), most, least to compare and order numbers and quantities. • 1NPV-2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and = • Begin to recognise place value in numbers beyond 20 by reading, writing, counting and comparing numbers up to 100, supported by objects and pictorial representations e.g. <i>Knowing that adding a one digit number to ten makes a teen number and subtracting units from a teen number leaves ten</i> • <i>Solve problems involving counting objects</i> 	<ul style="list-style-type: none"> • <i>Understand e.g. 23 as 20 + 3 and as 2 tens and 3 ones.</i> 	<p>and decompose two-digit numbers using standard and nonstandard partitioning</p> <ul style="list-style-type: none"> • Begin to understand zero as a place holder. • Use place value and number facts to solve problems 	<p>system, including identifying the previous and next multiple of 10.</p> <ul style="list-style-type: none"> • Use place value and number facts to solve problems
<p>Properties of numbers and number sequences</p>	<p>Properties of numbers and number sequences</p>	<p>Properties of numbers and number sequences</p>	<p>Properties of numbers and number sequences</p>
<ul style="list-style-type: none"> • Count in multiples of two and five to develop recognition of patterns. 	<ul style="list-style-type: none"> • Count in steps of 2, 3 and 5 from 0 and in tens from any number, forward and 	<ul style="list-style-type: none"> • Count in steps of 2, 3, 4, 8, 5 and 10 from 0 and in tens from any number, forward 	<ul style="list-style-type: none"> • Count in steps of 2, 3 and 5 from 0 and in tens from any number, forward and

<ul style="list-style-type: none"> Recognise and create repeating patterns with objects and with shapes. <i>Describe simple patterns and relationships involving numbers; decide if examples satisfy a given condition</i> Count in multiples of twos, fives and tens from different multiples to develop recognition of patterns. 1NF–2 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. 	<p>back. Counting in steps of three will support later understanding of a third.</p>	<p>and back. Counting in steps of three will support later understanding of a third.</p> <ul style="list-style-type: none"> Recognize patterns in numbers to and beyond 100. Find 10 more or 10 less than any given number. <i>Recognise and extend number sequences formed by counting from any number in steps of constant size</i> 	<p>back. Counting in steps of three will support later understanding of a third.</p> <ul style="list-style-type: none"> Find 10 more or 10 less than any given number <i>Recognise and extend number sequences formed by counting from any number in steps of constant size</i>
<p>Fractions</p>	<p>Fractions</p>	<p>Fractions</p>	<p>Fractions</p>
<ul style="list-style-type: none"> <i>Experience</i> half and quarter as ‘fractions of’ discrete (e.g. <i>countables</i>) and continuous (e.g. <i>liquid</i>) quantities by solving problems using shapes, objects and quantities. For example, recognise and find half a length, quantity, set of objects or shape. Connect halves and quarters to the equal sharing and grouping of 	<ul style="list-style-type: none"> Recognise, find, name and write fractions $1/3$, $1/4$, $2/4$, and $3/4$ of a length, shape and set of objects or quantity. Write simple fractions e.g. $1/2$ of 6 = 3 and recognise the equivalence of $2/4$ and $1/2$ 	<ul style="list-style-type: none"> Use fractions as ‘fractions of’ discrete (e.g. <i>countables</i>) and continuous (e.g. <i>liquid</i>) quantities by solving problems using shapes, objects and quantities. Connect unit fractions to equal sharing and grouping, to numbers when they can be calculated and to measures, finding fractions of lengths, quantities, sets of objects and shapes. 	<ul style="list-style-type: none"> Use fractions as ‘fractions of’ discrete (e.g. <i>countables</i>) and continuous (e.g. <i>liquid</i>) quantities by solving problems using shapes, objects and quantities. Connect unit fractions to equal sharing and grouping, to numbers when they can be calculated and to measures, finding fractions of lengths, quantities, sets of objects and shapes. Count in fractions up to 10 starting at any number and using the $1/2$ and $2/4$ equivalence on the

<p>sets of objects and to measures, as well as recognising and combining halves and quarters as parts of a whole.</p> <ul style="list-style-type: none"> • Recognize, find and name a half as one of two equal parts of an object, shape or quantity • Recognize, find and name a quarter as one of four equal parts of an object, shape or quantity 		<ul style="list-style-type: none"> • Count in fractions up to 10 starting at any number and using the $\frac{1}{2}$ and $\frac{2}{4}$ equivalence on the number line e.g. $1\frac{1}{4}$, $1\frac{2}{4}$, (or $1\frac{1}{2}$) $1\frac{3}{4}$, 2. Reinforce the concept of fractions as numbers and that they can add up to more than one. 	<p>number line e.g. $1\frac{1}{4}$, $1\frac{2}{4}$, (or $1\frac{1}{2}$) $1\frac{3}{4}$, 2. Reinforce the concept of fractions as numbers and that they can add up to more than one.</p>
<p>Developing and applying calculation</p>	<p>Developing and applying calculation</p>	<p>Developing and applying calculation</p>	<p>Developing and applying calculation</p>
<p>Addition and Subtraction</p>	<p>Addition and Subtraction 2 weeks</p>	<p>Addition and Subtraction 2 weeks</p>	<p>Addition and Subtraction 2 weeks</p>
<ul style="list-style-type: none"> • 1NF–1 Develop fluency in addition and subtraction facts within 10. • AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers. • Represent and use number bonds and related subtraction facts within 	<ul style="list-style-type: none"> • Recall and use addition and subtraction facts to 20 fluently and derive and use related facts to 100 e.g. use $3 + 7 = 10$; $10 - 7 = 3$ and $7 = 10 - 3$ to calculate $30 + 70 = 100$; $100 - 70 = 30$ and $70 = 100 - 30$. • Add and subtract numbers using concrete objects, pictorial 	<ul style="list-style-type: none"> • 2NF–1 Secure fluency in addition and subtraction facts within 10, through continued practice. • 2AS–1 Add and subtract across 10, for example: $8 + 5 = 13$ $13 - 5 = 8$ • Recall and use addition and subtraction facts to 20 fluently and derive and use 	<ul style="list-style-type: none"> • Recall and use addition and subtraction facts to 20 fluently and derive and use related facts to 100 e.g. use $3 + 7 = 10$; $10 - 7 = 3$ and $7 = 10 - 3$ to calculate $30 + 70 = 100$; $100 - 70 = 30$ and $70 = 100 - 30$. • Add and subtract numbers using concrete objects, pictorial representations and mentally, including:

20 using concrete objects and pictorial representations to support understanding.

- Memorise and reason with number bonds to 10 and 20 in several forms (for example, $9 + 7 = 16$; $16 - 7 = 9$; $7 = 16 - 9$). This establishes addition and subtraction as related operations.

- *Make connections between bonds for 10 and 20 e.g. between $7 + 2 = 9$ and $17 + 2 = 19$ supported by representations*

- **Add and subtract one-digit and two-digit numbers to 20, including**

zero (progressing from counting to non counting strategies, starting to use recall of number bonds).

- Realise the effect of adding or subtracting zero.

- **Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs.**

- **1AS-2 Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions**

representations and mentally, including:

- **a two-digit number and ones**

- **a two-digit number and tens**

- **two two-digit numbers**

- **adding three one-digit numbers**

- **Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.**

- *Use and explain a range of mental strategies appropriate to the numbers involved, sometimes supporting explanations with jottings or informal recording.*

- *Solve calculation problems using information from a range of pictograms, tally charts, block diagrams and simple tables.*

related facts to 100 e.g. use $3 + 7 = 10$; $10 - 7 = 3$ and $7 = 10 - 3$ to calculate $30 + 70 = 100$; $100 - 70 = 30$ and $70 = 100 - 30$.

- **Add and subtract numbers using concrete objects, pictorial representations and mentally, including:**

- **a two-digit number and ones**

- **a two-digit number and tens**

- **two two-digit numbers**

- **adding three one-digit numbers**

- **2AS-4 Add and subtract within 100 by applying related one-digit addition and subtraction facts: add and subtract any 2 two digit numbers.**

- **Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot.**

- Check calculations e.g. by adding to check subtraction and adding numbers in a different order to check addition e.g. $5 + 2 + 1 = 1 + 5 + 2 = 1 + 2 + 5$. This establishes commutativity

- **a two-digit number and ones**

- **a two-digit number and tens**

- **two two-digit numbers**
- **adding three one-digit numbers**

- **2AS-2 Recognise the subtraction structure of 'difference' and answer questions of the form, "How many more...?"**

- Continue to extend understanding of language of addition and subtraction to include sum and difference

- **Solve problems with addition and subtraction**

- **Using concrete objects and pictorial representations, including those involving numbers, quantities and measures.**

- **Applying increasing knowledge of mental and written methods.**

- *Use and explain a range of mental strategies appropriate to the numbers involved, sometimes supporting explanations with jottings or informal recording.*

and equations to real-life contexts.

- Combine and increase numbers, counting forwards and backwards
- **Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = \square - 9$.**
- Discuss and solve problems in familiar practical contexts, including using quantities. Problems should include the terms: put together, add, altogether, total, take away, distance between, difference between, more than and less than, so that pupils develop the concept of addition and subtraction and are enabled to use these operations flexibly.

and associativity of addition.

- **Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems.**
- Continue to extend understanding of language of addition and subtraction to include sum and difference
- **Solve problems with addition and subtraction**
- **Using concrete objects and pictorial representations, including those involving numbers, quantities and measures.**
- **Applying increasing knowledge of mental and written methods.**
- *Use and explain the equals sign to indicate equivalence, including in missing number problems (e.g. $4 + 6 = 5 + 5$; $17 = 19 - \Delta$).*
- *Use and explain a range of mental strategies appropriate to the numbers involved, sometimes supporting explanations*

		<i>with jottings or informal recording.</i>	
Multiplication and Division	Multiplication and Division 2 weeks	Multiplication and Division 2 weeks	Multiplication and Division 2 weeks
<ul style="list-style-type: none"> • Count in multiples of two. • Make connections between arrays, number patterns, and counting in twos. • <i>Recall doubles of numbers to 5 and corresponding halves.</i> • Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. • Through grouping and sharing small quantities, pupils begin to understand: multiplication and division; doubling numbers and quantities; and <i>make connections with</i> finding simple fractions of objects, numbers and quantities • Make connections between arrays, number patterns, and counting in twos and fives. 	<ul style="list-style-type: none"> • Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognizing odd and even numbers. <ul style="list-style-type: none"> • <i>Continue to recognise doubles and corresponding halves.</i> • Connect unit fractions to equal sharing and grouping, to numbers when they can be calculated and to measures, finding fractions of lengths, quantities, sets of objects and shapes. • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs. • Solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. 	<ul style="list-style-type: none"> • Recall and use multiplication and division facts for the 2, 4, 8, 5 and 10 multiplication tables, including recognizing odd and even numbers. • 2MD–1 Recognise repeated addition contexts, representing them with multiplication equations and calculating the product, within the 2, 5 and 10 multiplication tables. • Connect the 2, 4, 8, 5 10 multiplication tables to each other. Connect the 10 multiplication table to place value and the 5 multiplication table to the divisions on a clock face. • <i>Continue to recognise doubles and corresponding halves.</i> • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication 	<ul style="list-style-type: none"> • Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognizing odd and even numbers. • <i>Continue to recognise doubles and corresponding halves</i> • Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs. • 2MD–2 Relate grouping problems where the number of groups is unknown to multiplication equations with a missing factor, and to division equations (quotitive division). • Solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

<ul style="list-style-type: none"> • Make connections between arrays, number patterns, and counting in twos, fives and tens. • • <i>Recall doubles of numbers to 10 and corresponding halves</i> 	<ul style="list-style-type: none"> • Work with a range of materials and contexts in which multiplication and division relate to grouping and sharing discrete and continuous quantities, to arrays and to repeated addition. Relate these to fractions and measures. 	<p>(x), division (÷) and equals (=) signs.</p> <ul style="list-style-type: none"> • Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot. • Solve problems involving multiplication and division using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts. • Work with a range of materials and contexts in which multiplication and division relate to grouping and sharing discrete and continuous quantities, to arrays and to repeated addition. Relate these to fractions and measures. 	<ul style="list-style-type: none"> • Work with a range of materials and contexts in which multiplication and division relate to grouping and sharing discrete and continuous quantities, to arrays and to repeated addition. Relate these to fractions and measures.
Measurement	Measurement 2 weeks	Measurement 2 weeks	Measurement 2 weeks
<ul style="list-style-type: none"> • Compare, describe and solve practical problems for: • lengths and heights [e.g. long/short, longer/shorter, tall/short, double/half] <ul style="list-style-type: none"> • time [e.g. quicker, slower, earlier, later]. 	<ul style="list-style-type: none"> • Choose and use appropriate standard units to estimate and measure, with increasing accuracy, length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, 	<ul style="list-style-type: none"> • Choose and use appropriate standard units to estimate and measure, with increasing accuracy, length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, 	<ul style="list-style-type: none"> • Choose and use appropriate standard units to estimate and measure, with increasing accuracy, length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers,

<ul style="list-style-type: none"> • mass/weight [e.g. heavy/light, heavier than, lighter than] • capacity and volume [e.g. full/empty, more than, less than, half, half full, quarter] • Move from using and comparing different types of quantities and measures using non-standard units, including discrete (for example, counting) and continuous (for example, liquid) measurement, to using manageable common standard units. • Begin to use measuring tools such as a ruler, weighing scales and containers. • measure and begin to record the following: <ul style="list-style-type: none"> • lengths and heights • time (hours, minutes, seconds). • mass/weight • capacity and volume • Recognize and know the value of different denominations of coins and notes. • Sequence events in chronological order using 	<p>using rulers, scales, thermometers and measuring vessels.</p> <ul style="list-style-type: none"> • Use appropriate language for measuring and record using standard abbreviations. • Compare and order lengths, mass, volume/capacity and record the results using >, < and =. • Compare using simple multiples such as 'half as high', 'twice as wide'. • Become fluent in counting and recognizing coins <i>and notes</i>. Read and say amounts of money confidently. • Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. • Find different combinations of coins that equal the same amounts of money. • Compare and sequence intervals of time. • Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. 	<p>scales, thermometers and measuring vessels.</p> <ul style="list-style-type: none"> • Use appropriate language for measuring and record using standard abbreviations. • Compare and order lengths, mass, volume/capacity and record the results using >, < and =. • Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value. • Find different combinations of coins that equal the same amounts of money. • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. • Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. • Know the number of minutes in an hour and the number of hours in a day. 	<p>scales, thermometers and measuring vessels.</p> <ul style="list-style-type: none"> • Use appropriate language for measuring and record using standard abbreviations. • Find different combinations of coins that equal the same amounts of money. • Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change. • Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times. • Know the number of minutes in an hour and the number of hours in a day.
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<p>language [e.g. before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening].</p> <ul style="list-style-type: none"> • Recognize and use language relating to dates, including days of the week, weeks, months and years. • Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. • Use the language of time, including telling the time throughout the day, first using o'clock and then half past. • Connect experiences of turning clockwise with movement of hands on a clock face. 			
Geometry	Geometry 2 weeks	Geometry 2 weeks	Geometry 2 weeks
Properties of Shapes	Properties of Shapes	Properties of Shapes	Properties of Shapes
<ul style="list-style-type: none"> • Recognize and name common 2-D and 3-D shapes, including: <ul style="list-style-type: none"> • 2-D shapes [e.g. rectangles (including squares), circles and triangles] 	<ul style="list-style-type: none"> • Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. • Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. 	<ul style="list-style-type: none"> • Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. • Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces. 	<ul style="list-style-type: none"> • Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line. • Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.

<ul style="list-style-type: none"> • 3-D shapes [e.g. cuboids (including cubes), pyramids and spheres]. • Pupils handle common 2-D and 3-D shapes, naming these and related everyday objects fluently. They recognize these shapes in different orientations and sizes, and know that rectangles, triangles, cuboids and pyramids are not always similar to each other. • 1G–1 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. • <i>Compare and sort common 2D and 3D shapes and everyday objects.</i> • <i>Recognize and create repeating patterns with objects and with shapes.</i> • 1G–2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations. 	<ul style="list-style-type: none"> • Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]. • Compare and sort common 2-D and 3-D shapes and everyday objects on the basis of their properties and use vocabulary precisely. • Read and write names of shapes appropriate to their word reading and spelling. 	<ul style="list-style-type: none"> • Compare and sort common 2-D and 3-D shapes and everyday objects on the basis of their properties and use vocabulary precisely. • Read and write names of shapes appropriate to their word reading and spelling. 	<ul style="list-style-type: none"> • Compare and sort common 2-D and 3-D shapes and everyday objects on the basis of their properties and use vocabulary precisely. • Read and write names of shapes appropriate to their word reading and spelling. • 2G–1 Use precise language to describe the properties of 2D and 3D shapes, and compare shapes by reasoning about similarities and differences in properties. • Draw lines and shapes using a straight edge
<p>Position and Direction</p>	<p>Position and Direction</p>	<p>Position and Direction</p>	<p>Position and Direction</p>

<ul style="list-style-type: none"> • Use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside. • Describe position, direction and movement, including half, quarter and three-quarter turns. • Make whole, half, quarter and three-quarter turns in both directions and connect turning clockwise with movement on a clock face. • Use the language of position, direction and motion, including: left and right, top, middle and bottom, on top of, in front of, above, between, around, near, close and far, up and down, forwards and backwards, inside and outside. 	<ul style="list-style-type: none"> • Order and arrange combinations of mathematical objects in patterns and sequences including the use of shapes in different orientations. • Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise). 	<ul style="list-style-type: none"> • Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise). • Use the language of angles in practical contexts e.g. pupils moving in turns, instructing others to do so and programming robots using instructions given in right angles 	<ul style="list-style-type: none"> • Order and arrange combinations of mathematical objects in patterns and sequences including the use of shapes in different orientations. • Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise). • Use the language of angles in practical contexts e.g. pupils moving in turns, instructing others to do so and programming robots using instructions given in right angles
Statistics	Statistics 1 week	Statistics 1 week	Statistics 1 week
Interpreting, Constructing and Presenting Data	Interpreting, Constructing and Presenting Data	Interpreting, Constructing and Presenting Data	Interpreting, Constructing and Presenting Data

NB this is not included in the National Curriculum for Year 1 but schools may wish to introduce pupils to these skills or use data contexts to support problem solving

- Begin to interpret and construct simple pictograms, tally charts, block diagrams and simple tables often in cross curricular contexts*
- Begin to ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.*

- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.**
- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.**
- Ask and answer questions about totalling and comparing categorical data.**

- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.**
- Use many-to-one correspondence in pictograms with simple ratios 2, 5, 10.**
- Pose their own questions that can be answered using information presented in different pictograms, tally charts, block diagrams and simple tables*
- Understand and use Venn and Carroll diagrams to support reasoning about numbers or shapes*

- Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.**
- Use many-to-one correspondence in pictograms with simple ratios 2, 5, 10.**
- Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.**
- Ask and answer questions about totalling and comparing categorical data.**
- Pose their own questions that can be answered using information presented in different pictograms, tally charts, block diagrams and simple tables*
- Understand and use Venn and Carroll diagrams to support reasoning about numbers or shapes*