

## Maths Progress Model

| Number and Place Value | F1                                                                                                                                                                                                                                                                                                               | F2                                                               | Y1                                                                                                                                                       | Y2                                                                                                                | Y3                                                                                                                            | Y4                                                                                                                                                                | Y5                                                                                                                                    | Y6                                                                                                                       |
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|                        | Recite numbers past 5.                                                                                                                                                                                                                                                                                           | Count beyond 10 to 20.                                           | Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.                                                        | Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward.                          | Count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number.                               | Count in multiples of 6, 7, 9, 25 and 1000.<br><br>Count backwards through zero to include negative numbers.                                                      | Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero. | Use negative numbers in context, and calculate intervals across zero.                                                    |
|                        | Count objects- Saying one number for each item in order: 1,2,3,4,5.<br><br>Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').<br><br>Fast recognition of up to 3 objects, without having to count them individually (subitise) | Count objects, actions and sounds<br><br>Subitise up to 5        |                                                                                                                                                          | Recognise the place value of each digit in a two-digit number (tens, ones) and use number facts to solve problems | Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) and use number facts to solve problems | Recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) and solve problems with increasingly large positive numbers. | Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit and solve number problems.         | Read, write, order and compare numbers up to 10,000,000 and determine the value of each digit and use to solve problems. |
|                        | Show 'finger numbers' up to 5.<br><br>Link numerals and amounts: for example, showing the right number of                                                                                                                                                                                                        | Link the number symbol (numeral) with its cardinal number value. | Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less | Identify, represent and estimate numbers using different representations, including the number line.              | Identify, represent and estimate numbers using different representations.                                                     | Identify, represent and estimate numbers using different representations.                                                                                         | -                                                                                                                                     | -                                                                                                                        |

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|  | objects to match the numeral, up to 5.                        |                                                                                                                                                 | than (fewer), most, least.                     |                                                                   |                                       |                                                                                                                                         |                                                                                    |                                                          |
|  | Compare quantities using language: 'more than', 'fewer than'. | Understand the 'one more than/one less than' relationship between consecutive numbers.<br><br>Compare quantities up to 10 in different contexts | Given a number, identify one more and one less | Compare and order numbers from 0 up to 100; use <, > and = signs. | Compare and order numbers up to 1000. | Order and compare numbers beyond 1000.<br><br>Round any number to the nearest 10, 100 or 1000.                                          | Round any number up to 1,000,000 to the nearest 10, 100, 1000, 10,000 and 100,000. | Round any whole number to a required degree of accuracy. |
|  |                                                               | .                                                                                                                                               |                                                |                                                                   |                                       | Read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value. |                                                                                    |                                                          |

## Maths Progress Model

| Addition and Subtraction | F1                                                          | F2                                                                                | Y1                                                                                                                                                                     | Y2                                                                                                                                                | Y3                                                                                                                                               | Y4                                                                                                                    | Y5                                                                                                                                  | Y6                                                                                                                             |
|--------------------------|-------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
|                          | Solve real world mathematical problems with numbers up to 5 | Explore the composition of numbers to 10.                                         | Represent and use number bonds and related subtraction facts within 20.                                                                                                | Recall and use addition and subtraction facts to 20 fluently                                                                                      |                                                                                                                                                  |                                                                                                                       |                                                                                                                                     |                                                                                                                                |
|                          |                                                             | Automatically recall number bonds for numbers 0–10. (Including subtraction facts) | Add and subtract one-digit and two-digit numbers to 20, including zero.                                                                                                | Add and subtract numbers using concrete objects, pictorial representations, and mentally two two-digit numbers                                    | Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.                             | Add and subtract numbers with up to 4 digits using the written methods of addition and subtraction where appropriate. | Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction). |                                                                                                                                |
|                          |                                                             |                                                                                   | Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7 = ? - 9$ . | Using concrete objects and pictorial representations, including those involving numbers, quantities and measures;                                 | Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.                   | Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.   | Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.               | Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why.          |
|                          |                                                             |                                                                                   |                                                                                                                                                                        | Applying their increasing knowledge of mental and written methods.                                                                                | Add and subtract numbers mentally including a three-digit numbers and ones, a three-digit number and tens and a three-digit number and hundreds. |                                                                                                                       | Add and subtract numbers mentally with increasingly large numbers <i>[for example, <math>12,462 - 2300 = 10,162</math>]</i> .       |                                                                                                                                |
|                          |                                                             |                                                                                   |                                                                                                                                                                        | Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems. | Estimate the answer to a calculation and use inverse operations to check answers.                                                                | Estimate and use inverse operations to check answers to a calculation.                                                | Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy.                       | Use estimation to check answers to calculations and determine, in the context of a problem, an appropriate degree of accuracy. |

## Maths Progress Model

| Multiplication and Division | F1 | F2                                                                                                           | Y1                                                                                                                                              | Y2                                                                                                                                                                                                     | Y3                                                                                                                                                                                                                                    | Y4                                                                                                                                                  | Y5                                                                                                                                                            | Y6                                                                                                                                                                                                                          |
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|                             |    | Explore and represent patterns within numbers up to 10, including double facts.                              |                                                                                                                                                 | Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers.                                                                | Recall and use multiplication and division facts for the 3, 4 and 8 times table                                                                                                                                                       | Recall multiplication and division facts for multiplication tables up to $12 \times 12$ .                                                           |                                                                                                                                                               | Perform mental calculations, including with mixed operations and large numbers.                                                                                                                                             |
|                             |    | Automatically recall doubling facts up to 10.                                                                |                                                                                                                                                 | Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( $\times$ ), division ( $\div$ ) and equals ( $=$ ) signs. | Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-digit numbers times one-digit numbers, using mental and progressing to written methods. | Multiply two-digit and three-digit numbers by a one-digit number using formal written layout                                                        | Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers.             | Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the formal written method of long multiplication.                                                                                             |
|                             |    |                                                                                                              |                                                                                                                                                 |                                                                                                                                                                                                        |                                                                                                                                                                                                                                       |                                                                                                                                                     | Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context. | Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context. |
|                             |    | Explore and represent patterns within numbers up to 10, including how quantities can be distributed equally. |                                                                                                                                                 | Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot.                                                                           |                                                                                                                                                                                                                                       | Recognise and use factor pairs and commutativity in mental calculations                                                                             | Solve problems by identifying multiples and factors, common factors of two numbers and identifying square and cube numbers.                                   | Identify common factors, common multiples and prime numbers.                                                                                                                                                                |
|                             |    |                                                                                                              | Solve one-step problems by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. | Solve problems using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context.                                                       | Solve problems, including missing number problems, including positive integer scaling problems and correspondence problems in which $n$                                                                                               | Solve problems using the distributive law to multiply two-digit numbers by one digit, using integer scaling and correspondence problems such as $n$ | Solve problems involving multiplication and division and a combination of these, including understanding the                                                  | Solve problems involving multiplication and division and check using estimation.                                                                                                                                            |

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|  |  |  |  |  | objects are connected to $m$ objects. | objects are connected to $m$ objects. | meaning of the equals sign. |  |
|--|--|--|--|--|---------------------------------------|---------------------------------------|-----------------------------|--|

## Maths Progress Model

| Fractions, decimals and percentages | F1 | F2                                                           | Y1                                                                                             | Y2                                                                                                                                                                   | Y3                                                                                                                                                          | Y4                                                                                                                                                                                   | Y5                                                                                                                                                                                                                                           | Y6                                                                                                                                                                  |
|-------------------------------------|----|--------------------------------------------------------------|------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                     |    | Understanding and finding one half of shapes and quantities. | Recognise, find and name a half as one of two equal parts of an object, shape or quantity.     | Recognise, find, name and write fractions $\frac{1}{3}$ , $\frac{1}{4}$ , $\frac{2}{4}$ , and $\frac{3}{4}$ of a length, shape, and set of objects or quantity.      | Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10. | Recognise and show, using diagrams, families of common equivalent fractions.                                                                                                         | Compare and order fractions whose denominators are all multiples of the same number.                                                                                                                                                         | Use common factors to simplify fractions; use common multiples to express fractions in the same denomination.                                                       |
|                                     |    |                                                              | Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. | Write simple fractions <i>for example, <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of <math>\frac{2}{4}</math> and <math>\frac{1}{2}</math>.</i> | Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators.                            | Count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten.                                                  | Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths.                                                                                                                    | Compare and order fractions, including fractions $> 1$ .                                                                                                            |
|                                     |    |                                                              |                                                                                                |                                                                                                                                                                      | Recognise and use fractions as numbers: unit fractions (numerator of 1) and non-unit fractions with small denominators.                                     | Solve problems involving increasingly harder fractions to calculate quantities, and fractions to divide quantities, including non-unit fractions where the answer is a whole number. | Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements $> 1$ as a mixed number <i>[for example, <math>2\frac{5}{5} + \frac{4}{5} = 6\frac{5}{5} = 1\frac{1}{5}</math>].</i> | Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions.                                                |
|                                     |    |                                                              |                                                                                                |                                                                                                                                                                      | Recognise and show, using diagrams, equivalent fractions with small denominators.                                                                           | Add and subtract fractions with the same denominator.                                                                                                                                | Add and subtract fractions with the same denominator and denominators that are multiples of the same number.                                                                                                                                 | Multiply simple pairs of proper fractions, writing the answer in its simplest form <i>[for example, <math>\frac{1}{4} \times \frac{1}{2} = \frac{1}{8}</math>].</i> |
|                                     |    |                                                              |                                                                                                |                                                                                                                                                                      | Add and subtract fractions with the same denominator within one whole <i>[for example, <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math>].</i>           | Recognise and write decimal equivalents of any number of tenths or hundredths.                                                                                                       | Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams.                                                                                                                                           | Divide proper fractions by whole numbers <i>[for example, <math>\frac{1}{3} \div 2 = \frac{1}{6}</math>].</i>                                                       |

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|  |  |  |  |  | Compare and order unit fractions, and fractions with the same denominators. | Recognise and write decimal equivalents to $\frac{1}{4}$ , $\frac{1}{2}$ , $\frac{3}{4}$ .                                                              | Read and write decimal numbers as fractions [for example, $0.71 = \frac{71}{100}$ ].                                                                                                                                       | Associate a fraction with division and calculate decimal fraction equivalents [for example, $0.375$ ] for a simple fraction [for example, $\frac{3}{8}$ ].               |
|  |  |  |  |  | Solve problems that involve all of the above.                               | Find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the digits in the answer as ones, tenths and hundredths. | Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.                                                                                                                               |                                                                                                                                                                          |
|  |  |  |  |  |                                                                             | Round decimals with one decimal place to the nearest whole number.                                                                                      | Round decimals with two decimal places to the nearest whole number and to one decimal place.                                                                                                                               | Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places. |
|  |  |  |  |  |                                                                             | Compare numbers with the same number of decimal places up to two decimal places.                                                                        | Read, write, order and compare numbers with up to three decimal places.                                                                                                                                                    | Multiply one-digit numbers with up to two decimal places by whole numbers.                                                                                               |
|  |  |  |  |  |                                                                             | Solve simple measure and money problems involving fractions and decimals to two decimal places.                                                         | Solve problems involving number up to three decimal places.                                                                                                                                                                | Use written division methods in cases where the answer has up to two decimal places.                                                                                     |
|  |  |  |  |  |                                                                             |                                                                                                                                                         | Recognise the per cent symbol (%) and understand that per cent relates to 'number of parts per hundred', and write percentages as a fraction with denominator 100, and as a decimal.                                       | Solve problems which require answers to be rounded to specified degrees of accuracy.                                                                                     |
|  |  |  |  |  |                                                                             |                                                                                                                                                         | Solve problems which require knowing percentage and decimal equivalents of $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{1}{5}$ , $\frac{2}{5}$ , $\frac{4}{5}$ and those fractions with a denominator of a multiple of 10 or 25. | Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts.                                                         |

## Maths Progress Model

| Measurement | F1                                                                              | F2                                                                         | Y1                                                                                                                                             | Y2                                                                                                                                                                                          | Y3                                                                                             | Y4                                                                                                         | Y5                                                                                                                                                                                     | Y6                                                                                                                                                                                                                                   |
|-------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|             | Make comparisons between objects relating to size, length, weight and capacity. | Compare length, weight and capacity using the comparative language "than". | <i>Compare, describe and solve practical problems for:</i> lengths and heights, mass/weight, capacity, volume and time                         | <i>Choose and use appropriate standard units to estimate and measure to the nearest appropriate unit,</i> Length/height in any directions. Mass (kg/g) Temperature (C) Capacity (litres/ml) | <i>Measure, compare, add and subtract:</i> Length (m/cm/mm) Mass (kg/g) Volume/capacity (l/ml) | Convert between different units of measure <i>[for example, kilometre to metre; hour to minute]</i>        | Convert between different units of metric measure <i>(for example, kilometre and metre; centimetre and metre; centimetre and millimetre; gram and kilogram; litre and millilitre).</i> | Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate.                                                                                    |
|             |                                                                                 |                                                                            | Measure and record lengths and heights, mass/weight, capacity, volume and time                                                                 | Compare and order lengths, mass, volume/capacity and record the results using >, < and =.                                                                                                   | Measure the perimeter of simple 2-D shapes.                                                    | Measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres. | Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints.                                                           | Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places. |
|             |                                                                                 |                                                                            | Recognise and know the value of different denominations of coins and notes.                                                                    | Recognise and use symbols for pounds (£) and pence (p); Recognise and combine amounts to make a particular value                                                                            | Add and subtract amounts of money to give change, using both £ and p in practical contexts.    | Estimate, compare and calculate different measures, including money in pounds and pence.                   | Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres.                                                                                         | Convert between miles and kilometres.                                                                                                                                                                                                |
|             |                                                                                 |                                                                            | Sequence events in chronological order using language <i>[for example, before and after, next, first, today, yesterday, tomorrow, morning,</i> | Find different combinations of coins that equal the same amounts of money.                                                                                                                  | an analogue clock and 12-hour and 24-hour clocks; including roman numerals.                    | Estimate, compare and calculate different measures, including money in pounds and pence.                   | Calculate and compare the area of rectangles (including squares), and including using standard units, square centimetres (cm <sup>2</sup> ) and square                                 | Recognise that shapes with the same areas can have different perimeters and vice versa.                                                                                                                                              |

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|  |  |  | <i>afternoon and evening].</i>                                                                           |                                                                                                                                                                                                         |                                                                                                                                                                                                                 |                                                                                                                | metres (m <sup>2</sup> ) and estimate the area of irregular shapes.                                                                                      |                                                                                                                                                                                                                                                                                                                                          |
|  |  |  | Recognise and use language relating to dates, including days of the week, weeks, months and years.       | Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change.                                                                     | Estimate and read time with increasing accuracy to the nearest minute; record and compare time in seconds, minutes and hours; use vocabulary such as o'clock, a.m./p.m., morning, afternoon, noon and midnight. | Read, write and convert time between analogue and digital 12- and 24-hour clocks.                              | Estimate volume <i>[for example, using 1 cm<sup>3</sup> blocks to build cuboids (including cubes)]</i> and capacity <i>[for example, using water]</i> .  | Recognise when it is possible to use formulae for area and volume of shapes. Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ), and extending to other units <i>[for example, mm<sup>3</sup> and km<sup>3</sup>]</i> . |
|  |  |  | Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. | 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 number of hours in a day. | Know the number of seconds in a minute and the number of days in each month, year and leap year.                                                                                                                | Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. | Solve problems involving converting between units of time.                                                                                               | Calculate the area of parallelograms and triangles.                                                                                                                                                                                                                                                                                      |
|  |  |  |                                                                                                          | Compare and sequence intervals of time.                                                                                                                                                                 | Compare durations of events <i>[for example to calculate the time taken by particular events or tasks]</i> .                                                                                                    |                                                                                                                | Use all four operations to solve problems involving measure <i>[for example, length, mass, volume, money]</i> using decimal notation, including scaling. |                                                                                                                                                                                                                                                                                                                                          |

## Maths Progress Model

| Geometry | F1                                                                                                           | F2                                                                                                                    | Y1                                                                                                                                                                                                                        | Y2                                                                                                                          | Y3                                                                                                                                                                                                          | Y4                                                                                                                  | Y5                                                                                                                                       | Y6                                                                                                                                                             |
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|          | Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc.                  | Select, rotate and manipulate shapes in order to develop spatial reasoning skills.                                    | <i>Recognise and name common 2-D and 3-D shapes, including: 2-D shapes [for example, rectangles (including squares), circles and triangles] 3-D shapes [for example, cuboids (including cubes), pyramids and spheres.</i> | Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line.     | Draw 2-D shapes and make 3-D shapes using modelling materials.                                                                                                                                              | Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes. | Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.                                                        | Draw 2-D shapes using given dimensions and angles.                                                                                                             |
|          | Describe a familiar route.<br><br>Discuss routes and locations, using words like 'in front of' and 'behind'. |                                                                                                                       | Describe position, direction and movement, including whole, half, quarter and three-quarter turns.                                                                                                                        | Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces.                      | Recognise 3-D shapes in different orientations and describe them.                                                                                                                                           | Identify acute and obtuse angles and compare and order angles up to two right angles by size.                       | Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.                                               | Recognise, describe and build simple 3-D shapes, including making nets.                                                                                        |
|          | Combine shapes to make new ones - an arch, a bigger triangle etc.                                            | Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. |                                                                                                                                                                                                                           | Identify 2-D shapes on the surface of 3-D shapes <i>[for example, a circle on a cylinder and a triangle on a pyramid]</i> . | Recognise angles as a property of shape or a description of a turn.                                                                                                                                         | Identify lines of symmetry in 2-D shapes presented in different orientations.                                       | Draw given angles, and measure them in degrees.<br>-                                                                                     | Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons.<br>- |
|          |                                                                                                              |                                                                                                                       |                                                                                                                                                                                                                           | Compare and sort common 2-D and 3-D shapes and everyday objects.                                                            | Identify right angles, recognise that two right angles make a half-turn, three make three quarters of a turn and four a complete turn; identify whether angles are greater than or less than a right angle. | Complete a simple symmetric figure with respect to a specific line of symmetry.                                     | angles at a point and one whole turn (total 360); angles at a point on a straight line and 1/2 a turn (total 180) other multiples of 90. | Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius.                             |

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|  | <p>Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc.</p> <p>Extend and create AB patterns – stick, leaf, stick, leaf. Notice and correct an error in a repeating AB pattern.</p> | <p>Continue, copy and create repeating patterns- AB, ABB, AAB, ABC, ABBC</p> <p>Notice and correct an error in repeating patterns.</p> |  | Order and arrange combinations of mathematical objects in patterns and sequences.                                                                                                                                | Identify horizontal and vertical lines and pairs of perpendicular and parallel lines. | Describe positions on a 2-D grid as coordinates in the first quadrant.                              | Use the properties of rectangles to deduce related facts and find missing lengths and angles.       | Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. |
|  | Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'                                                                                                                                                                                                              |                                                                                                                                        |  | 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 |                                                                                       | Describe movements between positions as translations of a given unit to the left/right and up/down. | Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. | Describe positions on the full coordinate grid (all four quadrants).                                                      |

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|  |  |  |  | three-quarter turns (clockwise and anti-clockwise). |  |                                                                   |                                                                                                                                                                          |                                                                                         |
|  |  |  |  |                                                     |  | Plot specified points and draw sides to complete a given polygon. | 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. | Draw and translate simple shapes on the coordinate plane, and reflect them in the axes. |

## Maths Progress Model

| Statistics | F1 | F2                          | Y1                                                                                                                         | Y2                                                                                                                                                                             | Y3                                                                                                                            | Y4                                                                                         | Y5                                                                                  | Y6                                                                                                                         |
|------------|----|-----------------------------|----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
|            |    | Understand and use a tally. | Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.                                 | Interpret and present data using bar charts, pictograms and tables.                                                                                                            | Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. | Solve comparison, sum and difference problems using information presented in a line graph. | Interpret pie charts and line graphs and use these to solve problems.               | 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. | Solve one-step and two-step questions <i>[for example, 'How many more?' and 'How many fewer?']</i> using information presented in scaled bar charts and pictograms and tables. | Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. | Complete, read and interpret information in tables, including timetables.                  | Interpret and construct pie charts and line graphs and use these to solve problems. | 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.                                                                                                       |                                                                                                                               |                                                                                            | -                                                                                   | Calculate and interpret the mean as an average.                                                                            |