

Progression of skills – Mathematics

**Mathematics Progression of Skills – Year One**

<p><b>Number: Number and place value</b></p> <ul style="list-style-type: none"> <li>Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number</li> <li>Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens</li> <li>Given a number, identify one more and one less</li> <li>Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least</li> <li>Read and write numbers from 1 to 20 in numerals and words</li> </ul>	<p><b>Measurement</b></p> <p>Compare, describe and solve practical problems for:</p> <ul style="list-style-type: none"> <li>lengths and heights (e.g. long/short, longer/shorter, tall/short, double/half)</li> <li>mass or weight (e.g. heavy/light, heavier than, lighter than)</li> <li>capacity/volume (full/empty, more than, less than, half, half full, quarter)</li> <li>time (quicker, slower, earlier, later)</li> </ul> <p>Measure and begin to record the following:</p> <ul style="list-style-type: none"> <li>lengths and heights</li> <li>mass/weight</li> <li>capacity and volume</li> <li>time (hours, minutes, seconds)</li> </ul> <p>Recognise and know the value of different denominations of coins and notes</p> <ul style="list-style-type: none"> <li>Sequence events in chronological order using language such as: before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening</li> <li>Recognise and use language relating to dates, including days of the week, weeks, months and years</li> <li>Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times</li> </ul>
<p><b>Number: Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs</li> <li>Represent and use number bonds and related subtraction facts within 20</li> <li>Add and subtract one-digit and two-digit numbers to 20 including zero</li> <li>Solve simple one-step problems that involve addition and subtraction, using concrete objects and pictorial representations and missing number problems such as <math>7 = ? - 9</math></li> </ul> <p><b>Number: Multiplication and Division</b></p> <p>Solve simple one-step problems involving multiplication and division, calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher</p>	<p><b>Geometry: Properties of shapes</b></p> <p>Recognise and name common 2-D and 3-D shapes, including:</p> <ul style="list-style-type: none"> <li>2-D shapes (e.g. rectangles (including squares), circles and triangles)</li> <li>3-D shapes (e.g. cuboids (including cubes), pyramids and spheres)</li> </ul>
<p><b>Number: Fractions</b> } Recognise, find and name a half as one of two equal parts of an object, shape or quantity } Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity</p>	<p><b>Geometry: Position and direction</b> } Describe position, directions and movements, including half, quarter and three-quarter turns</p>

## Mathematics Progression of Skills – Year Two

<p><b>Number: Number and place value</b></p> <ul style="list-style-type: none"> <li>Count in steps of 2,3 and 5 from 0, and in tens from any number, forward and backward</li> <li>Recognise the place value of each digit in two-digit numbers (tens and ones) Identify, represent and estimate numbers using different representations, including the number line</li> <li>Compare and order numbers from 0 up to 100: use and = signs</li> <li>Read and write numbers to at least 100 in numerals and in words</li> <li>Use place value and number facts to solve problems</li> </ul>	<p><b>Measurement</b></p> <ul style="list-style-type: none"> <li>Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels Compare and order lengths, mass, volume/capacity and record the results using &gt;, &lt; and =</li> <li>Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value</li> <li>Find different combinations of coins to equal the same amounts of money</li> <li>Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change</li> <li>Compare and sequence intervals of time</li> <li>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.</li> <li>Know the number of minutes in an hour and the number of hours in a day</li> </ul>
<p><b>Number: Addition and Subtraction</b></p> <p>Solve problems with addition and subtraction:</p> <ul style="list-style-type: none"> <li>Using concrete objects and pictorial representations, including those involving numbers, quantities and measures</li> <li>Applying their increasing knowledge of mental and written method</li> </ul> <p>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</p> <p>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:</p> <ul style="list-style-type: none"> <li>A two-digit number and ones</li> <li>A two-digit number and tens</li> <li>Two two-digit numbers</li> <li>Adding three one-digit numbers</li> </ul> <ul style="list-style-type: none"> <li>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</li> <li>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</li> </ul>	<p><b>Geometry: Properties of shapes</b></p> <ul style="list-style-type: none"> <li>Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line</li> <li>Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</li> <li>To identify 2-D shapes on the surface of 3-D shapes, for example a circle on a cylinder and a triangle on a pyramid</li> <li>Compare and sort common 2-D and 3-D shapes and everyday objects</li> </ul> <p><b>Geometry: Position and direction</b></p> <ul style="list-style-type: none"> <li>Order and arrange combinations of mathematical objects in patterns and sequences</li> <li>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)</li> </ul>

<p><b>Number: Multiplication and Division</b></p> <ul style="list-style-type: none"><li>• Recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers</li><li>• Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs</li><li>• Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</li><li>• Solve one-step problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts</li></ul>	
<p><b>Number: Fractions</b></p> <ul style="list-style-type: none"><li>• Recognise, find, name and write fractions <math>\frac{1}{3}</math>, <math>\frac{1}{4}</math>, <math>\frac{2}{4}</math> and <math>\frac{3}{4}</math> of a length, shape, set of objects or quantity</li><li>• Write simple fractions e.g. <math>\frac{1}{2}</math> of 6 = 3 and recognise the equivalence of two quarters and one half</li></ul>	<p><b>Statistics</b></p> <ul style="list-style-type: none"><li>• Interpret and construct simple pictograms, tally charts, block diagrams and simple tables</li><li>• Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity</li><li>• Ask and answer questions about totalling and comparing categorical data.</li></ul>

## Mathematics Progression of Skills – Year Three

### Number: Number and place value

- Count from 0 in multiples of 4, 8, 50 and 100; finding 10 or 100 more or less than a given number
- Recognise the place value of each digit in a three-digit number (hundreds, tens, ones)
- Compare and order numbers up to 1000
- Identify, represent and estimate numbers using different representations
- Read and write numbers to at least 1000 in numerals and in words
- Solve number problems and practical problems involving these ideas

### Measurement

- Measure, compare, add and subtract: lengths (m/cm/mm); mass (kg/g); volume/capacity (l/ml)
- Measure the perimeter of simple 2-D shapes
- Add and subtract amounts of money to give change, using both £ and p in practical contexts
- Tell and write the time from an analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clocks
- Estimate and read time with increasing accuracy to the nearest minute; record and compare time in terms of seconds, minutes, hours and o'clock; use vocabulary such as a.m./p.m., morning, afternoon, noon and midnight
- Know the number of seconds in a minute and the number of days in each month, year and leap year
- Compare durations of events, for example to calculate the time taken by particular events or tasks.

### Number: Addition and Subtraction

Add and subtract numbers mentally, including:

- a three-digit number and ones
- a three-digit number and tens
- a three-digit number and hundreds

- Add and subtract numbers with up to three digits, using the efficient written methods of columnar addition and subtraction
- Estimate the answer to a calculation and use inverse operations to check answer
- Solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction

### Number: Multiplication and Division

- Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables
- Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for two-

### Geometry: Properties of shapes

- Draw 2-D shapes and make 3-D shapes using modelling materials; recognise 3-D shapes in different orientations and describe them
- Recognise angles as a property of shape or a description of a turn
- 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
- Identify horizontal, vertical, perpendicular and parallel lines

<p>digit numbers times one-digit numbers, using mental and progressing to efficient written methods</p> <ul style="list-style-type: none"> <li>• Solve problems, including missing number problems, involving multiplication and division, including integer scaling problems and correspondence problems in which n objects are connected to m objects</li> </ul>	
<p><b>Number: Fractions</b></p> <ul style="list-style-type: none"> <li>• 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</li> <li>• Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators</li> <li>• Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators</li> <li>• Recognise and show, using diagrams, equivalent fractions with small denominators</li> <li>• Add and subtract fractions with the same denominator within one whole (e.g. <math>\frac{5}{7} + \frac{1}{7} = \frac{6}{7}</math>)</li> <li>• Compare and order unit fractions with the same denominator</li> <li>• Solve problems involving all of the above</li> </ul>	<p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>• Interpret and present data using bar charts, pictograms and tables</li> <li>• Solve one-step and two-step questions such as ‘How many more?’ and ‘How many fewer?’ using information presented in scaled bar charts and pictograms and tables</li> </ul>

### Mathematics Progression of Skills – Year Four

<p><b>Number: Number and place value</b></p> <ul style="list-style-type: none"> <li>• Count in multiples of 6, 7, 9, 25 and 1000</li> <li>• Find 1000 more or less than a given number</li> <li>• Count backwards through zero to include negative numbers</li> <li>• Recognise the place value of each digit in a four-digit number(thousands, hundreds, tens, and ones)</li> <li>• Order and compare numbers beyond 1000</li> <li>• Identify, represent and estimate numbers using different representations</li> <li>• Round any number to the nearest 10, 100 or 1000</li> <li>• Solve number and practical problems that involve all of the above and with increasingly large positive numbers</li> </ul>	<p><b>Measurement</b></p> <ul style="list-style-type: none"> <li>• Convert between different units of measure (e.g. kilometre to metre; hour to minute)</li> <li>• Measure and calculate the perimeter of a rectilinear figure(including squares) in centimetres and metres</li> <li>• Find the area of rectilinear shapes by counting</li> <li>• Estimate, compare and calculate different measures, including money in pounds and pence</li> <li>• Read, write and convert time between analogue and digital 12 and 24-hour clocks</li> <li>• Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</li> </ul>
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<ul style="list-style-type: none"> <li>● Read Roman numerals to 100 (I to C) and understand how, over time, the numeral system changed to include the concept of zero and place value.</li> </ul>	
<p><b>Number: Addition and Subtraction</b></p> <ul style="list-style-type: none"> <li>● Add and subtract numbers with up to 4 digits using the efficient written methods of columnar addition and subtraction where appropriate</li> <li>● Estimate and use inverse operations to check answers to a calculation</li> <li>● Solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why</li> </ul> <p><b>Number: Multiplication and Division</b></p> <ul style="list-style-type: none"> <li>● Recall multiplication and division facts for multiplication tables up to <math>12 \times 12</math></li> <li>● Use place value, known and derived facts to multiply and divide mentally, including: multiplying by 0 and 1; dividing by 1; multiplying together three numbers</li> <li>● Recognise and use factor pairs and commutativity in mental calculations</li> <li>● Multiply two-digit and three-digit numbers by a one-digit number using formal written layout</li> <li>● Solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder multiplication problems such as which n objects are connected to m objects</li> </ul>	<p><b>Geometry: Properties of shapes</b></p> <ul style="list-style-type: none"> <li>● To compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</li> <li>● To identify acute and obtuse angles and compare and order angles up to two right angles by size</li> <li>● To identify lines of symmetry in 2-D shapes presented in different orientations</li> <li>● To complete a simple symmetric figure with respect to a specific line of symmetry</li> </ul> <p><b>Geometry: Position, direction, motion</b></p> <ul style="list-style-type: none"> <li>● To describe positions on a 2-D grid as coordinates in the first quadrant } To describe movements between positions as translations of a given unit to the left/right and up/down } To plot specified points and draw sides to complete a given polygon</li> </ul>
<p><b>Number: Fractions (including decimals)</b></p> <ul style="list-style-type: none"> <li>● Recognise and show, using diagrams, families of common equivalent fractions</li> <li>● Count up and down in hundredths; recognise that hundredths arise when dividing an object by a hundred and dividing tenths by ten</li> <li>● 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</li> <li>● Add and subtract fractions with the same denominator</li> <li>● Recognise and write decimal equivalents of any number of tenths or hundredths</li> <li>● Recognise and write decimal equivalents to <math>\frac{1}{4}</math>; <math>\frac{1}{2}</math>; <math>\frac{3}{4}</math></li> <li>● 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 units, tenths and hundredths</li> </ul>	<p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>● To interpret and present discrete data using bar charts and continuous data using line graphs</li> <li>● To solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and simple line graphs.</li> </ul>

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| <ul style="list-style-type: none"><li>• Round decimals with one decimal place to the nearest whole number</li><li>• Compare numbers with the same number of decimal places up to two decimal places</li><li>• Solve simple measure and money problems involving fractions and decimals to two decimal places.</li></ul> |  |
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## Mathematics Progression of Skills – Year Five

### Number: Number and place value

- Read, write, order and compare numbers to at least 1 000 000 and determine the value of each digit
- Count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000
- Interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers through zero
- Round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000
- Solve number problems and practical problems that involve all of the above
- Read Roman numerals to 1000 (M) and recognise years written in Roman numerals

### Measurement

- Convert between different units of measure (e.g. kilometre and metre; metre and centimetre; centimetre and millimetre; kilogram and gram; litre and millilitre)
- Understand and use approximate equivalences between metric and common imperial units such as inches, pounds and pints
- Measure and calculate the perimeter of composite rectilinear shapes in centimetres and metres
- Calculate and compare the area of squares and rectangles (including squares), and including using standard units, square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) and estimate the area of irregular shapes
- Estimate volume (e.g. using 1 cm<sup>3</sup> blocks to build cubes and cuboids) and capacity (e.g. using water)
- Solve problems involving converting between units of time
- To solve problems involving addition and subtraction of units of measure (e.g. length, mass, volume, money) using decimal notation.
- Use all 4 operations to solve problems involving measure (e.g. Length, mass, volume, money) using decimal notation including scaling

### Number: Addition and Subtraction

- Add and subtract whole numbers with more than 4 digits, including using efficient written methods (columnar addition and subtraction)
- Add/subtract numbers mentally with increasingly large numbers
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- Identify multiples and factors, including finding all factor pairs of a number, and common factors of two numbers
- Know and use the vocabulary of prime numbers, prime factors and composite (non-prime) numbers
- Establish whether a number up to 100 is prime and recall prime numbers up to 19
- 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

### Geometry: Properties of shapes

- Identify 3-D shapes, including cubes and cuboids, from 2-D representations
- Know angles are measured in degrees; estimate and compare acute, obtuse and reflex angles
- Draw given angles, and measure them in degrees (o)
- To Identify:
  - multiples of 90o
  - angles at a point and one whole turn (total 360o)
  - angles at a point on a straight line and 1/2 a turn (total 180o)
  - other multiples of 90o
- Use the properties of rectangles to deduce related facts and find missing lengths and angles
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles
- 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



<ul style="list-style-type: none"> <li>• Multiply and divide numbers mentally drawing upon known facts</li> <li>• Divide numbers up to 4 digits by a one-digit number using the efficient written method of short division and interpret remainders appropriately for the context</li> <li>• Multiply and divide whole numbers and those involving decimals by 10, 100 and 1000</li> <li>• Recognise and use square numbers and cube numbers, and the notation for squared (2) and cubed (3)</li> <li>• Solve problems involving multiplication and division including using their knowledge of factors and multiples, squares and cubes</li> <li>• To solve problems involving addition, subtraction, multiplication and division and a combination of these, including understanding the meaning of the equals sign</li> <li>• To solve problems involving multiplication and division, including scaling by simple fractions and problems involving simple rates</li> </ul>	
<p><b>Number: Fractions (including decimals)</b></p> <ul style="list-style-type: none"> <li>• Compare and order fractions whose denominators are all multiples of the same number</li> <li>• Identify, name and write equivalent fractions of a given fraction, represented visually, including tenths and hundredths</li> <li>• Add and subtract fractions with the same denominator and denominators that are multiples of the same number</li> <li>• Recognise mixed numbers and improper fractions and convert from one form to the other and write mathematical statements <math>&gt;1</math> as a mixed number (e.g. <math>2/5 + 4/5 = 6/5 = 1 \frac{1}{5}</math>)</li> <li>• Multiply proper fractions and mixed numbers by whole numbers, supported by materials and diagrams</li> <li>• Read and write decimal numbers as fractions (e.g. <math>0.71 = 71/100</math>) Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents</li> <li>• Round decimals with two decimal places to the nearest whole number and to one decimal place</li> <li>• Read, write, order and compare numbers with up to three decimal places</li> <li>• Solve problems involving number up to three decimal places</li> </ul>	<p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>• Solve comparison, sum and difference problems using information presented in a line graph</li> <li>• Complete, read and interpret information in tables, including timetables</li> </ul>

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| <ul style="list-style-type: none"><li>● 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 hundred, and as a decimal fraction</li><li>● Solve problems which require knowing percentage and decimal equivalents of <math>\frac{1}{2}</math>, <math>\frac{1}{4}</math>, <math>\frac{1}{5}</math>, <math>\frac{2}{5}</math>, <math>\frac{4}{5}</math> and those with a denominator of a multiple of 10 or 25</li></ul> |  |
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## Mathematics Progression of Skills – Year Six

### Number: Number and place value

- Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- Round any whole number to a required degree of accuracy
- Use negative numbers in context, and calculate intervals across zero
- Solve number problems and practical problems that involve all of the above.

### Algebra

- Use simple formulae
- Generate and describe linear number sequences
- Express missing number problems algebraically
- Find pairs of numbers that satisfy number sentences involving two unknowns
- Enumerate possibilities of combinations of two variables

### Number: Addition, Subtraction, Multiplication and Division

- Multiply multi-digit numbers up to 4 digits by a two-digit whole number using the efficient written method of long multiplication
- 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
- Divide numbers up to 4 digits by a two-digit number using the formal written method of short division where appropriate, interpreting remainders according to the context
- Perform mental calculations, including with mixed operations and large numbers
- Identify common factors, common multiples and prime numbers } Use their knowledge of the order of operations to carry out calculations involving the four operations
- Solve addition and subtraction multi-step problems in contexts, deciding which operations and methods to use and why
- Solve problems involving addition, subtraction, multiplication and division
- Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.

### Measurement

- Solve problems involving the calculation and conversion of units of measure, using decimal notation to three decimal places where appropriate
- 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 three decimal places
- Convert between miles and kilometres
- Recognise that shapes with the same areas can have different perimeters and vice versa
- Recognise when it is necessary to use the formulae for area and volume of shapes
- Calculate the area of parallelograms and triangles
- Calculate, estimate and compare volume of cubes and cuboids using standard units, including centimetre cubed (cm<sup>3</sup>) and cubic metres (m<sup>3</sup>) and extending to other units, such as mm<sup>3</sup> and km<sup>3</sup>

### Number: Fractions (including decimals and percentages)

- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination
- Compare and order fractions, including fractions  $>1$
- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

### Geometry: Properties of shapes

- Draw 2D shapes using given dimensions and angles
- Recognise, describe and build simple 3-D shapes, including making net
- Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals, and regular polygons

<ul style="list-style-type: none"> <li>• Multiply simple pairs of proper fractions, writing the answer in its simplest form (e.g. <math>1/4 \times 1/2 = 1/8</math>)</li> <li>• Divide proper fractions by whole numbers (e.g. <math>1/3 \div 2 = 1/6</math>)</li> <li>• Associate a fraction with division to calculate decimal fraction equivalents (e.g. 0.375) for a simple fraction (e.g. <math>3/8</math>)</li> <li>• Identify the value of each digit to three decimal places and multiply and divide numbers by 10, 100 and 1000 where the answers are up to three decimal places</li> <li>• Multiply one-digit numbers with up to two decimal places by whole numbers</li> <li>• Use written division methods in cases where the answer has up to two decimal places</li> <li>• Solve problems which require answers to be rounded to specified degrees of accuracy.</li> <li>• Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts</li> </ul>	<ul style="list-style-type: none"> <li>• Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter is twice the radius</li> <li>• Recognise angles where they meet at a point, are on a straight line, and are vertically opposite.</li> </ul> <p><b>Geometry: Position, direction, motion</b></p> <ul style="list-style-type: none"> <li>• Describe positions on the full coordinate grid (all four quadrants)</li> <li>• Draw and translate simple shapes on the coordinate plane, and reflect them in the axes</li> </ul>
<p><b>Ratio and Proportion</b></p> <ul style="list-style-type: none"> <li>• Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts</li> <li>• Solve problems involving the calculation of percentages (e.g. of measures, and such as 15% of 360) and the use of percentages for comparison</li> <li>• To solve problems involving similar shapes where the scale factor is known or can be found</li> <li>• Solve problems involving unequal sharing and grouping using the knowledge of fractions and multiples</li> </ul>	<p><b>Statistics</b></p> <ul style="list-style-type: none"> <li>• Interpret and construct pie charts and line graphs and use these to solve problem</li> <li>• Calculate and interpret the mean as an average</li> </ul>