Year 3			
Number			
Number and Place Value	Addition and Subtraction	Multiplication and Division	Fractions
Pupils should be taught to: ▪ count from 0 in multiples of 4, 8, 50 and 100; find 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 up to 1000 in numerals and in words ▪ solve number problems and practical problems involving these ideas.	Pupils should be taught to: 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 formal written methods of columnar addition and subtraction estimate the answer to a calculation and use inverse operations to check answers ▪ solve problems, including missing number problems, using number facts, place value, and more complex addition and subtraction.	Pupils should be taught to: ▪ 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-digit numbers times one-digit numbers, using mental and progressing to formal written methods ▪ solve problems, including missing number problems, involving multiplication and division, including positive integer scaling problems and correspondence problems in which n objects are connected to m objects.	Pupils should be taught to: ▪ 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, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators ▪ recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators ▪ recognise and show, using diagrams, equivalent fractions with small denominators ▪ add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] ▪ compare and order unit fractions, and fractions with the same denominators ▪ solve problems that involve all of the above.

<table>
<tr><th colspan="4">Measurement</th></tr>
<tr><td colspan="4">Pupils should be taught to:
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 and hours; use vocabulary such as o’clock, 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].</td></tr>
<tr><td></td><td colspan="2">Geometry -</td><td>Statistics</td></tr>
<tr><td rowspan="2"></td><td>Properties of Shapes</td><td>Position and Direction</td><td rowspan="2">Pupils should be taught to:
interpret and present data using bar charts, pictograms and tables
solve one-step and two-step questions [for example, ‘How many more?’ and ‘How many fewer?’] using information presented in scaled bar charts and pictograms and tables.</td></tr>
<tr><td>Pupils should be taught to:
draw 2-D shapes and make 3-D shapes using modeling 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 and vertical lines and pairs of perpendicular and parallel lines.</td><td>N/A</td></tr>
</table>

Year 4			
Number			
Number and Place Value	Addition and Subtraction	Multiplication and Division	Fractions (including decimals)
Pupils should be taught to ▪ count in multiples of 6, 7, 9, 25 and 1000 ▪ find 1000 more or less than a given number ▪ count backwards through zero to include negative numbers ▪ recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) ▪ order and compare numbers beyond 1000 ▪ identify, represent and estimate numbers using different representations ▪ round any number to the nearest 10, 100 or 1000 ▪ solve number and practical problems that involve all of the above and with increasingly large positive numbers ▪ read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and	Pupils should be taught to: ▪ add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate ▪ estimate and use inverse operations to check answers to a calculation ▪ solve addition and subtraction two-step problems in contexts, deciding which operations and methods to use and why.	Pupils should be taught to: ▪ recall multiplication and division facts for multiplication tables up to 12 × 12 ▪ 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 ▪ recognise and use factor pairs and commutativity in mental calculations ▪ multiply two-digit and three-digit numbers by a one-digit number using formal written layout ▪ solve problems involving multiplying and adding, including using the distributive law to multiply two digit numbers by one digit, integer scaling problems and harder correspondence problems such as n objects are connected to m objects.	Pupils should be taught to: ▪ recognise and show, using diagrams, families of common equivalent fractions ▪ count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten. ▪ 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 ▪ add and subtract fractions with the same denominator ▪ recognise and write decimal equivalents of any number of tenths or hundredths ▪ recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ ▪ find the effect of dividing a one- or two-digit number by 10 and 100, identifying the value of the

<table>
<tr><td>place value.</td><td></td><td></td><td>digits in the answer as ones, tenths and hundredths
▪ round decimals with one decimal place to the nearest whole number
▪ compare numbers with the same number of decimal places up to two decimal places
▪ solve simple measure and money problems involving fractions and decimals to two decimal places.</td></tr>
<tr><td colspan="4">Measurement</td></tr>
<tr><td colspan="4">Pupils should be taught to:
▪ Convert between different units of measure [for example, kilometre to metre; hour to minute]
▪ measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
▪ find the area of rectilinear shapes by counting squares
▪ estimate, compare and calculate different measures, including money in pounds and pence
▪ read, write and convert time between analogue and digital 12- and 24-hour clocks
▪ solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days.</td></tr>
<tr><td></td><td colspan="2">Geometry -</td><td>Statistics</td></tr>
<tr><td></td><td>Properties of Shapes</td><td>Position and Direction</td><td rowspan="2">Pupils should be taught to:
▪ interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs.
▪ solve comparison, sum and</td></tr>
<tr><td></td><td>Pupils should be taught to:
compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes</td><td>Pupils should be taught to:
describe positions on a 2-D grid as coordinates in the first quadrant
describe movements between positions as translations of a</td></tr>
</table>

	identify acute and obtuse angles and compare and order angles up to two right angles by size identify lines of symmetry in 2-D shapes presented in different orientations complete a simple symmetric figure with respect to a specific line of symmetry.	given unit to the left/right and up/down plot specified points and draw sides to complete a given polygon.	difference problems using information presented in bar charts, pictograms, tables and other graphs.