Basssingbourn Community Primary School Curriculum: Mathematics
Fluency in manipulating numbers, reasoning and problem solving underpin all learning in mathematics.

Year	Number				Algebra
	Number and place value	Addition and subtraction	Multiplication and division	Fractions (including decimals)	
Y3	count from 0 in multiples of 4, 8, 50 and 100, read and write numbers up to 1000 in numerals and in words, recognise the place value of each digit in a three-digit number (hundreds, tens, ones), identify, represent and estimate numbers, solve number problems	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	recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables, solve problems, including missing number problems, involving multiplication and division	count up and down in tenths, recognise, find and write fractions of a discrete set of objects, compare and order unit fractions, add and subtract fractions with the same denominator within one whole (e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$), solve problems	solve problems, including **missing number** problems, using number facts, place value, and more complex addition and subtraction. (copied from Addition and Subtraction) solve problems, including **missing number** problems, involving multiplication and division, including integer scaling (copied from Multiplication and Division)
Y4	count from 0 in multiples of 4,8,50 and 100, recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones)umbers, identify, represent and estimate numbers, solve number and practical problems with increasingly large positive numbers	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	recall multiplication and division facts for multiplication tables up to 12 × 12, use place value, known and derived facts to multiply and divide mentally, recognise and use factor pairs, multiply two-digit and three-digit numbers by a one-digit number using formal written layout, solve problems	count up and down in hundredths, compare numbers with the same number of decimal places up to two decimal places, round decimals with one decimal place to the nearest whole number, round decimals with one decimal place to the nearest whole number, solve problems	Perimeter can be expressed algebraically as $2(a + b)$ where a and b are the dimensions in the same unit. (Copied from NSG measurement)

		Measurement	Geometry		Statistics
		Measure	Properties of shapes	Position and direction	Data
Y3		compare durations of events, for example to calculate the time taken by particular events or tasks, tell and write the time from an analogue clock 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 (appears also in Telling the Time), measure, compare, add and subtract: **lengths** (m/cm/mm); **mass** (kg/g); **volume/capacity** (l/ml)**,** measure the **perimeter** of simple 2-D shapes, know the number of seconds in a minute and the number of days in each month, year and leap year	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 and vertical lines and pairs of perpendicular and parallel lines		interpret and present data using bar charts, pictograms and tables, solve one-step and two-step questions [e.g. 'How many more?' and 'How many fewer?'] using information presented in scaled bar charts and pictograms and tables
Y4		estimate, compare and calculate different measures, measure and calculate the **perimeter** of a rectilinear figure (including squares) in centimetres and metres, find the area of rectilinear shapes by counting squares, 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, convert between different units of measure (e.g. kilometre to metre; hour to minute), solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days	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, compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes, identify acute and obtuse angles and compare and order angles up to two right angles by size	describe positions on a 2-D grid as coordinates in the first quadrant, describe movements between positions as translations of a given unit to the left/right and up/down, plot specified points and draw sides to complete a given polygon	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 bar charts, pictograms, tables and other graphs,