## Maths Overview – Cycle A & B

	Autumn Term		Spring Term		Summer To	Summer Term	
Area of Maths	Number & Place Value Addition & Subtraction	Addition & Subtraction Multiplication & Division	Fractions	Measurement (including time)	Geometry	Statistics	
Knowle dge	Count from 0 in multiples of 4, 8, 50 and 100 Find 10/100 more or less than a given number Identify, represent and estimate numbers using different representations Read and write numbers up to 1000 in numerals and words Recognise the place value of each digit in a three-digit number (hundreds, tens, ones) Compare and order numbers up to 1000 Solve number problems and practical problems involving the above Add and subtract numbers mentally, including: -a 3-digit number and ones -a 3-digit number and hundreds Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction	Solve problems including missing number problems, using facts, place value and more complex addition and subtraction Estimate the answer to a calculation and use the inverse operations to check answers Recall and use multiplication and division facts for the 3, 4- and 8-times tables Write and calculate mathematical statements for multiplication and division using the multiplication tables that they know, including for 2-digit numbers times 1-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	<ul> <li>Count up and down in tenths; recognise that tenths arise from dividing an object into 10 equal parts and in dividing 1-digit numbers or quantities by 10</li> <li>Recognise, find and write fractions of a discrete set of objects: unit fractions and nonunit fractions with small denominators</li> <li>Recognise and use fractions as numbers: unit fractions and nonunit fractions with small denominators</li> <li>Recognise and show, using diagrams, equivalent fractions with small denominators</li> <li>Compare and order unit fractions, and fractions with the same denominators</li> <li>Add and subtract fractions with the same denominator within one whole [for example <sup>5</sup>/<sub>7</sub> + <sup>1</sup>/<sub>7</sub> = <sup>6</sup>/<sub>7</sub>]</li> <li>Solve problems that involve all of the above</li> </ul>	Measure, compare, add and subtract lengths (m/cm/mm), mass (kg/g), volume and capacity (l/ml)     Add and subtract amounts of money to give change, using both £ and p in practical contexts     Tell and write the time from all analogue clock, including using Roman numerals from I to XII, and 12-hour and 24-hour clock     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 am/pm, morning, afternoon, noon, midnight     Know the number of seconds if a minute and number of days if each month, year and leap years.     Measure the perimeter of simple 2D shapes	that two right angles make a half turn, three make three-quarters 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  In in	Interpret and present data using bar chart, pictograms and tables Solve one-step and two-step questions [E.g. 'How many more?] using information presented in scaled bar charts and pictograms and tables	
Key Vocabul ary – same as KS!, plus:	hundreds, three-digit, ten more, ten less, one hundred more, one hundred less, numeral, column, column addition/subtraction, inverse, calculation, missing number, operation formal written method	column, column addition/subtraction, inverse, calculation, missing number, operation formal written method, estimate, inverse, missing number, problem	tenths, unit fractions, non-unit fractions, numerator, denominator, compare, order, add, subtract	duration, nearest minute, record, a.m., p.m., noon, midnight, kilometre, millimetre, perimeter, analogue, digital, roman, numeral 12-hour, 24-hour, leap year	angle, turn, right angle, quarter of a turn, half-turn, three-quarter turn, complete turn, horizontal lines, vertical lines, parallel, perpendicular	present, graph, statistics, bar chart, tables, solve, one-step, two-step, x-axis, y-axis, interpret	
	Fluency - become fluent in the fundame mathematics, through frequent practice increasingly complex problems, so that have conceptual understanding and are recall and apply their knowledge rapidly accurately to problems.  Understanding & Being accurate and E	e with pupils able to v and ling and ling and ling able to ling and ling and ling able to ling and ling and ling able to ling and ling able to ling and ling able to ling able	e of enquiry, conjecturing relationships and neralisations, and developing an argument, tification or proof using mathematical iguage.  ploring & Proving		lem Solving - solve problems by applying nematics to a variety of routine and nonne problems with increasing sophistication, ding breaking down problems into a series mpler steps and persevering in seeking ions.  ying & Persevering		