

	Year 1 Fundamentals of Mathematics				Year 2 Fundamentals of Mathematics				Year 3 Fundamentals of Mathematics			
Number Place value + - X ÷ FDP RP Algebra	<div><div><u>Place value</u> *Reads and writes numbers to 100 in numerals (and 1-20 in words) * Identifies one more/less than a given number within 100</div><div><u>± -</u> * + and—1 and 2 digit numbers using 0-20 (including missing no. problems) * Represents and uses number bonds and related subtraction facts within 20</div><div><u>X ÷</u> * Solves multiplication and divisions using concrete, pictorial and arrays * Halves and doubles numbers to 20.</div><div><u>FDP</u> *Recognises, finds and names a half of shapes and quantities * Recognises, finds and names a quarter of shapes and quantities</div><div><u>Counting (forwards and backwards)</u> * Counts to and across 100, forwards and backwards from any number *Counts in multiples of 2, 5 and 10.</div></div>				<div><div><u>Place value</u> * Recognises the place value of each digit in a 2 digit number. *Orders numbers 0-100 and compares using > < and = (in numerals & words).</div><div><u>± -</u> * + - two 2 digit numbers and 3 one digit numbers (checking with inverse).</div><div><u>X ÷</u> *Recalls X and related ÷ facts for 2, 5 and 10s. * Solves x ÷ problems in context using materials, arrays, rep'd + & x ÷ facts.</div><div><u>FDP</u> * Identifies 1/2, 1/3, 1/4, 2/4 and 3/4 of length, shape or quantity. * Recognises the equivalence of 2/4 and 1/2.</div><div><u>Counting (forwards and backwards)</u> * Counts in steps of 2, 3 and 5 from zero and count in 10s from any number. * Identifies odd and even numbers.</div></div>				<div><div><u>Place value</u> * Recognises the place value of each digit in a three digit number. * Reads, writes, compares & orders numbers to 1000 (numerals & words)</div><div><u>± -</u> * + - 1s, 10s, 100s mentally to 3digit numbers. * + - numbers up to 3 digits with regrouping using the column method.</div><div><u>X ÷</u> * Identifies factor pairs using 2, 3, 4, 5, 8 and 10 times tables. (deriving ÷ facts) * X 2digit x 1 digit using short method for division and multiplication.</div><div><u>FDP</u> * + & - both unit and non unit fractions of amounts within a whole. * Counts in 10ths and recognises that 10ths arise by ÷ 1 digit numbers by 10.</div><div><u>Counting (forwards and backwards)</u> * Counts from 0 in multiples of 4, 8, 50 and 100. * + - 10, 100 to any given number.</div></div>			
% achieved	* = 5% Spring: Summer: Target 50%				* = 5% Spring: Summer: Target 50%				* = 5% Spring: Summer: Target 50%			
Shape/space/measure Measurement Time/money Shape Position/direction Statistics	<div><div><u>Measurement</u> * Measures & compares, and orders: length, mass, capacity in standard metric units.</div><div><u>Money</u> * Recognises the value of all coins and notes.</div><div><u>Geometry– shape</u> * Recognises and names common 2D and 3D shapes</div><div><u>Position & Direction</u> * Describes position, direction and movement (making turns) using prepositional language.</div><div><u>Time</u> * Tells the time to the nearest half hour and recognises and uses language relating to days & dates.</div></div>				<div><div><u>Measurement</u> * Uses all measuring apparatus accurately to estimate and measure length, mass, temperature and capacity.</div><div><u>Money/Time</u> *Combines £s and p to make different amounts and tells the time to the nearest 5 minutes (knowing number of minutes in hour and hours in day).</div><div><u>Geometry– shape</u> * Identifies and describes properties of 2D and 3D shapes.</div><div><u>Position direction</u> * Understands positions on a compass and uses this to give directions (including rotation as a turns).</div><div><u>Statistics</u> * Asks and answers questions about data within a graph and makes comparisons and real life links.</div></div>				<div><div><u>Measurement</u> * Measures and compares lengths (m,cm,mm), mass (kg,g) and volume/ capacity (l,ml) and calculates perimeter.</div><div><u>Money/Time</u> * Adds and subtract amounts of money to give change and reads time to the nearest minute.</div><div><u>Geometry– shape</u> * Identifies horizontal and vertical lines and pairs of perpendicular and parallel lines.</div><div><u>Position direction</u> * Identifies acute, obtuse and right angles and links turns to right angles i.e. 1/2 turn is 2 right angle turns.</div><div><u>Statistics</u> * Interprets and presents data using scaled bar charts, pictograms and tables.</div></div>			
% achieved	* = 5% Spring: Summer: Target 25%				* = 5% Spring: Summer: Target 25%				* = 5% Spring: Summer: Target 25%			
Being a Mathematician (see exemplars for specific year group)	<div><div><u>Reasoning</u> *Describes, convinces & justifies decisions following lines of enquiry & generalising.</div><div><u>Problem solving</u> *Works systematically & spots patterns by visualising & making conjectures.</div><div><u>Fluency</u> *Works efficiently and accurately.</div><div><u>Communication</u> *Makes their mathematical thinking clear to themselves and others.</div><div><u>Reflection</u> *Uses own and suggested strategies to make corrections and improvements.</div></div>				<div><div><u>Reasoning</u> *Describes, convinces & justifies decisions following lines of enquiry & generalising.</div><div><u>Problem solving</u> *Works systematically & spots patterns by visualising & making conjectures.</div><div><u>Fluency</u> *Works efficiently and accurately.</div><div><u>Communication</u> *Makes their mathematical thinking clear to themselves and others.</div><div><u>Reflection</u> *Uses own and suggested strategies to make corrections and improvements.</div></div>				<div><div><u>Reasoning</u> *Describes, convinces & justifies decisions following lines of enquiry & generalising.</div><div><u>Problem solving</u> *Works systematically & spots patterns by visualising & making conjectures.</div><div><u>Fluency</u> *Works efficiently and accurately.</div><div><u>Communication</u> *Makes their mathematical thinking clear to themselves and others.</div><div><u>Reflection</u> *Uses own and suggested strategies to make corrections and improvements.</div></div>			
% achieved	* = 5% Spring: Summer: Target 25%				* = 5% Spring: Summer: Target 25%				* = 5% Spring: Summer: Target 25%			
Total % achieved	* = 5% Spring Total: % Spring target: 60% Summer Total: % Target: 100%				* = 5% Spring Total: % Spring target: 60% Summer Total: % Target: 100%				* = 5% Spring Total: % Spring target: 60% Summer Total: % Target: 100%			

	Year 4 Fundamentals of Mathematics		Year 5 Fundamentals of Mathematics		Year 6 Fundamentals of Mathematics	
<div><div>Number</div><div>Place value</div><div>+ - X ÷</div><div>Fractions/ Decimals/ Percentages</div><div>Algebra/Ratio/ Proportion</div></div>	<div><div>Place value</div><div>*Reads, writes, orders, compares up to 10,000. (knowing value of each digit)</div><div>* Rounds to nearest 10, 100, 1000 & decimals (1dp) to nearest whole.</div><div>X ÷</div><div>*Recalls X ÷ facts to 12x12 (including X ÷ by 1 & 0 and X 3 numbers together).</div><div>*Uses short X ÷ methods.</div><div>FDP</div><div>* Recognises and shows common equivalent fractions. (inc common decimal equivalences).</div><div>* + - fractions with the same denominator.</div><div>Counting (forwards and backwards)</div><div>*Counts in 6, 7, 9, 25 and 1000 forwards & backwards (including negative numbers).</div><div>* Counts in 100ths recognising hundredths arise when dividing by 100.</div></div>	Spring:Summer: Target 50%	<div><div>Place value</div><div>*Reads, writes, orders, compares up to 1,000,000 (knowing value of each digit). and reads Roman numerals to 1000 (M) (recognising years in Roman numerals.)</div><div>+ -</div><div>* + - whole & decimal numbers more than 4digits (including using column method).</div><div>X ÷</div><div>*Identifies factors & multiples finding all factor pairs & common factors.</div><div>*Solves x÷ problems using factors, multiples, scaling, squares & cubes.</div><div>*Knows and uses prime numbers, prime factors and composite numbers. (with rapid recall of primes to 19)</div><div>FDP</div><div>*Reads, writes & compares decimal numbers, fractions & %s.</div><div>* Knows the % & decimal equivalent of: 1/2, 1/4, 1/5, 2/5, 4/5 & fractions with denominator of 10 or 25.</div><div>* +, - proper fractions with denominators that are multiples and X mixed numbers by whole numbers.</div><div>Counting (forwards and backwards)</div><div>* Counts in powers of 10 up to 1,000,000.</div><div>* Counts forwards & backwards with positive and negative whole numbers including through zero.</div></div>	Spring:Summer: Target 50%	<div><div>Place value</div><div>* Rounds any whole number to a required degree of accuracy.</div><div>* Uses negative numbers in context & calculates intervals across 0 (+ and -).</div><div>FDP</div><div>* +-X÷ fractions with diff. denominators and mixed numbers (simplest form) & recognises equivalent fractions.</div><div>* X ÷ by 10,100 & 1000 up to 3 d places.</div><div>* Calculates decimal fraction equivalents for a simple fraction.</div><div>Algebra & Ratio/Proportion</div><div>* Uses simple formulae and generates and describes linear number sequences.</div><div>* Compares quantities using ratios.</div></div>	Spring:Summer: Target 50%
% achieved	*= 5%	Spring:Summer: Target 50%	*= 5%	Spring:Summer: Target 50%	*= 5%	Spring:Summer: Target 50%
<div><div>Shape/space/ measure</div><div>Measure</div><div>Time/Money</div><div>Shape</div><div>Position/Direction</div><div>Statistics</div></div>	<div><div>Measurement</div><div>*Converts between different units of measure e.g. mm to cm to m to km, ml to l, g to kg, hours to mins.</div><div>Time</div><div>* Reads, writes and converts time between analogue and digital 12 and 24 hr clocks.</div><div>Geometry- Shape</div><div>*Compares and classifies shapes based on their properties, including identifying lines of symmetry and comparing angles.</div><div>Position & Direction</div><div>* Describes movements between positions as translations and plots polygons using coordinates given.</div><div>Statistics</div><div>* Solves comparison, sum and difference problems using info. presented in bar charts, pictograms, tables and other graphs.</div></div>	Spring:Summer: Target 25%	<div><div>Measurement</div><div>* Measure and calculate the perimeter and area of composite rectilinear shapes understanding cm² and m² as cm/m squared.</div><div>Time</div><div>* Solves problems involving converting units of time, crossing from minutes to hours. Involving days, weeks, months, years.</div><div>Geometry– shape</div><div>* Draws given angles and measures them in degrees and distinguishes between regular and irregular polygons.</div><div>Position & Direction</div><div>* Identifies, describes and represents the position of a shape following a reflection or translation.</div><div>Statistics</div><div>* Completes, reads and interprets information in tables, including timetables.</div></div>	Spring:Summer: Target 25%	<div><div>Measurement</div><div>* Uses formulae for area and volume of shape and calculates volumes of cubes and cuboids (cm³ & m³).</div><div>Time/money</div><div>* Solves multiple step word problems using all four operations with both time and money crossing hours and pounds.</div><div>Geometry– Shape</div><div>* Finds unknown angles in any triangles , quadrilaterals and regular polygons and illustrates and names parts of a circle.</div><div>Position & Direction</div><div>* Draws and translates simple shapes on the coordinate plane and reflects them in the axes.</div><div>Statistics</div><div>* Calculates and interprets the mean as an average.</div></div>	Spring:Summer: Target 25%
% achieved	*= 5%	Spring:Summer: Target 25%	*= 5%	Spring:Summer: Target 25%	*= 5%	Spring:Summer: Target 25%
<div><div>Being a mathematician</div></div>	<div><div>Reasoning</div><div>*Describes, convinces & justifies decisions following lines of enquiry & generalising.</div><div>Problem solving</div><div>*Works systematically & spot patterns by visualising & making conjectures.</div><div>Fluency</div><div>*Works efficiently and accurately.</div><div>Communication</div><div>*Makes their mathematical thinking clear to themselves and others.</div><div>Reflection</div><div>* Uses own and suggested strategies to make corrections and improvements.</div></div>	Spring:Summer: Target 25%	<div><div>Reasoning</div><div>*Describes, convinces & justifies decisions following lines of enquiry & generalising.</div><div>Problem solving</div><div>*Works systematically & spot patterns by visualising & making conjectures.</div><div>Fluency</div><div>*Works efficiently and accurately.</div><div>Communication</div><div>*Makes their mathematical thinking clear to themselves and others.</div><div>Reflection</div><div>* Uses own and suggested strategies to make corrections and improvements.</div></div>	Spring:Summer: Target 25%	<div><div>Reasoning</div><div>*Describes, convinces & justifies decisions following lines of enquiry & generalising.</div><div>Problem solving</div><div>*Works systematically & spot patterns by visualising & making conjectures.</div><div>Fluency</div><div>*Works efficiently and accurately.</div><div>Communication</div><div>*Makes their mathematical thinking clear to themselves and others.</div><div>Reflection</div><div>* Uses own and suggested strategies to make corrections and improvements.</div></div>	Spring:Summer: Target 25%
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Total % achieved	*= 5%	Spring Total: % Spring target: 60%	Summer Total: % Target: 100%	*= 5%	Spring Total: % Spring target: 60%	Summer Total: % Target: 100%