

Miss Haagen

Term	Topic	Year 2	Year 3	Year 4
Autumn Term	Number: Counting	<ul style="list-style-type: none"> count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backwards 	<ul style="list-style-type: none"> count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number. 	<ul style="list-style-type: none"> 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
	Number: Place Value	<ul style="list-style-type: none"> recognise the place value of each digit in a two-digit number compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs 	<ul style="list-style-type: none"> recognise the place value of each digit in a three-digit number compare and order numbers up to 1000 	<ul style="list-style-type: none"> recognise the place value of each digit in a four-digit number order and compare numbers beyond 1000 round any number to the nearest 10, 100 or 1000
	Number: Representing Numbers	<ul style="list-style-type: none"> identify, represent and estimate numbers using different representations, including the number line read and write numbers to at least 100 in numerals and in word 	<ul style="list-style-type: none"> identify, represent and estimate numbers using different representations read and write numbers up to 1000 in numerals and in words 	<ul style="list-style-type: none"> identify, represent and estimate numbers using different representations read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value
	Number: Addition and subtraction facts	<ul style="list-style-type: none"> use place value and number facts to solve problems recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 		
	Number: Mental addition and subtraction	<ul style="list-style-type: none"> add and subtract numbers using concrete objects, pictorial representations, and mentally, including: $TU+U$, $TU+T$, $TU+TU$ and $U+U+U$ show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot 	<ul style="list-style-type: none"> add and subtract numbers mentally, including: $HTU+U$, $HTU+T$ and $HTU+H$ 	
	Number: Written addition and subtraction		<ul style="list-style-type: none"> add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction 	<ul style="list-style-type: none"> add and subtract numbers with up to 4 digits using the formal written methods of columnar addition and subtraction where appropriate

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Spring Term	Number: Multiplication and division facts	<ul style="list-style-type: none"> recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even number 	<ul style="list-style-type: none"> recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables 	<ul style="list-style-type: none"> recall multiplication and division facts for multiplication tables up to 12×12
	Number: Mental multiplication and division	<ul style="list-style-type: none"> calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (\times), division (\div) and equals (=) signs show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot 	<ul style="list-style-type: none"> 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 methods 	<ul style="list-style-type: none"> 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
	Number: Written multiplication and division	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> progress to formal written methods calculations as above 	<ul style="list-style-type: none"> multiply two-digit and three-digit numbers by a one-digit number using formal written layout
	Number: Problems using multiplication and division	<ul style="list-style-type: none"> solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts 	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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
	Number: Problems using addition and subtraction	<ul style="list-style-type: none"> solve problems with addition and subtraction, using concrete, pictorial and abstract representations recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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

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Summer Term	Fractions: Recognising fractions	<ul style="list-style-type: none"> recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> count up and down in hundredths; recognise that hundredths arise when dividing an object by one hundred and dividing tenths by ten
	Fractions: Comparing fractions	<ul style="list-style-type: none"> recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$. 	<ul style="list-style-type: none"> compare and order unit fractions, and fractions with the same denominators recognise and show, using diagrams, equivalent fractions with small denominators 	<ul style="list-style-type: none"> recognise and show, using diagrams, families of common equivalent fractions
	Fractions: Finding fractions of quantities	<ul style="list-style-type: none"> write simple fractions for example, $\frac{1}{2}$ of 6 = 3 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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
	Fractions: Addition and subtraction of fractions		<ul style="list-style-type: none"> add and subtract fractions with the same denominator within one whole [for example, $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$] 	<ul style="list-style-type: none"> add and subtract fractions with the same denominator
	Fractions: Fraction problems		<ul style="list-style-type: none"> solve problems using all fraction knowledge 	
	Decimals: Decimals as fractional amounts			<ul style="list-style-type: none"> recognise and write decimal equivalents of any number of tenths or hundredths recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ 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 ones, tenths and hundredths
	Decimals: Ordering decimals			<ul style="list-style-type: none"> 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

Mrs Matthews

Term	Topic	Year 2	Year 3	Year 4
Autumn Term	Measures: Exploring money	<ul style="list-style-type: none"> recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value find different combinations of coins that equal the same amounts of money 		
	Measures: Calculating using money	<ul style="list-style-type: none"> solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change 	<ul style="list-style-type: none"> add and subtract amounts of money to give change, using both £ and p in practical context 	<ul style="list-style-type: none"> convert between different units of measure estimate, compare and calculate different measures, including money in pounds and pence
	Statistics: Presenting and interpreting data	<ul style="list-style-type: none"> interpret and construct simple pictograms, tally charts, block diagrams and simple tables 	<ul style="list-style-type: none"> interpret and present data using bar charts, pictograms and tables 	<ul style="list-style-type: none"> interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs
	Statistics: Extracting information from data	<ul style="list-style-type: none"> ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity ask and answer questions about totalling and comparing categorical data 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs
	Measures: Length	<ul style="list-style-type: none"> choose and use appropriate standard units to estimate and measure length/height (m/cm) to the nearest appropriate unit, using rulers compare and order lengths and record the results using >, < and = 	<ul style="list-style-type: none"> measure, compare, add and subtract: lengths (m/cm/mm) 	<ul style="list-style-type: none"> convert between different units of measure estimate, compare and calculate different measures
	Measures: Perimeter		<ul style="list-style-type: none"> measure the perimeter of simple 2-D shapes 	<ul style="list-style-type: none"> measure and calculate the perimeter of a rectilinear figure (including squares) in centimetres and metres
	Measures: Area			<ul style="list-style-type: none"> find the area of rectilinear shapes by counting squares

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Spring Term	Measures: Telling the time	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> read, write and convert time between analogue and digital 12- and 24-hour clocks
	Measures: Comparing, converting and ordering units of time	<ul style="list-style-type: none"> know the number of minutes in an hour and the number of hours in a day compare and sequence intervals of time 	<ul style="list-style-type: none"> 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 	<ul style="list-style-type: none"> Convert between different units of measure (e.g. Hours to minutes) solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to day
	Geometry: Shape vocabulary	<ul style="list-style-type: none"> (vertices, edges, faces, symmetry) 	<ul style="list-style-type: none"> identify horizontal and vertical lines and pairs of perpendicular and parallel line 	
	Geometry: Properties of 2d shape	<ul style="list-style-type: none"> identify and describe the properties of 2-D shapes, including the number of sides compare and sort common 2-D shapes and everyday objects 	<ul style="list-style-type: none"> draw 2-D shapes 	<ul style="list-style-type: none"> compare and classify geometric shapes, including quadrilaterals and triangles, based on properties and sizes
	Geometry: Symmetry	<ul style="list-style-type: none"> identify line symmetry in a vertical line 		<ul style="list-style-type: none"> 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
	Geometry: Properties of 3d shape	<ul style="list-style-type: none"> identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces identify 2-D shapes on the surface of 3-D shapes. compare and sort common 3-D shapes and everyday objects 	<ul style="list-style-type: none"> make 3-D shapes using modelling materials recognise 3-D shapes in different orientations and describe them 	

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Summer Term	Measures: Mass	<ul style="list-style-type: none"> choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit, using scales compare and order mass (kg/g) and record the results using $>$, $<$ and $=$ 	<ul style="list-style-type: none"> measure, compare, add and subtract: mass (kg/g) 	<ul style="list-style-type: none"> convert between different units of measure estimate, compare and calculate different measures
	Measures: Capacity	<ul style="list-style-type: none"> choose and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit, using measuring vessels compare and order volume/capacity (l/ml) and record the results using $>$, $<$ and $=$ 	<ul style="list-style-type: none"> measure, compare, add and subtract: volume/capacity (l/ml) 	<ul style="list-style-type: none"> convert between different units of measure estimate, compare and calculate different measures
	Measures: Fraction measure problems			<ul style="list-style-type: none"> solve simple measure and money problems involving fractions and decimals to two decimal places
	Geometry: Angles	<ul style="list-style-type: none"> 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 $\frac{3}{4}$ turns 	<ul style="list-style-type: none"> 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 or less than right angle 	<ul style="list-style-type: none"> identify acute and obtuse angles compare and order angles up to two right angles by size
	Geometry: Position and direction	<ul style="list-style-type: none"> order and arrange combinations of mathematical objects in patterns and sequences. 		<ul style="list-style-type: none"> 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