## End of Term Expectations - Mathematics

| $\begin{gathered} \text { Year Group } \\ 1 \\ \hline \end{gathered}$ | Autumn | Spring | Summer |
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|  | Place Value - Week 1-5 <br> - Count to 10 forwards and backwards beginning with 0 or 1 or from any given number <br> - Count, read and write numerals to 10 in numerals and words <br> - Given a number, identify one more or one less <br> - Identify and represent numbers using objects and pictorial representation including a number line and use the language of equal to, more than, less than, (fewer) most, least | Place Value within 20 - Week 1-3 <br> - Count to 20 forwards and backwards from any given number <br> - Count, read and write numbers to 20 in numerals and words <br> - Given a number identify one more or one less <br> - Identify and represent numbers using objects and pictorial representation including a number line and use the language of equal to, more than, less than, (fewer) most, least | Multiplication and division - Week 1-3 <br> - Count in multiples of 2 's, 5's and 10 's <br> - Solve one step problems involving multiplication and division by calculating the answer using concrete objects, pictorial representations and arrays |
|  | Addition and subtraction - Week 6-10 <br> - Represent and use number bonds and related subtraction facts within 10 <br> - Read, write and interpret mathematical statements involving addition, subtraction and equal signs <br> - Add and subtract one-digit numbers to 10 including 0 <br> - Solve one step problems that involve addition and subtraction using concrete objects and pictorial representation and missing number problems | Addition and subtractions - Week 4-6 <br> - Represent and use number bonds and related subtraction facts within 20. <br> - Read, write and interpret mathematical statements involving addition, subtraction and equal signs <br> - Add and subtract one-digit numbers to 20 including 0 Solve one step problems that involve addition and subtraction using concrete objects and pictorial $7=$ ? - 9 | Fractions - Week 4-5 <br> - Recognise, find and name a half as one of two equal parts of an object, shape or quantity <br> - Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity <br> - Compare, describe and solve practical problems for lengths and heights, e.g. long/short, longer/shorter, tall/short, double/half <br> - Compare, describe and solve practical problems for mass and weights, e.g. heavy/light, heavier than/lighter than, Capacity and volume e.g. full/empty, more than, less than, half, half full, quarter |
|  | Geometry: Shape - Week 11 <br> - Recognise and name common 2-D shapes e.g. square, circle and triangles <br> - Recognise and name common 3-D shapes e.g. Cuboids, cubes, pyramids and spheres | Place Value within 50 - Week 7-8 <br> - Count to 50 forwards and backwards beginning with 0 or 1 or from any given number <br> - Count, read and write numerals to 50 in numerals and words <br> - Given a number, identify one more or one less <br> - Identify and represent numbers using objects and pictorial representation including a number line and use the language of equal to, more than, less than, (fewer) most, least <br> - Count in multiples of 2 's, 5's and 10 's | Geometry: Position and direction- Week 6 <br> - Describe position, direction and movement including whole, half, quarter and three-quarter turns |
|  | Consolidation - Week 12 | Measurement: Length and Height - Week 9-10 <br> - Measure and begin to record lengths and heights <br> - Compare, describe and solve practical problems for lengths and heights e.g. long/short, longer/shorter, tall/short, double/half | Place Value to 100 - Week 7-8 <br> - Count to 100 forwards and backwards beginning with 0 or 1 or from any given number <br> - Count, read and write numerals to 100 in numerals and words <br> - Given a number, identify one more or one less |


|  |  |  | - Identify and represent numbers using objects and pictorial representation including a number line and use the language of equal to, more than, less than, (fewer) most, least |
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|  |  | Measurement: Weight and Volume- Week 11-12 <br> - Measure and begin to record mass/weight, capacity and volume <br> Compare, describe and solve practical problems for mass/weight e.g. heavy/light, heavier than/lighter than, capacity and volume e.g. full/empty, more than/less than, half, half full, quarter | Measurement: Money - Week 9 <br> - Recognise and know the value of different denominations of coins and notes |
|  |  |  | Measurement: Time Week 10-12 <br> - $\quad$ Sequence events in chronological order using language eg before, after, next, first, today, yesterday, tomorrow, morning, afternoon and evening <br> - Recognise and use language relating to dates including days of the week, weeks, months and years <br> - Tell the time to the hour and half past the hour and draw hands on a clock face to show these times <br> - Compare, describe and solve practical problems for time e.g. quicker, slower, earlier, later <br> - Measure and begin to record time e.g. hours, minutes seconds |


| Year Group | Autumn | Spring | Summer |
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|  | Place Value - Week 1-4 <br> - Read and write numbers to at least 100 in numerals and words. <br> - Recognise the place value of each digit in a 2-digit number (tens \& ones) <br> - Identify, represent and estimate numbers using different representations including the number line. <br> - Compare and order numbers from $0-100$; use $<>$ and $=$ signs. <br> - Use place value and number facts to solve problems <br> - Count in steps of 2,3,5 and tens from any number forwards and backwards | Measurement: Money - Week 1-2 <br> - Recognise and use symbols for pounds and pence ( $£ / p$ ) <br> - Combine amounts to make a particular value <br> - Find different combinations of coins that make the same amount of money <br> - Solve simple problems practically, including addition and subtraction and giving change. | Fractions - Week 1-3 <br> - Recognise, find, name and write fractions of a length, shape, set of objects or quantity $\begin{array}{llllll}\perp & \perp & \perp & < \\ 2 & 3 & 4 & 4\end{array}$ and $\begin{aligned} & 3\end{aligned}$ <br> - Write simple fractions for example $1 / 2$ of $6=3$ <br> кесоgnıse the equivaıence or $\begin{aligned} & 2 \text { ana } \\ & 4 \quad<\end{aligned}$ |
|  | Addition \& Subtraction - Week 5-9 <br> - Recall and use addition \& subtraction facts to 20 fluently. Derive and use related facts up to 100. <br> - Add \& subtract numbers using concrete objects, pictorial representations and mentally, including two digit numbers and ones, two digit numbers and tens, two digit number and two digit number and adding 3 one digit numbers. <br> - Show that the addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot. <br> - Solve problems with addition and subtraction: using concrete objects and pictorial representations. Include problems involving numbers, quantities and measures. <br> - Recognise and use the inverse relationship between addition and subtraction. Use this to check calculations and solve missing number problems | Multiplication \& Division - Week 3-7 <br> [0 Recall and use multiplication facts for 2,5 and 10 times tables including recognising odd and even numbers <br> [] Calculate mathematical statements for 2,5 and 10 's using multiplication and division using $x, \div$ and $=$ <br> T Solve problems using multiplication and division using, materials, arrays, repeated addition and mental methods. <br> [0 Show that multiplication of two numbers can be done in any order (commutative) but division cannot. | SATS WEEK <br> Problem Solving and Efficient Methods - Week 4-5 <br> - Reasoning and problem solving in all aspects of previous learning: Multiplication \& Division, Statistics, Fractions, Properties of Shape, Length \& Height. |
|  | Geometry: Properties of shape - Week 10-12 <br> - Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line <br> - Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces. <br> - Identify 2D shapes on the surface of 3D shapes e.g a circle on a cylinder and a triangle on a pyramid. <br> Compare and sort common 2D and 3D shapes and everyday objects. | Measurement: Length \& Weight - Week 8-9 <br> - Choose and use appropriate standards of units to estimate and measure length/height ( $\mathrm{m} / \mathrm{cm}$ ) in any direction; mass ( $\mathrm{kg} / \mathrm{g}$ ), temperature $\left({ }^{( } \mathrm{C}\right)$, capacity $(\mathrm{l} / \mathrm{ml})$. <br> - Use rulers, scales thermometers and measuring vessels to the nearest unit. <br> Compare and order lengths, mass, volume/capacity and record the results using < > and = | Measurement: Time - Week 4-6 <br> - Tell and write the time to five minutes, including quarter past/to the hour. <br> - Draw hands on a clock to show these times <br> - Know the number of minutes in an hour and the number of hours in a day <br> Compare and sequence intervals of time |
|  |  | Measurement: Mass, Capacity \& Temperature - Week 1012 <br> - Choose and use appropriate standards of units to estimate and measure length/height ( $\mathrm{m} / \mathrm{cm}$ ) in any direction; mass ( $\mathrm{kg} / \mathrm{g}$ ), temperature $\left({ }^{( } \mathrm{C}\right)$, capacity $(\mathrm{l} / \mathrm{ml})$. <br> - Use rulers, scales thermometers and measuring vessels to the nearest unit. | Statistics - Week 7-8 <br> - Interpret and construct simple pictograms, tally charts, block diagrams and simple tables <br> - Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity <br> Ask and answer questions about totalling and comparing categorical data. |


|  |  | - Compare and order lengths, mass, volume/capacity and record the results using < > and = |  |
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|  |  |  | Geometry: Position and Direction - Week 9-10 <br> - Use mathematical vocabulary to describe position, direction and movement including in a straight line. <br> - Distinguish between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise) <br> - Order and arrange combinations of mathematical objects in patterns and sequences. |
|  |  |  | Investigations - Week 11-12 <br> - Reasoning and problem solving in all aspects of previous learning |


| Year Group | Autumn | Spring | Summer |
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|  | Place value - Week 1-3 <br> - Recognise the place value of each digit in a three-digit number <br> - Identify, represent and estimate using different representations <br> - Find 10 or 100 more or less than a given number <br> - Compare and order numbers up to 1000 <br> - Read and write numbers in numerals and words up to 1000 <br> - Solve number problems and practical problems involving these ideas. <br> - Count from 0 in multiples of $4,8,50$ and 100. | Multiplication and Division - Week 1-3 <br> - Recall and use multiplication and division facts for the 3,4 and 8 multiplication tables. <br> - Write and calculate multiplication and division statements for the tables known including 2 digits times 1 -digit numbers using mental and formal written methods <br> - Solve problems, including missing numbers involving multiplication and division. <br> - Solve problems including positive integer scaling and correspondence problems in which $n$ objects are connected to $m$ objects | Fractions - Week 1-2 <br> - Recognise and show, using diagrams, equivalent fractions with small denominators <br> - Compare and order unit fractions, and fractions with the same denominators <br> - Add and subtract fractions with the same denominator within one whole. <br> - Solve problems that involve all the above |
|  | Addition \& Subtraction - Week 4-8 <br> - Add and subtract numbers mentally including: 3 digits and ones, 3 digits and tens, 3 digits and hundreds. <br> - Add and subtract numbers with up to 3 digits using formal written methods of columnar addition and subtraction <br> - Estimate the answer to a calculation and use inverse operations to check answers <br> - Solve problems, including missing numbers, using number facts, place value and more complex addition and subtraction. | Measurement: Length and Perimeter - Week 4-6 <br> - Measure, compare, add and subtract lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ), mass ( $\mathrm{kg} / \mathrm{g}$ ) and volume/capacity ( $1 / \mathrm{ml}$ ) <br> - Measure the perimeter of simple 2D shapes. | Measurement: Money - Week 3-4 <br> - Add and subtract amounts of money to give change using f and $p$ in practical contexts. |
|  | Multiplication and Division - Week 9-11 <br> - Count from 0 in multiples of $4,8,50$ and 100 <br> - Recall and use multiplication and division facts for the 3,4 and 8 multiplication tables. <br> - Write and calculate multiplication and division statements for the tables known including 2 digits times 1-digit numbers using mental and formal written methods <br> - Solve problems, including missing numbers involving multiplication and division. <br> - Solve problems including positive integer scaling and correspondence problems in which $n$ objects are connected to $m$ objects | Fractions - Week 7-9 <br> - Count up and down in tenths <br> - Recognise that tenths arise from dividing an object into 10 equal parts and in dividing one-digit numbers or quantities by 10 . <br> - Recognise and use fractions as numbers, unit and non-unit fractions with small denominators. <br> - Recognise, find and write fractions of a discrete set of objects, unit and non-unit fractions with small denominators. <br> - Solve problems that involve all the above. | Geometry: Properties of Shape - Week 5-6 <br> [2 Recognise angles as a property of shape or a description of a turn <br> T Identify right angles <br> [] Recognise that 2 right angles make a half turn, 3 make three quarters of a turn, and 4 make a complete turn <br> [0 Identify whether angles are greater than or less than a right angle <br> To Identify horizontal and vertical lines. <br> [0 Identify pairs of perpendicular and parallel lines <br> 20 Draw 2D shapes and make 3D shapes using modelling material <br> (⿴囗 Recognise 3D shapes in different orientations and describe them |


|  |  | Measurement: Mass \& Capacity - Week 10-12 <br> - Measure, compare, add and subtract lengths ( $\mathrm{m} / \mathrm{cm} / \mathrm{mm}$ ), mass ( $\mathrm{kg} / \mathrm{g}$ ) and volume/capacity ( $1 / \mathrm{ml}$ ) | Statistics - Week 7-8 <br> - Interpret and present data using bar charts, pictograms and tables <br> Using information presented in scaled bar charts, pictograms and tables, solve one step and two step questions e.g How many more? How many fewer? |
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|  |  |  | Measurement: Time - Week 9-12 <br> - Tell and write the time from an analogue clock <br> - Tell and write the time from an analogue clock with Roman Numerals I to XII <br> - Tell the 12 hour and 24 -hour time <br> - Estimate and read time with increasing accuracy to the nearest minute <br> - Record and compare time in terms of seconds, minutes and hours <br> - Use vocabulary such as o'clock, am/pm, morning, afternoon, noon and midnight <br> - Know the number of seconds in a minute <br> - Know the number of days in each month <br> - Know the number of days in a year and leap year <br> - Compare durations of events (time taken by particular events or tasks) |


| Year Group <br> 4 | Autumn | Spring | Summer |
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|  | Place Value -Week 1-4 <br> - Count in multiples of 6, 7, 9, 25 and 1000 <br> - Find 1000 more or less than a given number <br> - Recognise the place value of each digit in a 4-digit number <br> - Order and compare numbers beyond 1000 <br> - Identify, represent and estimate numbers using different representations <br> - Round any number to the nearest 10,100 and 1000 <br> - Count backwards through zero to negative numbers <br> - Solve number and practical problems will all of the above. | Multiplication \& Division - Week 1-3 <br> - Recognise and use factor pairs and commutativity in mental calculations <br> - Multiply 2 digit and 3 -digit numbers by a one-digit number using formal written layout <br> - Solve problems involving multiplying and adding including using the distributive law to multiply 2 -digit numbers by 1 digit; integer scaling problems and correspondence problems such as $n$ objects are connected to $m$ objects | Decimals -Week 1-2 <br> - Compare numbers with the same number of decimal places up to two decimal places. <br> - Round decimals with one decimal place to the nearest whole number. <br> - Recognise and write decimal equivalents to $1 / 41 / 2$ and $3 / 4$ <br> - Understand the effect of dividing a one- or two-digit number by 10 or 100 . <br> - Identifying the value of the digits in the answer as ones, tenths and hundredths. |
|  | Addition \& Subtraction - Week 5-7 <br> - Add and subtract numbers with up to 4 digits using the formal written method of columnar addition and subtraction where appropriate <br> - Estimate and use inverse operations to check answers to a calculation <br> - Solve addition and subtraction two step problems in context, deciding which operations and methods to use and why. | Measurement: Length \& Perimeter - Week 4-5 <br> - Measure and calculate the perimeter of a rectilinear figure (including squares) in cm and m <br> - Convert between different units of measure e.g. km to m | Measurement: Money - Week 3-4 <br> - Estimate, compare and calculate different measures, including money in pounds and pence. <br> - Solve simple measure and money problems involving fractions and decimals to two decimal places. |
|  | Measurement: Area - Week 8 <br> Find the area of rectilinear shapes by counting squares | Fractions - Week 6-9 <br> - Recognise and show, using diagrams, families of common equivalent fractions <br> - Count up and down in hundredths <br> - Recognise that hundredths arise when dividing an object by 100 and dividing tenths by 10 <br> - Add and subtract fractions with the same denominator <br> - 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 | Measurement: Time - Week 5-7 <br> - Read, write and convert time between analogue and digital 12 - and 24 -hour clocks. <br> - Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. |
|  | Multiplication \& Division - Week 9-11 <br> - Recall and use multiplication and division facts for multiplication tables up to $12 \times 12$ <br> - Count in multiples of $6,7,9,25$ and 1000 <br> - Use place value, known and derived facts to multiply and divide mentally, including multiplying by 0 and 1 , dividing by 1 <br> - Multiplying together 3 numbers <br> - Solve problems involving multiplying and adding including using the distributive law to multiply 2-digit numbers by 1 digit; integer scaling problems and correspondence problems such as $n$ objects are connected to $m$ objects | Decimals - Week 10-12 <br> - Recognise and write decimal equivalents of any number of tenths or hundredths. <br> - Find the effect of dividing a one- or two-digit number by 10 or 100 , identifying the value of the digits in the answer as ones, tenths and hundredths <br> - Solve simple measure and money problems involving fractions and decimals to two decimal places. <br> - Convert between different units of measure [for example, kilometre to metre] | Geometry: Properties of Shape - Week 8-9 <br> - Identify acute and obtuse angles <br> - Compare and order angles up to 2 right angles by size <br> - Compare and classify geometric shapes including quadrilaterals and triangles, based on their properties and size. <br> - Identify lines of symmetry in 2D shapes presented in different orientations |


|  | Consolidation - Week 12 |  | Statistics - Week 10 <br> - Interpret and present discrete and continuous data using appropriate graphical methods, including bar charts and time graphs. <br> Solve comparison, sum and difference problems using information presented in bar charts, pictograms, tables and other graphs. |
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|  |  |  | Geometry: Position \& Direction - Week 11-12 <br> - Describe on a 2D grid as coordinates in the first quadrant <br> - Plot specified points and draw sides to complete a given polygon <br> - Describe movements between positions as translations of a given unit to the left/right and up/down. |

## Place value - Week 1-3

- Read, write, order and compare numbers to at least 1,000,000 and determine the value of each digit
- Count forwards or backwards in steps of powers of 10 for any given number up to 1,000,000
- Interpret negative numbers in context
- Count forwards and backwards with positive and negative whole numbers including through zero
- Round any number up to $1,000,000$ to the nearest $10,100,1000$, 10,000 and 100,000
- Solve number and practical problems that involve all the above
- Read Roman numerals up to 1,000 (M) and recognise years written in Roman numerals


## Addition \& Subtraction - Week 4-5

- Add and subtract numbers mentally with increasingly large numbers
- Add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar)
- Use rounding to check answers to calculations and determine, in the context of a problem, levels of accuracy
- Solve addition and subtraction multi-step problems in contexts, deciding with operations and methods to use and why.


## Multiplication \& Division - Week 6-8

- Multiply and divide numbers mentally drawing upon known facts
- Multiply and divide whole numbers by 10,100 and 1000
- Identify multiples and factors
- Find all factor pairs of a number and common factors of 2 numbers
- Recognise and use square numbers and cube numbers using the notations (e.g $3^{2}$ and $4^{3}$ )
- Solve problems involving multiplication and division including using knowledge of factors and multiples, squares and cubes
- Know and use vocabulary of prime numbers, prime factors and composite (non-prime) numbers
- Establish whether a number up to 100 is a prime and recall prime numbers up to 19


## Multiplication \& Division - Week 1-3

- Multiply and divide numbers mentally drawing upon known facts.
- Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for 2-digit numbers.
- Divide numbers up to 4 digits by a 1 - digit number using the formal written method of short division and interpret remainders appropriately for the context.
- Solve problems involving addition and subtraction, multiplication and division and a combination of these, including understanding the use of the equals sign.


## Fractions - Week 4-5

Compare and order fractions whose denominators are multiples of the same number.
Identify, name and write equivalent fractions of a given fraction, represented visually including tenths and hundredths.
Recognise mixed numbers and improper fractions and convert from one form to the other and write
mathematical statements $>1$ as a mixed number
e.g $\frac{2}{5}+\frac{4}{5}=\frac{6}{=} 1 \quad 1$

## Decimals \& Percentages - Week 6-8

- Read, write, order and compare numbers with up to three decimal places.
- Recognise and use thousandths and relate them to tenths, hundredths and decimal equivalents.
- Round decimals with two decimal places to the nearest whole number and to one decimal place.
- Solve problems involving number up to three decimal places.
- Recognise the percent symbol (\%) and understand that percent relates to 'number of parts per hundred',
- Write percentages as a fraction with denominator 100 , and as a decimal.
- Solve problems which require knowing percentage and decimal equivalents of
$2^{\prime} 44^{\prime} \quad 5^{\prime} \quad 5$ and those fractions with a denominator of a multiple of 10 or 25


## Geometry: Properties of Shapes - Week 1-3

- Identify 3-D shapes, including cubes and other cuboids, from 2-D representations.
- Use the properties of rectangles to deduce related facts and find missing lengths and angles.
- Distinguish between regular and irregular polygons based on reasoning about equal sides and angles.
- Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles.
Draw given angles and measure them in degrees.
- Identify: angles at a point and one whole turn (total $360^{\circ}$ ), angles at a point on a straight line and $1 / 2$ a turn (total $180^{\circ}$ ) other multiples of $90^{\circ}$


## Geometry: Position \& Direction - Week 4-5

- Identify, describe and represent the position of a shape following a reflection or translation, using the appropriate language, and know that the shape has not changed.


## Decimals - Week 6-8

- Recognise and write decimal equivalents of any number of tenths or hundredths.
- Find the effect of dividing a one- or two-digit number by 10 or 100 , identifying the value of the digits in the answer as ones, tenths and hundredths
- Solve simple measure and money problems involving fractions and decimals to two decimal places.
- Convert between different units of measure [for example, kilometer to metre]

|  | Fractions - Week 9-12 <br> - Add and subtract fractions with the same denominator and denominators that are multiples of the same number. | Measurement: Perimeter \& Area - Week 9-10 <br> - Measure and calculate the perimeter of composite rectilinear shapes in cm and m <br> - Calculate and compare the area of rectangles (including squares) using standard units $\mathrm{cm} 2 / \mathrm{m} 2$ <br> Estimate the area of irregular shapes | Negative Numbers - Week 9 <br> - Interpret numbers greater than and less than zero in different contexts. <br> - Identify and place negative numbers on a number line <br> - Interpret sets of negative and positive numbers in a range of contexts <br> - Use their knowledge of positive and negative numbers to calculate intervals |
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|  |  | Statistics - Week 11-12 <br> - Solve comparison, sum and difference problems using information presented in a line graph. <br> - Complete, read and interpret information in tables including timetables. | Measuring: Converting Units - Week 10-11 <br> - Convert between different units of metric measure [for example, km and $\mathrm{m} ; \mathrm{cm}$ and $\mathrm{m} ; \mathrm{cm}$ and $\mathrm{mm} ; \mathrm{g}$ and kg ; l and ml ] <br> - Understand and use approximate equivalences between metric units and common imperial units such as inches, pounds and pints. <br> - Solve problems involving converting between units of time. |
|  |  |  | Measurement: Volume - Week 12 <br> - Estimate volume (e.g. using $1 \mathrm{~cm}^{3}$ blocks to build cuboids, including cubes) and capacity (e.g. using water) <br> - Use all 4 operations to solve problems involving measure |


| Year Group | Autumn | Spring | Summer |
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|  | Place Value - Week 1-2 <br> - Read, write, order and compare numbers up to $10,000,000$ and determine the value of each digit <br> - Round any whole number to a required degree of accuracy <br> - Use negative numbers in context and calculate intervals across zero <br> - Solve number and practical problems that involve all the above | Ratio - Week 1-2 <br> T Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts. <br> [0 Solve problems involving similar shapes where the scale factor is known or can be found. <br> TSolve problems involving unequal sharing and grouping using knowledge of fractions and multiples. | Geometry: Properties of Shapes - Week 1-2 <br> - Draw 2-D shapes using given dimensions and angles. <br> - Compare and classify geometric shapes based on their properties and sizes and find unknown angles in any triangles, quadrilaterals and regular polygons. <br> - Recognise angles where they meet at a point, are on a straight line, or are vertically opposite, and find missing angles. |
|  | Four Operations - Week 3-7 <br> - Solve addition and subtraction multi-step problems in contexts deciding which operations and methods to use andwhy <br> - Multiply multi-digit numbers up to 4 digits by a 2-digit number using the formal written method of long multiplication <br> - Divide numbers up to 4 digits by a 2-digit whole number using the formal written method of long division. <br> - Divide numbers up to 4 digits by a 2-digit number using the formal written method of short division <br> - Interpret remainders as whole number remainders, fractions or by rounding as appropriate for the context <br> - Perform mental calculations, including with mixed operations and large numbers <br> - Identify common factors, common multiples and prime numbers <br> - Use their knowledge of the order of operations to carry out calculations involving the four operations <br> - Solve problems involving addition, subtraction, multiplication and division. <br> - Use estimation to check answers to calculations and determine in context of a problem, an appropriate degreeof accuracy | Algebra - Week 3-4 <br> Q Use simple formulae. <br> [Generate and describe linear number sequences. <br> [ Express missing number problems algebraically. <br> [ Find pairs of numbers that satisfy an equation with two unknowns. <br> Q Enumerate possibilities of combinations of two variables. | Geometry: Position \& Direction - Week 4 <br> - Describe positions on the full co-ordinate grid (all 4 quadrants) <br> - Draw and translate simple shapes on the co-ordinate plane and reflect them in the axes |
|  | Fractions - Week 8-11 <br> - Use common factors to simplify fractions <br> - Use common multiples to express fractions in the same denomination <br> - Compare and order fractions, including fractions $>1$ <br> - Generate and describe linear number sequences (with fractions) <br> - Add and subtract fractions with different denominations and mixed numbers, using the concept of equivalent fractions | Decimals - Week 5-6 <br> - Identify the value of each digit in numbers given to 3 decimal places and multiply numbers by 10,100 and 1,000giving answers up to 3 decimal places. <br> - Multiply 1 -digit numbers with up to 2 decimal places by whole numbers. <br> - Use written division methods in cases where the answer has up to 2 decimal places. <br> - Solve problems which require answers to be rounded to specified degrees of accuracy. | SATS Week <br> Problem Solving and Investigations - Week 5-11 <br> - Reasoning and problem solving in all aspects of previous learning |


|  | - Multiply simple pairs of proper fractions writing the answer in its simplest form e.g. <br> - Divide proper fractions by whole numbers e.g. ${ }^{1} \div 2=$ <br> - Associate a fraction with division and calculate decimal fraction equivalents. <br> - Recall and use equivalences between simple fractions, decimals and percentages, including in different contexts |  |  |
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|  | Measurement: Converting Units - Week 12 <br> - Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate. <br> - Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to 3 dp . <br> - Convert between miles and kilometres. | Fractions, Decimals \& Percentages - Week 7-8 <br> - Solve problems involving the calculation of percentages [for example, of measures and such as $15 \%$ of 360 ] and the use of percentages for comparison. <br> - Recall and use equivalences between simple fractions, decimals and percentages including in different contexts. |  |
|  |  | Measurement: Perimeter, Area \& Volume - Week 9-10 <br> - Recognise that shapes with the same areas can have <br> - different perimeters and vice versa. <br> - Recognise when it is possible to use formulae for area and <br> - volume of shapes. <br> - Calculate the area of parallelograms and triangles. <br> - Calculate, estimate and compare volume of cubes and <br> - cuboids using standard units, including $\mathrm{cm} 3, \mathrm{~m} 3$ and <br> - extending to other units (mm3, km3) |  |
|  |  | Statistics - Week 11-12 <br> - Illustrate and name parts of circles, including radius, diameter and circumference and know that the diameter istwice the radius. <br> - Interpret and construct pie charts and line graphs and use <br> - these to solve problems. <br> - Calculate the mean as an average. |  |

