The Leys Primary School Subject Overview for Maths - 2023-24 'Becoming a Mathematician'

|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 |
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|  | e.g Once I got a fish alive, Five little monkeys. <br> Using some number names and number language spontaneously Beginning to recognise numerals of personal significance e.g. their birthday Developing countinglike behaviour, such as making sounds, pointing or saying some numbers in sequence. <br> Counting in everyday contexts, sometimes skipping numbers - 1-2-3-5 <br> Comparing size using 'big', 'small' | each item, saying one number for each item, using the stable order of 1,2,3 <br> Counting up to three items, recognising that the last number said represents the total counted so far. Beginning to recognise numerals 0 to 3 Using some number names and number language within play, and may show fascination with large numbers Talking about and exploring 2D and 3D shapes using informal and mathematical language. <br> Talking about and identifying different patterns around them e.g. stripes on clothes, patterns on wallpaper, and use informal language to describe it e.g. round, pointy | Beginning to count up to <br> 5 in 1 to 1 <br> Subitising up to 2 <br> Linking numeral ( 1 to <br> 4) to amount <br> Showing finger numbers up to 4 <br> Building models with a wide variety of shapes Comparing size and length using 'big', small', long' and 'short' Building / constructing using a variety of shapes and equipment Creating and extending repeating patterns $A B A B$ | one number for each item, using the stable order of 1,2,3,4,5. <br> Show finger numbers up to 5. <br> Subitising up to 2 <br> Uses some number names and number language within play, and may show fascination with large numbers <br> Making comparisons between objects relating to size, length and height using small, big , long, <br> short , tall. <br> Using shapes appropriately for tasks e.g. a triangle for a hat Talking about and exploring 2D and 3D shapes using informal and mathematical language such as: sharp corners, pointy , curvy , sides. <br> Shows an understanding of simple positional language such as: inside, under, on top | Experimenting with their own symbols and marks as well as numerals <br> Showing finger numbers up to 5 <br> Subitising up to 3 <br> Combining shapes to make new one Comparing weight and capacity using heavy/ light, full /empty | amounts up to 5 and maybe beyond <br> Solving real world mathematical problems with numbers up to 5 . <br> Subitising up to 3 <br> Exploring using a range of their own marks and signs to which they ascribe mathematical meanings <br> Using positional language such as :'in front of' , 'behind' Describing a familiar route using words such as in 'front' of and 'behind' Beginning to describe a sequence of events,real or fictional using words such as 'first', 'then'. |
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| Key People |  |  |  |  |  |  |
| Key subject links |  | STEAM week, Enterprise Day |  | STEAM week |  | STEAM week, Summer Fair |
| Key Vocabulary | More,lots,same, count, compare, numbers | More, less, circle, square, rectangle, triangle, | More, lots, same, fewer, count, compare, subitise, | full,empty, big,small. heavy,light, more,lots, | Compare, count, identify, full/ empty | Same, different compare, |


|  | Big, small | lots, same, count, compare,pattern | shape, size , big , small, long, short , pattern | the same, fewer, count, compare, subitise, inside under, on top shapes | Heavy /light | correct,sequence, order in front, behind |
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| Key Texts |  |  |  |  |  |  |
| SMSC and British Values | - enable students to develop their self-knowledge, self-esteem and self-confidence <br> - encourage respect for other people <br> - an understanding of how students (citizens) can influence decision-making through discussion (the democratic process) |  |  |  |  |  |
| Global Goals and School values | 3 ano wellebili <br> 4 <br> QUALITY EDUCATION <br> 5 <br> GENDER <br> EQUALITY <br> School Values: Inclusivity / Aspiration / Empowerment / Empathy / Determination / Respect |  |  |  |  |  |
| The Leys Pathways | - Explore familiar and unfamiliar roles and experiences <br> - Communicate in a two way conversation <br> - Understand my feelings and respond to the feelings of others <br> - Solve problems independently with resilience |  |  |  |  |  |
| EYFS <br> Reception | Number <br> Matching by size, shape, colour, number <br> Sort by size, shape, colour and numbers <br> Comparing amounts using 'more', fewer' and | Number <br> Representing 1, 2 and 3 <br> Comparing 1, 2 and 3 <br> Composition of 1, 2 and 3 <br> Number 4 | Number <br> Introducing 0 <br> Comparing numbers to 5 <br> Composition of 4 and 5 <br> Numbers 6, 7 and 8 | Number <br> Numbers 9 and 10 <br> Comparing numbers to 10 <br> Number bonds to 10 <br> Measure, Shape and Spatial Thinking | Number <br> Consolidating key skillssubitising, counting, composition, sorting and matching, comparing and ordering <br> Building numbers beyond 10 | Number <br> Consolidating key skillssubitising, counting, composition, sorting and matching, comparing and ordering <br> Doubling |


|  | 'same' <br> Measure, Shape and Spatial Thinking <br> Comparing size using 'big', 'small', 'large'. 'Little' <br> Making simple repeating patterns | Number 5 <br> One more and one less <br> Measure, Shape and Spatial Thinking <br> Circles and Triangles <br> Positional language <br> Shapes with 4 sides <br> Night and day | Making pairs <br> Combining 2 groups <br> Measure, Shape and Spatial Thinking <br> Comparing mass <br> Comparing capacity <br> Comparing Length and height <br> Time- sequencing events, days of the week | 3D shapes <br> Patterns | Counting patterns beyond 10 <br> Adding more <br> Taking away <br> Measure, Shape and Spatial Thinking <br> Spatial reasoning | Sharing and grouping <br> Even and odd <br> Measure, Shape and Spatial Thinking <br> Spatial reasoning <br> Patterns and relationships |
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| Key Skills | Matching <br> Sorting <br> Comparing using 'more', 'fewer' and 'the same' <br> Order numbers to 3 <br> Comparing size using 'big', 'small', 'large'. <br> 'Little' <br> Copying, continuing and creating simple patterns | Subitising to 5 <br> 1:1 correspondence <br> Counting to 5 <br> Representing numbers in different ways <br> Comparing using 'more', <br> 'fewer' and 'the same' <br> Combining 2 numbers to make numbers 1-3 <br> Using positional language. <br> Find one more and one less <br> Recognise simple 2D shapes | Recognising numeral 0 and what it means Comparing using 'more', 'fewer' and 'the same' <br> Combining 2 numbers to make numbers 4 and 5 <br> Compare mass using 'heavier' and 'lighter' <br> Compare capacity using 'full', 'empty', 'half full', 'half empty' <br> 1:1 correspondence <br> Counting to 8 <br> Recognise groups of 2pairs | 1:1 correspondence <br> Counting to 10 <br> Comparing using 'more', 'fewer' and 'the same' <br> Order quantities <br> Number bonds to 5 <br> Number bonds to 10 <br> Recognise 3D shapes <br> Copying, continuing and creating more complex patterns | Subitising <br> Counting <br> Composition of numbers <br> Sorting and matching <br> Comparing and ordering <br> Identify numbers to 20 <br> Counting patterns beyond 10 <br> Spatial reasoning <br> Counting on from a given number <br> Subtracting | Subitising <br> Counting <br> Composition of numbers <br> Sorting and matching <br> Comparing and ordering <br> Doubling numbers to 5 <br> Sharing and grouping number <br> Recognising odd and even numbers <br> Spatial reasoning <br> Copying, continuing and creating more complex |


|  |  | To describe when things happen e.g today, tomorrow, morning, night, evening | Combine 2 groups of objects and say how many altogether <br> Compare length and height using 'taller', 'shorter', 'tallest', 'shortest', longer', 'longest' <br> Sequence days of the week <br> Sequence familiar events |  |  | patterns |
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| Key People |  |  |  |  |  |  |
| Key subject links |  | STEAM week, Enterprise Day |  | STEAM week |  | STEAM week, Summer Fair |
| Key Vocabulary | Sort, match 'more', 'fewer' and 'the same' 'big', 'small', 'large'. <br> 'Little' <br> Subitize <br> Pattern | Number names, makes, equal, add, plus, <br> altogether <br> 'more', 'fewer' and 'the same' <br> On, in, under, behind, in front, next to today, tomorrow, morning, night, evening Circle, triangle, square, rectangle | Number names, makes, equal, add, plus, <br> altogether <br> 'more', 'fewer' and 'the same' <br> 'heavier' and 'lighter' <br> 'full', 'empty', 'half full', <br> 'half empty' <br> taller', 'shorter', 'tallest', <br> 'shortest', longer', <br> 'longest' <br> Pair <br> Days of the week <br> First, next, after, today, <br> tomorrow, yesterday | Number names, makes, equal, add, plus, <br> altogether <br> 'more', 'fewer' and 'the same' <br> 3D shapes names <br> Number bonds | Number names, makes, equal, add, plus, <br> altogether <br> 'more', 'fewer' and 'the same' <br> On, in, under, behind, in front, next to | Number names, makes, equal, add, plus, <br> altogether <br> 'more', 'fewer' and 'the same' <br> On, in, under, behind, in front, next to |
| Key Texts |  |  |  |  |  |  |


| SMSC and British Values | - enable students to develop their self-knowledge, self-esteem and self-confidence <br> - encourage respect for other people <br> - an understanding of how students (citizens) can influence decision-making through discussion (the democratic process) |  |  |  |  |  |
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| Global Goals and School values | School Values: Inclusivity / Aspiration / Empowerment / Empathy / Determination / Respect |  |  |  |  |  |
| The Leys Pathways | - Explore familiar and unfamiliar roles and experiences <br> - Communicate in a two way conversation <br> - Understand my feelings and respond to the feelings of others <br> - Solve problems independently with resilience |  |  |  |  |  |
| Year 1 | Place Value (within 10) <br> Sort objects <br> Count objects <br> Count objects from a larger group <br> Represent objects <br> Recognise numbers as words <br> Count on from any number <br> 1 more <br> Count backwards within | Addition \& Subtraction (with 10) <br> Addition problems <br> Find a part <br> Subtraction - find a part <br> Fact families - the eight facts <br> Subtraction - take away/crossing out (How many left?) <br> Subtraction - take away (How many left?) | Place Value (within 20) <br> Count within 20 <br> Understand 10 <br> Understand 11, 12 and 13 <br> Understand 14, 15, 16 <br> Understand 17, 18, 19 <br> Understand 20 <br> 1 more and 1 less <br> The number line to 20 <br> Use a number line to 20 | Place Value(within 50) <br> Count from 20 to 50 <br> $20,30,40$ and 50 <br> Count by making groups of tens <br> Groups of tens and ones <br> Partition into tens and ones <br> The number line to 50 <br> Estimate on a number line to 50 <br> 1 more, 1 less | Multiplication \& Division <br> Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays. <br> Fractions <br> Recognise, find and name a half as one of two equal parts of an object, shape or quantity. | Place Value (within 100) <br> Count to and across 100, forwards and backwards, beginning with 0 or 1 , or from any given number. <br> Count numbers to 100 in numerals; count in multiples of twos, fives and tens. <br> Read and write numbers from 1 to 100 in numerals |


|  | 10 <br> 1 less <br> Compare groups by matching <br> Fewer, more, same <br> Less than, greater than, equal to <br> Compare numbers <br> Order objects and numbers <br> The number line <br> Addition \& Subtraction (within 10) <br> Introduce parts and wholes <br> Part-whole model <br> Write number sentences <br> Fact families - addition facts <br> Number bonds within 10 <br> Systematic number bonds within 10 <br> Number bonds to 10 <br> Addition - add together <br> Addition - add more | Subtraction on a number line <br> Add or subtract 1 or 2 <br> Geometry - Shape <br> Recognise and name 3-D shapes <br> Sort 3-D shapes <br> Recognise and name 2-D shapes <br> Sort 2-D shapes <br> Patterns with 2-D and 3- <br> D shapes | Estimate on a number line to 20 <br> Compare numbers to 20 <br> Order numbers to 20 <br> Addition \& Subtraction <br> (within 20) <br> Add by counting on within 20 <br> Add ones using number bonds <br> Find and make number bonds to 20 <br> Doubles <br> Near doubles <br> Subtract ones using number bonds <br> Subtraction - counting back <br> Subtraction - finding the difference <br> Related facts <br> Missing number problems |  <br> Height <br> Compare lengths and heights <br> Measure length using objects <br> Measure length in centimetres | Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity. <br> Geometry - Position \& Direction <br> Describe position, direction and movement, including whole, half, quarter and threequarter turns. | and words. <br> Measurement - Money <br> Recognise and know the value of different denominations of coins and notes. <br> Measurement - Time <br> Sequence events in chronological order using appropriate language. <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 the hands on a clock face to show these times. <br> Compare, describe and solve practical problems for time |
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| Key Skills | Count to and across 10, |  | Count to and across 20, | Count to and across 50, | Solve one-step problems | Count to and across 100, |


|  | forwards and backwards <br> Count numbers to 10 in numerals; count in multiples of twos, fives and tens. <br> Read and write numbers from 1 to 10 <br> Represent and use number bonds and related subtraction facts within 10. <br> Add and subtract onedigit and two-digit numbers to 10 <br> Solve one-step problems that involve addition and subtraction |  | forwards and backwards <br> Count numbers to 20 in numerals; count in multiples of twos, fives and tens. <br> Read and write numbers from 1 to 20 <br> Represent and use number bonds and related subtraction facts within 20. <br> Add and subtract onedigit and two-digit numbers to 20 | forwards and backwards <br> Count numbers to 50 in numerals; count in multiples of twos, fives and tens. <br> Read and write numbers from 1 to 50 <br> Compare, describe and solve practical problems for lengths and heights; mass/weight and capacity/volume. | involving multiplication and division <br> Recognise, find and name a half <br> Recognise, find and name a quarter <br> Describe position, direction and movement | forwards and backwards <br> Count numbers to 100 in numerals; count in multiples of twos, fives and tens. <br> Read and write numbers from 1 to 100 <br> Recognise and know the value of different denominations of coins and notes. <br> Sequence events in chronological order <br> Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times. |
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| Key People |  |  |  |  |  |  |
| Key subject links |  | STEAM week, Enterprise Day |  | STEAM week |  | STEAM week, Summer Fair |
| Key Vocabulary | place value, count, across 10, forwards, backwards, number, multiples, identify, represent, pictorial representation, more, less, addition, subtraction, interpret, addition, subtraction, | geometry, recognise, 2-D shape, 3-D shape, place value, count, forwards, backwards. | addition, subtraction, represent, number bonds, one-digit, two-digit, zero, place value, count, multiples. | measurement, compare length, height, mass, weight, capacity, volume | multiplication, division, one-step problem, calculate, concrete objects, pictorial representations, arrays, fractions, recognise, half, quarter, geometry, position, direction, movement, whole, half, | place value, count, forwards, backwards, multiples, measurement, denominations, coins, notes, sequence, chronological order, dates, days of the week, weeks, months, years, time, hour, half-past the |




|  | Add to the next 10 <br> Add across a 10 <br> Subtract across 10 <br> Subtract from a 10 <br> Subtract a 1-digit <br> number from a 2-digit <br> number (across a 10 ) |  |  |  |  |  |
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| Key Skills | Count in steps of 2,3, and 5 from 0 , and in tens from any number, forward and backward. <br> Read and write numbers to at least 100 <br> Recognise the place value of each digit in a two-digit number. <br> Compare and order numbers up to 100 <br> Recall and use addition and subtraction facts to 20 <br> Recognise and use the inverse relationship between addition and subtraction | Solve problems with addition and subtraction. <br> Recall and use multiplication and division facts for the 2,5 and 10 multiplication tables <br> Identify and describe the properties of 2-D shapes <br> Identify 2-D shapes on the surface of 3-D shapes. <br> Recognise and name common 3-D shapes. <br> Compare and sort common 3-D shapes | Recognise and use symbols for pounds ( $£$ ) and pence ( p ) <br> Solve problems involving multiplication and division | Choose and use appropriate standard units to estimate and measure length/height <br> Compare and order lengths <br> Choose and use appropriate standard units to estimate and measure mass, temperature and capacity <br> Compare and order mass, volume/capacity | Recognise, find, name and write fractions $1 / 3,1 / 4,1 / 2$ and $3 / 4$ <br> Compare and sequence intervals of time. <br> 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. | Interpret and construct simple pictograms, tally charts, block diagrams and simple tables. <br> Describe position, direction and movement in a straight line |
| Key People |  |  |  |  |  |  |
| Key subject links |  | STEAM week, Enterprise Day |  | STEAM week |  | STEAM week, Summer Fair |


| Key Vocabulary | place value, count, steps, number, forward, backward, identify, represent, estimate, recognise, digit, compare, order, less than, greater than, equal to, addition, subtraction, commutative, inverse, relationship, calculations, concrete objects, pictorial representations. | addition, subtraction, solve, concrete objects, pictorial representations, measurement, symbols, pounds, pence, combinations, equivalent, | multiplication, division, odd, even, commutative, calculate, arrays, repeated addition, statistics, interpret, construct, pictograms, tally charts, block diagrams, tables, quantity. | geometry, identify, properties, 2-D shapes, symmetry, vertical line, 3-D shapes, compare, sort, fractions, recognise, numerator, denominator, length, equivalence. | measurement, standard units, estimate, length, height, metres, centimetres, compare, order, less than, greater than, equals, geometry, pattern, sequence, position, direction, movement, straight line, rotation, angles, clockwise, anti-clockwise. | measurement, compare, sequence, time, five minutes, quarter past, hour, clock face, standard units, estimate, mass, grams, kilograms, temperature, degrees centigrade, capacity, millilitres, litres, units, order, mass, volume, capacity, less than, more than, equals. |
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| SMSC and British Values | - enable students to develop their self-knowledge, self-esteem and self-confidence <br> - encourage respect for other people <br> - an understanding of how students (citizens) can influence decision-making through discussion (the democratic process) |  |  |  |  |  |
| Global Goals and School values | AND WELL-BEING <br> School Values: Inclus | QUALITY EDUCATION <br> vity / Aspiration / Emp | werment / Empathy / | termination / Respect |  | PoNSBIE Pronuction |
| The Leys Pathways | - Explore new experiences with confidence <br> - Communicate my thoughts and feelings in a calm, verbal way <br> - Understand how my actions impact others <br> - Solve problems independently with resilience in friendships and academics |  |  |  |  |  |
| Year 3 | Place Value | Addition \& Subtraction | Multiplication \& Division | Fractions | Fractions | Geometry - Shape |



|  | Add and subtract 10 s <br> Add and subtract 100s <br> Spot the pattern <br> Add 1s across a 10 <br> Add 10s across a 100 <br> Subtract 1s across a 10 <br> Subtract 10s across a 100 <br> Make connections <br> Add two numbers (no exchange) <br> Subtract two numbers (no exchange) | Multiply by 4 <br> Divide by 4 <br> The 4 times-table <br> Multiply by 8 <br> Divide by 8 <br> The 8 times-table <br> The 2, 4 and 8 timestables | and millimetres <br> Metres, centimetres and millimetres <br> Equivalent lengths (metres and centimetres ) <br> Equivalent lengths (centimetres and millimetres) <br> Compare lengths <br> Add lengths <br> Subtract lengths <br> What is perimeter? <br> Measure perimeter <br> Calculate perimeter | Add and subtract mass <br> Measure capacity and volume in millilitres <br> Measure capacity and volume in litres and millilitres <br> Equivalent capacities and volumes (litres and <br> millilitres) <br> Compare capacity and volume <br> Add and subtract capacity and volume | Know the number of seconds in a minute and the number of days in each month, year and leap year. <br> Compare durations of events. |  |
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| Key Skills | Key Skills | Count from zero in multiples of 4, 8,50 and 100 <br> Red and write numbers up to 1,000 <br> Recognise place value of each digit in a three-digit number. <br> Compare and order numbers up to 1,000 . <br> Add and subtract numbers mentally. | Add and subtract numbers with up to three digits. <br> Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables. | Solve problems, involving multiplication and division. <br> Measure, compare, add and subtract, lengths <br> Measure the perimeter of simple 2-D shapes. | Count up and down in tenths. <br> Measure, compare, add and subtract, mass and volume/capacity | Recognise and show equivalent fractions <br> Compare and order fractions <br> Add and subtract fractions with the same denominator <br> Add and subtract amounts of money <br> Tell and write the time from an analogue clock. |
| Key People | Key People |  |  |  |  |  |


| Key subject links | Key subject links |  | STEAM week, Enterprise Day |  | STEAM week |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Key Vocabulary | Key Vocabulary | place value, count, zero, multiples, more, less, identify, represent, estimate, digit, addition, subtraction, inverse, operation, mentally. | addition, subtraction, digits, formal written method, place value, multiplication, division, recall, facts, times tables, calculate. | multiplication, division, measurement, add, subtract, money, pounds, pence, statistics, interpret, data, bar charts, pictograms, tables, scale. | measurement, compare, add, subtract, length, metres, centimetres, millimetres, perimeter, 2D shape, fractions, tenths, numerator, denominator. | fractions, equivalent, denominator, add, subtract, measurement, time, analogue clock, estimate, accuracy, seconds, minutes, hours, days, weeks, months, years, duration. |
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| Global Goals and School values | School Values: Inclusivity / Aspiration / Empowerment / Empathy / Determination / Respect |  |  |  |  |  |
| The Leys Pathways | - Explore the world around me, increasing my knowledge and understanding <br> - Communicate verbally confidently and in writing with increased clarity <br> - Understand how my actions affect myself and others around me <br> - Solve problems regarding school life independently with resilience and seek support openly |  |  |  |  |  |
| Year 4 | Place Value <br> Represent numbers to 1,000 | Area <br> What is area? <br> Counting squares | Multiplication \& Division <br> Factor pairs <br> Use factor pairs | Fractions <br> Understand the whole Count beyond 1 | Decimals <br> Round decimals with one decimal place to the | Geometry - Shape <br> Compare and classify geometric shapes, |



|  | Add and subtract 1 s , $10 s, 100$ s and 1,000 s <br> Add up to two 4-digit numbers - no exchange <br> Add two 4-digit numbers - one exchange <br> Add two 4-digit numbers- more than one exchange <br> Subtract two 4-digit numbers - no exchange <br> Subtract two 4-digit numbers - one exchange <br> Subtract two 4-digit numbers - more than one exchange <br> Efficient subtraction <br> Estimate answers <br> Checking strategies |  | Perimeter of a rectangle <br> Perimeter of rectilinear shapes <br> Find missing lengths in rectilinear shapes <br> Calculate the perimeter of rectilinear shapes <br> Perimeter of regular polygons <br> Perimeter of polygons | Tenths on a place value chart <br> Tenths on a number line <br> Divide a 1-digit number by 10 <br> Divide a 2-digit number by 10 <br> Hundredths as fractions <br> Hundredths as decimals <br> Hundredths on a place value chart <br> Divide a 1 or 2-digit number by 100 |  | Describe positions on a 2D grid as coordinates in the first quadrant. <br> Describe movements between positions as translations of a given unit to the left/right and up/down. <br> Plot specified points and draw sides to complete a given polygon. |
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| Key Skills | Key Skills | Count in multiples of 6,7, 9,25 and 1,000 . <br> Count using negative numbers. <br> Read Roman numerals to 100 <br> Recognise the place value of each digit in a fourdigit number. <br> Order and compare | Find the area of rectilinear shapes <br> Recall multiplication and division facts for multiplication tables up to $12 \times 12$. | Multiply two-digit and three-digit numbers by a one-digit number. <br> Convert between different units of measure. <br> Estimate, compare and calculate different measures <br> Measure and calculate the perimeter of a | Count up and down in hundredths <br> Recognise families of common equivalent fractions. <br> Add and subtract fractions with the same denominator. <br> Recognise and write decimal equivalents to $\frac{1}{4}$, $\frac{1}{2}, \frac{3}{4}$ | Round decimals with one decimal place to the nearest whole number <br> Compare numbers with the same number of decimal places <br> Estimate, compare and calculate different measures <br> Read, write and convert time between analogue |


|  |  | numbers <br> Round any number to the nearest 10,100 or 1,000 <br> Estimate and use inverse operations to check answers to a calculation. <br> Add and subtract numbers with up to 4 digits. <br> Solve addition and subtraction two-step problems, deciding which operations to use |  | rectilinear figure | Find the effect of dividing a one- or twodigit number by 10 and 100. <br> Solve simple problems involving fractions and decimals | and digital 12- and 24hour clocks <br> Solve problems involving converting from hours to minutes; minutes to seconds; years to months; weeks to days. |
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| Key People | Key People |  |  |  |  |  |
| Key subject links | Key subject links |  | STEAM week, Enterprise Day |  | STEAM week |  |
| Key Vocabulary | Key Vocabulary | place value, count, negative numbers, estimate, Roman numerals, digit, order, compare, rounding, addition, subtraction, inverse, formal written method. | length, perimeter, convert, measure, estimate, compare, calculate, rectilinear figure, square, rectangle, centimetres, metres, multiplication, division, times tables, factors, commutativity. | multiplication, division, formal written method, distributive law, area, rectilinear shape, square, rectangle, fractions, hundredths, equivalent. | Fractions, add, subtract, numerator, denominator, decimals, equivalent, tenths, hundredths, value, measure, money. | decimals, rounding, whole number, compare, measurement, estimate, compare, calculate, money, pounds, pence, convert, time, analogue, digital, 24-hour clocks, seconds, minutes, hours, days, weeks, months, years. |
| SMSC and British Values | - enable students to develop their self-knowledge, self-esteem and self-confidence <br> - encourage respect for other people <br> - an understanding of how students (citizens) can influence decision-making through discussion (the democratic process) |  |  |  |  |  |


| Global Goals and School values | School Values: Inclusivity / Aspiration / Empowerment / Empathy / Determination / Respect |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| The Leys Pathways | - Explore the wo <br> - Communicate <br> - Understand how <br> - Solve problems | orld around me, increasin verbally confidently and w my actions affect my regarding school life in | my knowledge and under writing with increased If and others around me ependently with resilience | anding <br> ity <br> and seek support ope |  |  |
| Year 5 | Place value <br> Roman numerals to 1,000 <br> Numbers to 10,000 <br> Numbers to 100,000 <br> Numbers to 1,000,000 <br> Read and write numbers <br> to 1,000,000 <br> Powers of 10 <br> 10/100/1,000/10,000/1 <br> 00,000 more or less <br> Partition numbers to 1,000,000 <br> Number line to 1,000,000 <br> Compare and order | Multiplication \& Division <br> Multiples <br> Common multiples <br> Factors <br> Common factors <br> Prime numbers <br> Square numbers <br> Cube numbers <br> Multiply by 10,100 and <br> 1,000 <br> Divide by 10,100 and 1,000 <br> Multiples of 10,100 and 1,000 | Multiplication \& Division <br> Multiply up to a 4-digit number by a 1-digit number <br> Multiply a 2-digit number by a 2-digit number (area model) <br> Multiply a 2-digit number by a 2-digit number <br> Multiply a 3-digit number by a 2-digit number <br> Multiply a 4-digit number by a 2-digit number <br> Solve problems with multiplication <br> Short division <br> Divide a 4-digit number | Decimals \& Percentages <br> Decimals up to 2 decimal places <br> Equivalent fractions and decimals (tenths) <br> Equivalent fractions and decimals (hundredths) <br> Equivalent fractions and decimals <br> Thousandths as fractions <br> Thousandths as decimals <br> Thousandths on a place value chart <br> Order and compare decimals (same number of decimal places) | Geometry - Shape <br> Distinguish between regular and irregular polygons based on reasoning about equal sides and angles. <br> Use the properties of rectangles to deduce related facts and find missing lengths and angles. <br> Identify 3-D shapes including cubes and other cuboids, from 2-D representations. <br> Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles. | Negative numbers <br> Measurement - <br> Converting units <br> Convert between different units of metric measure. <br> Understand and use approximate equivalences between metric units and common imperial units. <br> Use all four operations to solve problems involving measure using decimal notation, including scaling. <br> Measurement - Volume |



|  |  | number - breaking the whole <br> Subtract two mixed numbers |  | Read and interpre $\dagger$ timetables |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Key Skills | Count forwards and backwards. <br> Order and compare numbers. <br> Read Roman numerals <br> Interpret negative numbers <br> Round numbers <br> Add and subtract whole numbers <br> Solve addition and subtraction multi-step problems, deciding which operations to use <br> Solve problems involving addition, subtraction, multiplication and division. | Identify multiples and factors. <br> Establish whether a number up to 100 is prime <br> Recognise and use square numbers and cube numbers <br> Identify, name and write equivalent fractions <br> Recognise mixed numbers and improper fractions and convert between the two. <br> Compare and order fractions <br> Add and subtract fractions | Multiply numbers up to 4 digits by a one- or twodigit number <br> Divide numbers up to 4 digits by a one- or twodigit number <br> Solve problems involving addition, subtraction, multiplication and division <br> Multiply proper fractions and mixed numbers by whole numbers. | Read and write decimal numbers as fractions. <br> Round decimals with two decimal places <br> Order and compare numbers with up to three decimal places. <br> Write percentages as a fraction and as a decimal. <br> Solve problems with percentages, decimals and fractions. <br> alculate the perimeter of composite rectilinear shapes <br> Calculate and compare the area of rectangles <br> Estimate volume <br> Read and interpret information in tables <br> Solve problems using information presented in a line graph. | Distinguish between regular and irregular polygons <br> Identify 3-D shapes, from 2-D representations. <br> Estimate and compare acute, obtuse and reflex angles. <br> Draw given angles, and measure them in degrees. <br> Represent the position of a shape following a reflection or translation. <br> Solve problems involving number up to three decimal places. | Convert between different units of metric measure. <br> Use all four operations to solve problems involving measure <br> Compare and estimate volume of different 3-D shapes and estimate capacity <br> C |


| Key People |  |  |  |  |  |  |
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| Key subject links |  | STEAM week, Enterprise Day |  | STEAM week |  | STEAM week, Summer Fair |
| Key Vocabulary | Place value, count, order, compare, digit, rounding, positive, negative numbers, Roman numerals, addition, subtraction, multiplication, division, operations | factors, multiples, prime, composite, square and cube numbers, statistics, timetable, line graph, perimeter, area, volume, capacity, composite rectilinear, rectangles, squares, regular, irregular. | Multiplication, division, remainders, factors, multiples, squares, cubes, scaling, fractions, equivalent, mixed numbers, improper fractions, convert, compare, order, denominator, numerator. | Decimals, equivalent, rounding, order, compare, fractions, percentages, per cent, convert | shapes, 2-D, 3-D, angles, right angle, degrees, acute, obtuse, reflex, triangles, square, rectangle, regular, irregular, polygons, properties. | Ition, shape, reflection, translation, coordinates, quadrant, convert, metric, measure, equivalent, imperial, scale, volume, 3-D, capacity. |
| SMSC and British Values | - enable students to develop their self-knowledge, self-esteem and self-confidence <br> - encourage respect for other people <br> - an understanding of how students (citizens) can influence decision-making through discussion (the democratic process) |  |  |  |  |  |
| Global Goals and School values | School Values: Inclusivity / Aspiration / Empowerment / Empathy / Determination / Respect |  |  |  |  |  |
| The Leys Pathways | - Explore and challenge my learning in order to promote independence and resilience <br> - Communicate clearly and confidently both verbally and in writing <br> - Understand my strengths and areas for development within our school community <br> - Solve a wide range of problems across the curriculum, both independently and collectively as a team |  |  |  |  |  |
| Year 6 | Place Value | Fractions | Ratio | Fractions, Decimals \& | Geometry - Shape | Themed projects, |



|  | Division using factors <br> Introduction to long division <br> Long division with remainders <br> Solve problems with division <br> Solve multi-step problems <br> Order of operations <br> Mental calculations and estimation <br> Reason from known facts | Converting Units <br> Metric measures <br> Convert metric measures <br> Calculate with metric measures <br> Miles and kilometres <br> Imperial measures | Place value within 1 <br> Place value - integers and decimals <br> Round decimals <br> Add and subtract $\dagger$ decimals <br> Multiply by 10, 100 and 1,000 <br> Divide by 10,100 and 1,000 <br> Multiply decimals by integers <br> Divide decimals by integers <br> Multiply and divide decimals in contex $\dagger$ | Volume of a cuboid <br> Statistics <br> Line graphs <br> Dual bar charts <br> Read and interpret pie charts <br> Pie charts with percentages <br> Draw pie charts <br> The mean |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Key Skills | Ordering numbers <br> Rounding numbers <br> Working with negative numbers <br> Solve addition and subtraction multi-step problems, deciding which operations and methods to use. <br> Multiply multi-digit numbers up to 4 digits by a two-digit whole number. | Simplify fractions <br> Compare and order fractions <br> Add and subtract fractions <br> Multiple simple pairs of proper fractions <br> Divide proper fractions by whole numbers <br> Convert between standard units of measurement. | Solve problems involving the relative sizes of two quantities. <br> Solve problems involving similar shapes where the scale factor is known or can be found. <br> Use simple formulae. <br> Find pairs of numbers that satisfy an equation with two unknowns. <br> Multiply and divide numbers by 10,100 and | Recall and use equivalences between simple fractions, decimals and percentages. <br> Calculate area and perimeter of simple shapes. <br> Calculate, estimate and compare volume of cubes and cuboids <br> Interpret and construct pie charts and line graphs and use these to solve problems. | Draw 2-D shapes <br> Compare and classify geometric shapes. <br> Recognize, describe and build simple 3-D shapes <br> Find unknown angles in any triangles, quadrilaterals, and regular polygons. <br> Describe positions on the full coordinate grid <br> Reflect and translate |  |


|  | Divide numbers up to four digits by a twodigit whole number. <br> Solve problems involving addition, subtraction, multiplication and division. | Solve problems involving the conversion of units of measure. | 1000 <br> Multiply one-digit numbers with up to two decimal places by whole numbers <br> Use written division methods in cases where the answer has up to two decimal places | Calculate and interpret the mean as an average. | simple shapes. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Key People |  |  |  |  |  |  |
| Key subject $\dagger$ links |  | STEAM week, Enterprise Day |  | STEAM week |  | STEAM week, Summer Fair |
| Key <br> Vocabulary | Place value, order, compare, digit, rounding, negative numbers, integers, addition, subtraction, multiplication, division, operations, factors, multiples, prime numbers, estimate, remainders, fractions, numerator, denominator | addition, subtraction, multiplication, division, compare, order, operations, factors, multiples, simplify, numerator, denominator, equivalent, mixed numbers, improper fractions, position, coordinates, grid, quadrant, axes, translation, reflection. | Digit, decimal, multiply, divide, rounding, fractions, percentages, equivalent, algebra, formula, linear sequence, equation, variables. | Measurement, units, conversion, length, mass, volume, millimetres, centimetres, metres, kilometres, grams, kilograms, perimeter, area, volume, shapes, 2-D, 3-D, square, rectangle, triangle, cubes, cuboids, ratio, proportion, relative size, scale factor. | shapes, 2-D, 3-D, nets, angles, right angle, acute, obtuse, reflex, triangles, square, rectangle, regular polygons, quadrilaterals, perpendicular, interpret, construct, pie charts, line graphs, mean, average. |  |
| SMSC and British Values | - enable students to develop their self-knowledge, self-esteem and self-confidence <br> - encourage respect for other people <br> - an understanding of how students (citizens) can influence decision-making through discussion (the democratic process) |  |  |  |  |  |


| Global Goals and School values | 4 <br> QUALITY EDUCATION <br> 5 <br> GENDER <br> 11 SUSTANABLE CITIES <br> AND COMMUNITIES <br> School Values: Inclusivity / Aspiration / Empowerment / Empathy / Determination / Respect |  |
| :---: | :---: | :---: |
| The Leys Pathways | - Explore and challenge my learning in order to promote independence and resilience <br> - Communicate clearly and confidently both verbally and in writing <br> - Understand my strengths and areas for development within our school community <br> - Solve a wide range of problems across the curriculum, both independently and collectively as a team |  |

Ensure you consider - diversity, gender. age, recent/old etc of key people, include whole school theme weeks e.g. STEAM, Healthy Living and enough detail to support an ECT, Check this with current year group staff before sending to $A B$ and requesting Steve to post on the website at the end of the Summer term.

SMSC - Through their provision of SMSC, schools should:

- enable students to develop their self-knowledge, self-esteem and self-confidence;
- enable students to distinguish right from wrong and to respect the civil and criminal law of England;
- encourage students to accept responsibility for their behaviour, show initiative, and to understand how they can contribute positively to the lives of those living and working in the locality of the school and to society more widely; - enable students to acquire a broad general knowledge of and respect for public institutions and services in England; - further tolerance and harmony between different cultural traditions by enabling students to acquire an appreciation of and respect for their own and other cultures;
- encourage respect for other people; and
- encourage respect for democracy and support for participation in the democratic processes, including respect for the basis on which the law is made and applied in England. The list below describes the understanding and knowledge expected of pupils as a result

British Values - By promoting these children should develop

- an understanding of how citizens can influence decision-making through the democratic process;
- an appreciation that living under the rule of law protects individual citizens and is essential for their wellbeing and safety;
- an understanding that there is a separation of power between the executive and the judiciary, and that while some public
bodies such as the police and the army can be held to account through Parliament, others such as the courts maintain independence;
- an understanding that the freedom to choose and hold other faiths and beliefs is protected in law:
- an acceptance that other people having different faiths or beliefs to oneself (or having none) should be accepted and tolerated, and should not be the cause of prejudicial or discriminatory behaviour; and - an understanding of the importance of identifying and combating discrimination.

Global Goals


Values

VALUES


School Pathways

## Explore

Communicate
Understand
Solve
Care

EYFS
Explore familiar and unfamiliar roles and experiences.

Communicate in a two way conversation.
Understand my feelings and respond to the feelings of others.
Solve problems independently with resilience.
Care for myself, others and the world around me.
KS1
Explore new experiences with confidence.
Communicate my thoughts and feelings in a calm, verbal way
Understand how my actions impact others
Solve problems independently with resilience in friendships and academics.
Care for myself, others and the wider environment.
LKS2
Explore the world around me, increasing my knowledge and understanding.
Communicate verbally confidently and in writing with increased clarity.
Understand how my actions affect myself and others around me.
Solve problems regarding school life independently with resilience and seek support openly.

Care for myself, others and the wider world.
UKS2
Explore and challenge my learning in order to promote independence and resilience.

Communicate clearly and confidently both verbally and in writing.
Understand my strengths and areas for development within our school community.
Solve a wide range of problems across the curriculum, both independently and collectively as a team.
Care and understand how to promote the physical and mental well-being of myself and others and the world we live in.

