## Maths Curriculum Overview 2023-2024

|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| Nursery | Counting, number rhymes and songs Number discrimination (1-5) Counting concrete objects 2D shapes - recognising shapes around the environment | Counting, number rhymes and songs Counting concrete objects (1-10) <br> Positional language <br> Number recognition <br> Matching numbers and quantity | Forming numbers <br> Numbers in our environment <br> Different sizes <br> Counting 2 groups of objects Length, measuring, longer \& shorter | Counting rhymes and songs <br> Number recognition and <br> formation <br> Addition - one more <br> Addition - finding totals of two <br> groups <br> One more and one less <br> Number sentences using + and = | Doubling <br> Halving <br> Number problems <br> Time <br> Measuring - using cubes/rulers | Number problems - missing numbers <br> Addition and subtraction Scales and measurement Picture making using 2D shapes |
| Concepts and skills taught | Children to practise counting objects from 1-5. Children to sing number songs. <br> Counting fingers, counting number of jumps, star jumps and squats. <br> Numbers around the environment number hunt around the outdoor area. Hide numbers 1-5 around the outdoor area and place them in order from smallest to biggest. <br> Focus activity in the water tray children to catch as many fish/ducks as they can. Children to count each fish/duck and find the total number. <br> Children to listen to the 2D shape song - children to draw around each shape and write the initial sound of each shape. | Children to practise counting by singing a variety of number songs. <br> Children to count numbers by using concrete objects. Children to then match the number of objects to the correct numeral. <br> Children to identify the position of a concrete object using locational language. <br> Number recognition using a variety of games and children to practise writing each number <br> Children to use sort shapes in the correct colour bowl. Children to match the number of shapes in the bowl to the correct number by counting each shape carefully one at a time | Children to review number formation using the number poems <br> Children to find numbers around the environment and visually recognise them. Children to then practise writing and identify number they are not sure about. <br> Children to draw around 3 different sized circles and label them as small, medium and big. <br> Children to use Numicon to count 2 different groups of holes and then count the total and write them in their books. <br> Using mathematical terms - children to draw different sized beanstalks and measure them using cubes/ruler. | Children to recap number formation and practise the ones they are not familiar with. <br> Children to add one more to a number and write the total. Children to use Numicon to work out one more in their books. <br> Children to choose 2 number cards and find the total. <br> Children to use Numicon to work out one less by crossing out a circle and then the children can work out the total when you take one away. <br> Children to practise a simple/addition and subtract sentences. | Children to practise doubling number using Numicon. Children to practise writing a doubling number sentence. <br> Children to practise halving using two bowls. Children to half an even number by choosing a number card. <br> Children to solve a both addition and subtraction problems using cubes. <br> Children to be introduced to a clock. Children to know the importance of time and why we need clocks. Children to familiarise themselves with time periods in the day and begin to understand about o'clock. <br> Adult to draw different sized beanstalks in their books and children to measure them using cubes and a ruler. | Children to work out the missing number with a sequence of numbers in order <br> Children work out addition number sentences using concrete resources and then using dots/number lines in their books <br> Children to work out subtraction number sentences using concrete resources and then using dots/number lines in their books <br> Children to explore heavy and lighter objects using scales <br> Children to name 2D shapes and then the children can create a picture using 2D shapes. <br> Begin work related to reception framework |


|  | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| Reception | Identifying numbers <br> Counting <br> Number value using dots and objects <br> One more \& one less <br> Largest \& smallest numbers <br> Ordering (3 numbers) | Number recognition \& value One more using addition (+)One less using take away (-) Doubling Money Halving Identifying and naming shape properties | Addition <br> Subtraction <br> Time sequencing <br> Number bonds of 5 and 10 <br> Measures - length and height | Subtraction <br> Adding <br> Repeated addition <br> Sharing <br> Capacity and weight <br> 3D shapes | Estimation <br> Weight <br> Length and height <br> Time sequencing <br> Number bonds to 20 <br> Counting in $2 s, 5 s$ and $10 s$ | Addition <br> Subtraction <br> Division <br> Multiplication <br> 2D and 3D shapes <br> Fractions |
| Concepts and skills taught | Children to practise their number formation and counting fingers on their hands. <br> Children to write numbers in their books and draw the same number of dots for each number. <br> Children to use counters to practise counting <br> Children to work out one more and one less of each number using cubes <br> Children to use number cards and then add one more to the number. <br> Children to write number sentences <br> Children to choose number cards and work out the largest and smallest number. <br> Children to order 3 numbers that they choose from number cards in order from smallest to biggest. | Children to recall number recognition and matching them to cubes and counters. <br> Children to work out one more or less of a number using counters, number lines and cubes. <br> Children to practise recognising coins and then adding coins together. <br> Children to choose certain coins to make up a certain total. <br> Children to half a number using 2 bowls and counters. <br> Children to practise naming 2D shapes and work out how many sides/corners each shape has. <br> Children to find shapes around the environment | Children to add 2 groups together and create number sentences by using cubes, ten frames, dots, number lines. <br> Children to take away 2 numbers by using cubes, ten frames, dots, number lines. Children to recognise that we need to write the bigger value first when subtracting. <br> Children to recognise that we do things according to time - children to practise telling the time and link it to familiar parts of the day for e.g. phonics starts at 9 o'clock. <br> Children to identify the hour of a day on a clock. <br> Children to start of the week by working out part-part-whole to work out number bonds to 5 and 10 and then write number sentences using cube/counters. <br> Children to investigate different lengths and heights of objects. Children to use hands and feet to measure larger items such as tables, chairs and use cubes and ruler to measure smaller items in class. <br> Children to estimate each length before measuring and compare answers. | Children to take away 2 numbers by using cubes, ten frames, dots, number lines <br> Children to add 2 groups together and create number sentences by using cubes, ten frames, dots, number lines. <br> Children to practise repeated addition and counting in 2's. Children to use cubes and number lines to work out repeated addition problems. <br> Children to share even numbers between 2 and 3 people. Children to practise halving and sharing between 3 by sorting shapes and cubes. <br> Children take part in practical activities to get observations on weight and capacity and comparing weights. <br> Children to identify and name properties of shapes. Introduce 3D shapes to the children. Children to find 3D shapes around the environment and explore the properties of 3D shapes | Children to estimate the number of cubes in a bowl and then count the actual amounts. <br> Children to compare weights by estimating with object is heavier and which is lighter. <br> Children to estimate how long an object is by estimating first and then counting the correct number of cubes. <br> Children to practise telling the time. Recap o'clock and move onto half past. <br> Children to order times of the day in order <br> Children to practise finding number bonds to 20 by using ten frames. <br> Children to find the missing numbers of number bond number sentences <br> Children to practise counting in $2 s, 5,10$ s using hundred squares. | Children to work out number sentences <br> Children to explore place value (tens and ones) <br> Children to use dots and circles to work out division number sentences <br> Children will have bowls to divide by 2 and 3 <br> Children to work out multiplication number sentences by drawing dots. <br> Children to draw 2 dots When working out multiples of 2 . <br> Children to identify features of 2D/3D shapes. Talking about vertices, sides, faces, corners and edges. <br> Children to draw lines to shapes to illustrate half and quarter. |


| Maths Early Learning Goals |  |
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| Number | Numerical Patterns |
| Children at the expected level of development will: <br> - Have a deep understanding of number to 10 , including the composition of each number. <br> - Subitise (recognise quantities without counting) up to 5. <br> - Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10 , including double facts. | Children at the expected level of development will: <br> - Verbally count beyond 20 , recognising the pattern of the counting system. <br> - Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. <br> - Explore and represent patterns within numbers up to 10 , including evens and odds, double facts and how quantities can be distributed equally. |


| Autumn 1 | Place value, adding, subtracting and reasoning: measures | Place value, adding, subtracting and reasoning: measures | Place value, mental calculations; Addition and subtraction using written methods | Place value, mental calculations; Addition and subtraction using written methods | Place value and mental calculations; Addition and subtraction using written methods | Place value and mental calculations; Ad using written metho |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Concepts } \\ & \text { and skills } \\ & \text { taught: } \end{aligned}$ | Count, read and write numbers Solve addition and subtraction problems Record time in hours and minutes - Number bonds | $\begin{aligned} & \text { - Read and write numbers in words and numerals } \\ & \text { Solve addition and subtraction problems } \\ & \text { Solve problems involving measures } \\ & \text { Solve problems related to minutes and hours in a } \\ & \text { day } \end{aligned}$ | Read, write and partition numbers into hundreds, tens one ones <br> Solve Add and subtract three-digit numbers Solve problems involving measures, money and issing numbers | - Compare, order, round and count in multiples of a numbers <br> - Solve problems involving time, money and measures <br> - Add and subtract problems involving four-digit numbers. | - Solve problems using mental calculations Read, write, round, order and compare numbers up to <br> - Solve multi-step addition and subtraction problems using a written method. | - Read, write, partition, order and <br> to <br> 10000000 and solve negativ <br> - Add, subtract, multiply and divi <br> - $\quad$ Solve multi-step problems involv statistics using a writt |
| ocus: | Multiplication, Division, Fractions \& Geometric Reasoning |  |  |  |  |  |
| Autumn 2 | Mental and written methods for multiplication and division; fractions and shape | Mental and written methods for multiplication and division; fractions and shape | Mental and written methods for multiplication and division; Fractions, shape and co-ordinates | Mental and written methods for multiplication and division; Fractions, shape, co-ordinates and angles | Mental and written methods for multiplication and division; Fractions, shape, co-ordinates and angles | Mental and written methods for multip Shape, co-ordinates and |
| $\begin{aligned} & \text { Concepts } \\ & \text { and skills } \\ & \text { taught: } \end{aligned}$ |  | - To identify the inverse of a calculation To find the fraction of an amount $(1 / 2,1 / 4,1 / 3)$ Recognise, find and identify $1 / 4,1 / 3,2 / 4$ and $3 / 4$ of an object or shape. <br> To solve problems involving measures and money Name and identify shape properties | - Count up in multiples of a number such as 3,8 and 4 <br> - Multiply and divide a two-digit number with a one digit <br> - Describe regular and irregular shapes and plot co-ordinates <br> - Recognise different fractions, find the equivalent and add and subtract fractions | - Recall multiplication and division facts up to $\times 12$ <br> Identify factor pairs <br> - Add, subtract and find equivalent fractions in decimals <br> - Recognise and plot co-ordinates and measure angles | - List multiples and identify factors and prime numbers <br> - Multiply and divide by 10,100 and 1000 <br> - Multiply and divide four-digit numbers <br> - Name the properties of 2 D and 3 D shapes equivalence in the form fractions and decimatify equivalence in the form fractions and decimals. | - Multiply and divide four-digit $n$ <br> - To solve multi-st digits problem operations <br> - Identify missing angles in shape co-ordinat |
| Focus: | Number, Addition, Subtraction, Reasoning \& Statistics |  |  |  |  |  |
| Spring 1 | Place value and measures; Mental and written methods for addition and subtraction | Place value and measures; Mental and written methods for addition and subtraction | Place value and measures; Mental and written methods for addition and subtraction | Place value and measures; Mental and written methods for addition and subtraction | Place value and measures; Mental and written methods for addition and subtraction | Place value, fractions and measures; methods for addition and |
| $\begin{gathered} \text { Concepts } \\ \text { and skills } \\ \text { taught: } \end{gathered}$ |  | - Compare and order numbers <br> - Recall addition and subtraction up to 100 using different methods <br> - Solve problems involving money and measures <br> - Draw and tell the time which is five minutes past/to and quarter to/past | - Read, write, order and compare numbers up to 1000 <br> - Add and subtract 3 -digit numbers using a range of methods <br> - Solve problems invelvinot time, measure and | $\begin{aligned} & \text { Find the perimeter of rectilinear shapes } \\ & \text { - Identify roman numerals up to } 100 \text { and recognise } \\ & \text { decimal equivalence of fractions } \\ & \text { Solve time probless and interpere tand present } \\ & \text { discrete and continuous data } \end{aligned}$ | - Solve multi-step problems involving 4-digit numbers |  |
| Focus | Multiplication, Division, fraction \& Geometric Reasoning |  |  |  |  |  |
| Spring 2 | Mental and written methods for multiplication and division; fractions. Shape properties and positional directions | Mental and written methods for multiplication and division; Fractions, shape properties and positional directions | Mental and written methods for multiplication and division; Fractions and shape properties and positional directions | Mental and written methods for multiplication and division; Fractions, shape properties and positional directions | Mental and written methods for multiplication and division. Fractions, decimals and percentages, geometry and positional directions | Mental and written methods for mul Shape properties and positio |
| Concepts and Skills taught: | - Double and halve and share and group numbers when dividing <br> - Name and recognise common 2d and 3d shapes - Solve one step word problems |  | - Recall 3,4 -and 8 -times table using division facts Draw, make and identify properties of 2d and 3d shapes <br> - Solve missing number problems involving | - Convert between units of measures Describe position of shapes on quadrant and describe the translation | - Identify angles in shapes, on a straight line and around a point <br> - Identify and describe translations and reflections Read and write decimals as fraction equivialents | - Multiply and divide four-digit remainders and decim - Describe and identify yositions to 2d and 3d |
| Focus | Number, Addition, Subtration, Reasoning \& Statistics |  |  |  |  |  |
| Summer 1 | Mental and written methods for addition and subtraction; Place value and measures | Mental and written methods for addition and subtraction; Place value and measures | Mental and written methods for addition and subtraction; Place value and measures | Mental and written methods for addition and subtraction and measures | Mental and written methods for addition and subtraction; Number problems | Mental and written methods for addit Number, fractions, percentages |
| Concepts and Skills taught: | - Compare, describe and measure different objects <br> for mass and length <br> - Recognise and draw a half and quarter of a shape/object <br> - Tell time up to an hour, thirty minutes and draw hands on clock faces | Mentally solve addition and subtraction calculations Add subtract units of different measures Add and subtrat three-digit numbers and solve related problems |  | - Mentally add, subtract and multiply and be able to explain reasoning <br> - Solve two-step addition and subtraction problems <br> - Read, write and convert times in 12- and 24-hour clock time | $\begin{aligned} & \text { - Add and subtract fractions with different } \\ & \text { denominators } \\ & \text { Calculate the epermeter using algebraic equations } \\ & \text { Solve multi-step word problem involving different } \\ & \text { measures } \end{aligned}$ |  |
| Focus | Multiplication, Division, Fractions \& Geometric Reasoning |  |  |  |  |  |
| Summer 2 | Mental and written methods for multiplication and division. Fractions, shape properties and positional directions | Mental and written methods for multiplication and division; Fractions and shape properties and positional directions | Mental and written methods for multiplication and division; Fractions, shape properties and positional directions | Mental and written methods for multiplication and division; Fractions, decimals, shape properties and positional directions | Mental and written methods for multiplication and division. Fractions, percentages and decimals. Shape properties and positional directions | Transitional tasks to secondary scho fractions, decimals and pe |
| Concepts and Skills taught: | - Scale up and down numbers Solve money problems Describe the position and movement | - Find a combination of coins that total an amount <br> - Describe 3d shapes using faces, edges and vertices <br> - Describe positional Imovements of shapes | - $\begin{gathered}\text { Identify parallel and perpendicular lines } \\ \text { Solve problems involving multipicication and division } \\ \text { Draw and identify properties of shape and describe } \\ \text { the change in orientation }\end{gathered}$ | - Estimate, compare and calculate problems involving measures and money - $\quad$ Recognise and write decimal equivalents Plot points to create specififed polygons Identify and draw acute and obtuse angles | - $\begin{array}{c}\text { Solve multi-step multiplication and division } \\ \text { probems including scaling up } \\ \text { - } \\ \text { Draw and measure given angles to nearest degree } \\ \text { Identify, and describe 3 3s shapes from 2d shape } \\ \text { representations }\end{array}$ |  |

