

## Maths Curriculum Overview 2023 - 2024

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
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) Positional language Number recognition Matching numbers and quantity	Forming numbers Numbers in our environment Different sizes Counting 2 groups of objects Length, measuring, longer & shorter	Counting rhymes and songs Number recognition and formation Addition - one more Addition - finding totals of two groups One more and one less Number sentences using + and =	Doubling Halving Number problems Time Measuring – using cubes/rulers	Number problems - missing numbers 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.  Counting fingers, counting number of jumps, star jumps and squats.  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.  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.  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.  Children to count numbers by using concrete objects. Children to then match the number of objects to the correct numeral.  Children to identify the position of a concrete object using locational language.  Number recognition using a variety of games and children to practise writing each number  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  Children to find numbers around the environment and visually recognise them. Children to then practise writing and identify number they are not sure about.  Children to draw around 3 different sized circles and label them as small, medium and big.  Children to use Numicon to count 2 different groups of holes and then count the total and write them in their books.  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.  Children to add one more to a number and write the total. Children to use Numicon to work out one more in their books.  Children to choose 2 number cards and find the total.  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.  Children to practise a simple/addition and subtract sentences.	Children to practise doubling number using Numicon. Children to practise writing a doubling number sentence.  Children to practise halving using two bowls. Children to half an even number by choosing a number card.  Children to solve a both addition and subtraction problems using cubes.  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.  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  Children work out addition number sentences using concrete resources and then using dots/number lines in their books  Children to work out subtraction number sentences using concrete resources and then using dots/number lines in their books  Children to explore heavy and lighter objects using scales  Children to name 2D shapes and then the children can create a picture using 2D shapes.  Begin work related to reception framework

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Identifying numbers Counting Number value using dots and objects One more & one less Largest & smallest numbers Ordering (3 numbers)	Number recognition & value One more using addition (+)- One less using take away (-) Doubling Money Halving Identifying and naming shape properties	Addition Subtraction Time sequencing Number bonds of 5 and 10 Measures – length and height	Subtraction Adding Repeated addition Sharing Capacity and weight 3D shapes	Estimation Weight Length and height Time sequencing Number bonds to 20 Counting in 2s, 5s and 10s	Addition Subtraction Division Multiplication 2D and 3D shapes Fractions
Concepts and skills taught	Children to practise their number formation and counting fingers on their hands.  Children to write numbers in their books and draw the same number of dots for each number.  Children to use counters to practise counting  Children to work out one more and one less of each number using cubes  Children to use number cards and then add one more to the number.  Children to write number sentences  Children to choose number cards and work out the largest and smallest number.  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.  Children to work out one more or less of a number using counters, number lines and cubes.  Children to practise recognising coins and then adding coins together.  Children to choose certain coins to make up a certain total.  Children to half a number using 2 bowls and counters.  Children to practise naming 2D shapes and work out how many sides/corners each shape has.  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.  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.  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.  Children to identify the hour of a day on a clock.  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.  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.	Children to take away 2 numbers by using cubes, ten frames, dots, number lines  Children to add 2 groups together and create number sentences by using cubes, ten frames, dots, number lines.  Children to practise repeated addition and counting in 2's. Children to use cubes and number lines to work out repeated addition problems.  Children to share even numbers between 2 and 3 people. Children to practise halving and sharing between 3 by sorting shapes and cubes.  Children take part in practical activities to get observations on weight and capacity and comparing weights.  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.  Children to compare weights by estimating with object is heavier and which is lighter.  Children to estimate how long an object is by estimating first and then counting the correct number of cubes.  Children to practise telling the time. Recap o'clock and move onto half past.  Children to order times of the day in order  Children to practise finding number bonds to 20 by using ten frames.  Children to find the missing numbers of number sof number sof number sentences  Children to practise	Children to work out number sentences  Children to explore place value (tens and ones)  Children to use dots and circles to work out division number sentences  Children will have bowls to divide by 2 and 3  Children to work out multiplication number sentences by drawing dots.  Children to draw 2 dots When working out multiples of 2.  Children to identify features of 2D/3D shapes. Talking about vertices, sides, faces, corners and edges.  Children to draw lines to shapes to illustrate half and quarter.
			Children to estimate each length before measuring and compare answers.		counting in 2s,5, 10s using hundred squares.	

Maths Early Learning Goals					
Number	Numerical Patterns				
Children at the expected level of development will:  Have a deep understanding of number to 10, including the composition of each number.  Subitise (recognise quantities without counting) up to 5.  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:  Verbally count beyond 20, recognising the pattern of the counting system.  Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.  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; Add using written method
Concepts and skills taught:	Count, read and write numbers     Solve addition and subtraction problems     Record time in hours and minutes     Number bonds	Read and write numbers in words and numerals Solve addition and subtraction problems Solve problems involving measures Solve problems related to minutes and hours in a day	Read, write and partition numbers into hundreds, tens one ones Add and subtract three-digit numbers Solve problems involving measures, money and missing numbers	Compare, order, round and count in multiples of a numbers     Solve problems involving time, money and measures     Add and subtract problems involving four-digit numbers.	Solve problems using mental calculations     Read, write, round, order and compare numbers up     to     100 000.     Solve multi-step addition and subtraction problems     using a written method.	Read, write, partition, order and to 10 000 000 and solve negative Add, subtract, multiply and divid denominators and identify equi Solve multi-step problems involvi statistics using a writter.
Focus:				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 multipl Shape, co-ordinates and a
Concepts	<ul> <li>Count up in 2s, 5s and 10s</li> </ul>	<ul> <li>To identify the inverse of a calculation</li> </ul>	Count up in multiples of a number such as 3, 8	<ul> <li>Recall multiplication and division facts up to x 12</li> </ul>	<ul> <li>List multiples and identify factors and prime</li> </ul>	<ul> <li>Multiply and divide four-digit nur</li> </ul>
and skills taught:	Identify half and quarter of a shape     Double and half numbers     Share different amounts into equal groups     Name different shapes	To find the fraction of an amount (1/2, %,1/3) Recognise, find and identify %, 1/3, 2/4 and % of an object or shape. To solve problems involving measures and money Name and identify shape properties	and 4 Multiply and divide a two-digit number with a one digit  bescribe regular and irregular shapes and plot co-ordinates  Recognise different fractions, find the equivalent and add and subtract fractions	Identify factor pairs     Add, subtract and find equivalent fractions in decimals     Recognise and plot co-ordinates and measure angles	Multiply and divide by 10, 100 and 1000     Multiply and divide four-digit numbers     Name the properties of 2D and 30 shapes     Add, subtract and multiply fractions and identify equivalence in the form fractions and decimals.	To solve multi-step problems operations Multiply and divide decir Identify missing angles in shape a co-ordinates
Focus:			Number, Addition, Sub	otraction, 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; N methods for addition and sul
Concepts and skills taught:	Count forwards and backwards across 100 Identify the value of coins and add and subtract them Identify number bonds up to 20 by adding and subtracting Draw the time on a clock face (half past)	Compare and order numbers Recall addition and subtraction up to 100 using different methods Solve problems involving money and measures Draw and tell the time which is five minutes past/tv and quarter to/past	Read, write, order and compare numbers up to 1000     Add and subtract 3-digit numbers using a range of methods     Solve problems involving time, measure and statistics	Find the perimeter of rectilinear shapes     Identify roman numerals up to 100 and recognise decimal equivalence of fractions     Solve time problems and interpret and present discrete and continuous data	Solve multi-step problems involving 4-digit numbers including measures     Read and write roman numerals up to 1000     Solve timetable, chart and graph problems by comparing, finding the sum and difference	Read, write and convert betwee     To use formula to solve alge     To solve problems involving m     fractions     Interpret and construct data or     graphs
Focus			Multiplication, Division,	Fractions & 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 multipl Shape properties and positiona
Concepts	Double and halve and share and group numbers	Solve multiplication and division word problems	Recall 3, 4-and 8-times table using division facts	Convert between units of measures	Identify angles in shapes, on a straight line and	Multiply and divide four-digit no
and Skills taught:	when dividing  Name and recognise common 2d and 3d shapes  Solve one step word problems	using related facts  Rotate shapes a quarter, half and three-quarters (clockwise and anti-clockwise)  Describe and sort 2d and identify symmetry	Draw, make and identify properties of 2d and 3d shapes     Solve missing number problems involving multiplication and division	Compare shapes and identify lines of symmetry     Describe position of shapes on quadrant and     describe the translation	around a point     Identify and describe translations and reflections     Read and write decimals as fraction equivalents	remainders and decima Describe and identify positions or Recognise, describe, draw and so to 2d and 3d sha
Focus				, Subtraction, 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 addition Number, fractions, percentages a
Concepts and Skills taught:	Compare, describe and measure different objects for mass and length     Recognise and draw a half and quarter of a shape/object     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 subtract three-digit numbers and solve related problems	Interpret data and present information pictograms, charts and graphs     Find the difference between different units of measures     Solve three-digit problems including finding the missing number     Tell the time on a roman numerals clock and identify time differences	Mentally add, subtract and multiply and be able to explain reasoning     Solve two-step addition and subtraction problems     Read, write and convert times in 12- and 24-hour clock time	Add and subtract fractions with different denominators     Calculate the perimeter using algebraic equations     Solve multi-step word problem involving different measures	Perform mental calculations with large number     Convert units of measures across capacity     Calculate the value of different
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 school fractions, decimals and perc
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     Describe 3d shapes using faces, edges and vertices     Describe positional movements of shapes     Find the equivalent fractions of numbers	Identify parallel and perpendicular lines     Solve problems involving multiplication and division     Draw and identify properties of shape and describe     the change in orientation	Estimate, compare and calculate problems involving measures and money     Recognise and write decimal equivalents     Plot points to create specified polygons Identify and draw acute and obtuse angles	Solve multi-step multiplication and division problems including scaling up     Draw and measure given angles to nearest degree Identify, and describe 3d shapes from 2d shape representations	Prime numbers/f.  Divisibility rul  Relationship between fractic percentages  Equivalence and simplif,  Solve algebraic and multi-ste