Deansbrook Infant School

Maths Curriculum Map

Maths Curriculum intent

Mathematics is an important part of everyday life. With this is mind, the purpose of mathematics at Deansbrook Infant School is to develop an ability to solve problems, to reason, to think logically and to work systematically, with fluency and accuracy, to set children up with the skills they need for life. Our ethos "Everyone can do maths" means that learning begins with the children's previous knowledge and progresses in small steps, with no ceilings put on their learning. All children are challenged and encouraged to excel. Our curriculum follows the principles of maths mastery where new mathematical concepts are introduced using a 'Concrete, Pictorial and Abstract' approach. This enables all children to experience hands-on learning with clear models and images to aid their understanding. Basic math skills are practised daily to ensure key mathematical concepts are embedded, easily recalled and that children can see the links between topics and apply their knowledge to various new problems.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	Recite numbers in order using a range of number songs and rhymes Develop an interest in numbers in the classroom environment Develop an interest in 2D shapes in the classroom environment and use these during play	Recite numbers to 10 Begin to count objects Use everyday language to talk about shapes of objects big/small/tall Begin to learn names of shapes during play	Number representation Symbols and mark making Subitising Positional/ spatial language Language of size	Number conservation Repeating patterns Sequencing language Visual spatial awareness	Number comparison More/less Capacity	Number problems Writing numerals Language related to money

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Reception	Match objects that are the same. Sort objects based on colour size or shape. Use Language such as little large small, tall long short. Understand that when making comparisons some sets can have ***more, fewer*** or the **same** as another set. Copy, continue and create, sound, colour, size and shape patterns.	Representing, comparing and writing numbers to 5 Count 5 objects Match number names to numerals and quantities Find 1 more 1 less than a number to 5 Understand that circles have 1 curved side and triangles have 3 straight sides. Understand that squares and rectangles have 4 straight sides and 4 corners Begin to hear and use positional language such as **next to, behind, beside, between, above, below.** Find 1 more 1 less than a number to 5 Exploring times of the day use language to describe when events happen. E.g. day, night, morning, afternoon, after, today, tomorrow	Introducing zero Continue to understand that when comparing numbers, one quantity can be ***more than, fewer*** or **the same as** another quantity. Continue to understand that all numbers are made up of smaller numbers. (composition of 4 and 5) Comparing mass using language heavy, heavier than, heaviest. Light, lighter than, lightest. Comparing capacity using language, full, nearly full, half full, empty.	Count to 6,7, 8 9 and 10. Represent 6,7 8,9 and 10 in different ways. Begin to understand that a pair is 2. Begin to combine 2 groups to find how many altogether. Begin to use the language to describe length and height e.g. ***longer, shorter, taller.*** Continue to order and sequence important times of the day and use vocabulary ***yesterday, today and tomorrow*** Explore number bonds to 10 using real objects. Explore 3D shapes and begin to name them. Explore patterns which use items more than once for example ABB,AAB,AABB	Continue to provide regular opportunities for children Count on and back within 10 Ordering numbers Matching and sort objects Instantly recognise small quantities(subitise) Build and identify numbers to 20(and beyond) Count on and back beyond 10 Understand that a quantity of a group can be changed by adding more. Understand that a quantity of a group can be changed by taking items away. Provide opportunities for children to complete jigsaws and shape puzzles Understand that shapes can be combined and separated to make new shapes.(Spatial reasoning)	Continue to provide regular opportunities for children Count on and back within 10 Ordering numbers Matching and sort objects Instantly recognise small quantities(subitise) Understand that double means twice as many. Recognise and make equal groups. Understand that some quantities will share equally between 2 groups(even and odd) Understand that places and models can be replicated opportunities to look at these from different positions. Use positional language to describe where objects are in relation to others.(Spatial reasoning)

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 1	Count forwards/backwards complete number tracks and find missing numbers10/20 Count out a set to represent a number to 10 / 20 Interpret mathematical symbols + and = Recognise, sort, name and describe common 2D shapes Compare numbers using language of more than / less than / fewer than /same as addition by combining 2 groups and part whole method To say what 1 more and 1 less than a number is 10/20 Understand and use ordinal numbers Ordinal numbers(1st,2nd,3rd)	Use the addition and equals sign in a number sentence Recognise name and describe 3D shapes. Describe, continue and create patterns with shapes Partition numbers into 2 or more parts using part, part, whole method Add 1 digit numbers to 10 including 0 by counting on Find number bonds to 10 Solve addition stories Subtract 2 single digit numbers to 10-using pictures *and crossing out method, part, whole method and finding the difference* Fact families for addition and subtraction Number bonds within 10 Subtraction -taking away and counting back Count forwards and backwards and write numbers to 20 in numerals and words	Count, read and write numbers forwards and backwards from 0-20 Use the language of greater, least, less, more, and equal to. When comparing numbers and groups Solves one step problems involving addition including missing number problems. Fact families using bar model and tens frame Identify, order and partition teen numbers	Count read and write numbers to 50 Partition numbers to 50 using tens and ones and part, whole method Counts in multiples of 2s 5s and 10s Compares, describes and solves practical problems for mass/weight/length /height Recognise, find and name half as a one of 2 equal parts using shapes	Recognise, find and name half as a one of two equal parts using shapes and quantities Recognise, find and name quarter as a one of four equal parts using shapes and quantities Add and subtract 1 and 2 digit numbers to 20 Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9 Solve one step problems involving multiplication and division using concrete objects, pictorial representations and arrays Use the language of position, direction and movement Use mathematical language to describe turns	Subtract one-digit and two-digit numbers to 20, including 0 Count, read and write to and across 100 forwards and backwards. Identify and represent numbers Recognise and use language related to dates, days, weeks, months and years Recognise and know the value of different denominations of coins and notes Compares, describes and solves practical problems for volume/capacity Tell the time to the hour and half past the hour and draw hands on a clock face

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 2	Read, write, count and order numbers from 0 up to 100 in numerals and words Compare numbers up to 100 using =,<> Represent numbers to 100 using a range of concrete materials Recognise the place value of each digit in a two digit number and use this knowledge to solve problems Use concrete, pictorial and abstract representations in their part whole model to add and subtract a two digit number and a one digit number and 2 2 digit numbers Count in steps of 2,3 5 from 0 and 10s from any number forwards and backwards Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100	Subtract numbers using concrete objects, pictorial representations, and mentally, including: a two-digit number and ones; a two-digit number and tens; two two-digit numbers; Subtract a 1 digit number from a 2 digit number by regrouping. Solve problems involving *multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context* Calculate mathematical statements for division within the multiplication tables. Recognise, find, name and write fractions 1/3, ½, 2/4 and ¾ of a quantity. Solve simple problems in a practical context involving addition and subtraction of money of the same unit including giving change Interpret and construct simple pictograms, tally charts, block diagrams and tables Ask-and-answer questions about totalling and comparing categorical data	Identify and describe the properties of 2D and 3D shapes Add numbers applying increasing knowledge of mental methods including two 2 digit numbers not crossing 10. Subtract numbers using concrete objects including: two two-digit numbers crossing 10. Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context Know the number of minutes in an hour and the number of hours in a day	Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context Recognise, find, name and write fractions 1/3, ½, 2/4 and ¾ of a quantity. Put fractions in order Measure length and height to the nearest centimetre Tell and write the time to 5 and 15 minute intervals	Use concrete, pictorial and abstract representations to add and 2 2-digit numbers using partitioning Use commutativity to generate number facts, solve missing number problems and check calculations **Use mathematical language to describe position, direction and movement** **Measure, compare and order capacity, length and mass** **Read scales in steps of 2,3,5 and 10** **Add, subtract, compare values and find change in pounds and pence** **Solve problems involving money** Read, write and draw the time to fifteen minute intervals	Choose and use appropriate standard units to estimate and measure mass (kg/g); **Measure, compare and order capacity, length and mass** Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context Calculate mathematical statements for division within the multiplication tables Recognise, find, name and write fractions 1/3, ½, 2/4 and ¾ of a quantity **To choose and use appropriate standard units to estimate and measure temperature**