DINNINGTON FIRST SCHOOL MATHS CURRICULUM

Curriculum Intent	At Dinnington First School, our Maths curriculum follows the White Rose Maths scheme and is carefully designed to inspire all children. We aim to ensure that every child becomes fluent in the fundamentals of mathematics, can quickly recall key facts with confidence, and is able to reason mathematically. Through problem solving and opportunities to apply their knowledge in different contexts through thinking-skills tasks, children are encouraged to think deeply and develop a love of maths. Above all, we strive to make learning maths fun, engaging, and accessible for all. At Dinnington First School these skills are embedded within Maths lessons every week and are developed consistently over time. We believe that all pupils can enjoy success in maths if they have a resilient mindset for learning, are supported in developing their understanding through a logical progression of concrete, pictorial and abstract elements and if they foster a genuine enjoyment for the subject. We are committed to ensuring that every pupil develops as a mathematician, so that in their life beyond our school they are equipped with the essential building blocks of good number fact recall and mental maths knowledge as well as the ability to reason and use written techniques to successfully solve problems.

Concepts **Skills**

	Ongoing	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Nursery	**KIRFS**: • Recognise and recite number names to 3 & Touch Count to 3. • Recognise and recite number names to 5 & Touch Count to 5. • Match amounts to the numeral for quantities up to 5 & Understand the last numeral reached is how many. • Sort and compare quantities up to 5 & subitise up to 3 • Subitise up to 4 & understand positional language • Subitise up to 5 & recognise common 2D shapes.	**Number** **Counting within 5** Daily counting – how many? , Rote counting past 5, selecting small numbers of objects. Introduce Ten Town characters 0-5. Recognising numerals 0-5 Begin to show the correct number of fingers to represent numbers up to 5. Understand position through words alone	**Number** **Counting and recognising numbers up to 5** Daily counting. Develop fast recognition of up to 3 objects. ('subitising'). Say one number for each item in order: 1,2,3,4,5. Show 'finger numbers' up to 5. Number Sense – subitising 1-5 Compare quantities using language: 'more than', 'fewer than'. **2D and 3 D shape** Talk about and explore 2D and 3D shape.	**Number** **Counting and recognising numbers up to 10** Daily counting. Rote counting to 10 and beyond. Know that the last number reached tells you how many in total Link numerals and amounts: Number Sense – subitising 6-10. **2D and 3 D shape & patterns** Talk about and explore 2D and 3D shapes. Talk about and identify the patterns around them.	**Number** **Counting, comparing and recognising numbers up to 10** Consolidate counting and place value from Block 3. Solve real world mathematical problems with numbers up to 5. Compare quantities using language: 'more than', 'fewer than'. **2D and 3 D shape & patterns** Talk about and explore 2D and 3D shapes. Begin to describe a sequence	**Number** **Numbers to 10 and beyond** Daily counting. Link numerals and amounts: Experiment with their own symbols and marks as well as numerals. **2D and 3 D shape & patterns** Combine shapes to make new ones Extend, create and correct ABAB patterns **Measurement** Make comparisons between objects relating to size, length, weight and capacity	**Number** **Numbers to 10 and beyond** Daily counting. Link numerals and amounts: Experiment with their own symbols and marks as well as numerals. **2D and 3 D shape & patterns** Combine shapes to make new ones Extend, create and correct ABAB patterns **Measurement** Make comparisons between objects relating to size, length, weight and capacity

	Ongoing	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Reception	**KIRFS**: • **Say in order numbers 0 to 5 and 5 to 0 and know what number is next in the sequence.** • **Say in order numbers 0 to 10 and 10 to 0 and know what number is next in the sequence.** • **Automatically recall number bonds to 5. & Partition numbers to 5 into two groups.** • **Compare quantities up to 10 in different contexts** • **Automatically recall doubles facts up to 5+5** • **Recite number names in order up to 20**	**Number** **Counting and recognising number within 10** • correspondence • Sorting and matching • Repeating patterns • Subitising to 3 • Matching amounts to 5 • Recognition and ordering numbers to 10 • Using ten frames • Comparing amounts **Shape and Measure** • Positional language 2D shapes	**Number** **Counting and recognising numbers up to and beyond 10** • Subitising up to 6 • 1 More/less • Using number lines • Matching amounts to 10 to cardinal value • Number bonds to 5 • Teen number recognition • Partitioning teen numbers (10+?)	**Number** **Subitising within 10, Partitioning 10** • 3D shapes • Part/whole partitioning to 10 • Subitising practice **Addition and Subtraction** • Number bonds within 10 • Subtraction up to 10 • Number bonds to 10 • Addition within ten • 2 more/less **Shape and Measure** • 3D shapes	**Number** **Place value, counting, comparing and recognising numbers up to 20** • Subitising practice • Sequencing • Teen numbers recap • More/less teen numbers • Number bonds to 10 practice • Comparing/ordering teen numbers • Odd/even numbers. **Shape and Measure** • Length and height	**Number** **Place Value, Doubling & Halving, Addition & Subtraction** • Sharing equally • Doubling/halving • Subtraction within 10 practice • Number bonds within 10 practice • Addition and subtraction number sentence within 10	**Number** **Place Value, Doubling & Halving, Addition & Subtraction** • Addition and subtraction • Number sentences within 20 • Doubling/halving practice • Subitising up to 10 • Teen number practice **Shape and Measure** • Symmetry • Estimating • Capacity

	Ongoing	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Y1	**KIRFS**: • Numbers 1-20 in numerals and words • Doubles and halves to 10 • Place Value • Number bonds within to 10 and to 20	**Number** **Place Value** **Numbers within 10** Count forwards and backwards 1 more / less <>=	**Number** **Addition and Subtraction within 10** Part –Whole models Addition fact families & bonds within 10 **Geometry** **Shape** Recognise & name 2D & 3D shapes	**Number** **Place Value within 20** Understand the number line to 20 Estimate on a number line **Addition & Subtraction within 20** Find and make number bonds to 20 Doubles and near doubles Subtract by finding the difference	**Number** **Place value within 50** Count from 20 to 50 Count making groups of 10 Partition into 10s and 1s Estimate on a number line to 50 **Measurement** **Length & Height** Compare lengths & heights Measure using objects and cm **Mass & Volume** Use 'heavier and lighter' 'full & empty' correctly Compare mass and volume.	**Number** **Multiplication % Division** Count in 2s, 5s and 10s Make arrays and doubles Add equal groups. **Fractions** Find ½ and ¼ of an object or shape or quantity **Geometry** **Position & Direction** Describe position : left, right, forwards, backwards, above and below and use ordinal numbers.	**Number** **Place value within 100** Count from 50 to 100 Count in 10s to 100 1 more and less **Measurement** **Money** Recognise coins and notes **Time** Before and after Days of the week Months of the year Tell the time to the hour and half hour.

	Ongoing	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Y2	**KIRFS:** • 2,5 & 10 x tables, • Number bonds within 20 • Doubles and halves of numbers to 20 • Read and write numbers to 100	**Number** **Place Value within 100** Recognise 10s and 1s Partition numbers flexibly Estimate numbers on a number line to 100 **Addition & Subtraction** Bonds to 10 Bonds within 20 Bonds to 100 (tens) Add by making 10 Add three single digit numbers.	**Number** **Addition & Subtraction** Cont'd from Block 1 **Geometry** **Shape** Recognise 2D and 3D shapes Count sides, edges, faces & vertices Recognise & draw lines of symmetry	**Measurement** **Money** Count money – Pence Choose notes & coins Make £1 & find change **Number** **Multiplication & Division** Add equal groups Use arrays Doubles and halving 2 x table Odd and even numbers 5 & 10 x tables including dividing facts	**Measurement** **Lengths & Height** Measure in cm and m Compare & order lengths and heights **Mass, Capacity & Temperature** Measure in g, kg, ml, l, Compare and solve calculations involving mass, volume, capacity & temperature	**Number** **Fractions** Recognise equal and unequal parts Recognise & find ½ , ¼, 1/3, and 1 whole. **Measurement** **Time** Tell the time using O'Clock, half past, quarter to and past Tell the time to the nearest 5 mins Know how many hours in a day.	**Statistics** **Tally charts, block charts and pictograms** Make tally charts and use them to draw pictograms and block diagrams. Interpret pictograms. **Geometry** **Position & Direction** Describe movement and turns clockwise / anticlockwise.

	Ongoing	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Y3	**KIRFS:** • Bonds within 20 • Bonds within 100, • X-tables, • Multiples of 50 and 100	**Number** **Place Value to 1000** Partition numbers flexibly to 1000 Estimate on a number line to 1000 Find 1,10 or 100 more or less Count in 50s **Addition & Subtraction** Add and subtract 100s Add and subtract 10s across 100 Add and subtract two numbers with exchange Know compliments to 100 Estimate and use inverse operations to check answers	**Number** **Addition & Subtraction** Block 1 Cont'd **Multiplication & Division** Recognise multiples of 2,5 and 10 Recall facts from the 3,4 and 8 x tables	**Number** **Multiplication & Division** Reason about multiplication Multiply 2digits by 1 with exchange Divide 2 digits by 1 with remainders Scaling **Measurement** **Length & Perimeter** Measure in mm, cm and m. Compare lengths and find equivalent lengths Solve + and- problems with length. Measure & calculate perimeter.	**Number** **Fractions** Understand denominators of unit fractions and numerators of non-unit fractions Compare fractions Count in fractions on a number line Find equivalent fractions **Measurement** **Mass & Capacity** Measure in g, kg, ml and l. Find equivalent measurements Solve addition and subtraction problems involving measurement.	**Number** **Fractions** Add and subtract fractions Find unit and non unit fractions for a set of objects. Reason with fractions. **Measurement** **Money & Time** Convert £ and p Solve addition and subtraction problems involving money including calculating change.	**Geometry** **Shape** Turns and angles including right angles Horizontal and vertical, parallel and perpendicular. Recognise and describe 2D and 3D shapes **Statistics** **Pictograms, Bar charts & 2-way tables** Interpret and draw pictograms, bar charts and two-way tables.

	Ongoing	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6
Y4	**KIRFS** • Multiples of 1000 and 25 • X-tables (all) • Scaling by 10 • Fractions and decimal equivalents	**Number** **Place value within 10,000** Represent numbers to 10,000 Flexible partitioning of numbers to 10,000 Estimate on a number line to 10,0000 Find 1,10, 00 or 1000 more or less. Roman numerals Round to the nearest 10, 100, 1000 **Addition & Subtraction** Add and subtract 4 digit numbers with exchanges using efficient methods. Estimate answers and check with inverse operations	**Number** **Multiplication & Division** 3,6,9,7,11 and 12 x table facts. Multiply by 1 and 10 Multiply 3 numbers **Measurement** **Area** Find area by counting squares Make shapes with a given area.	**Number** **Multiplication & Division** Factor pairs Multiply & divide by 10, 100 and 1000 Multiply & divide 3 digit numbers by 1 digit Develop efficient multiplication and division written methods **Measurement** **Length & Perimeter** Know equivalent lengths, Calculate perimeter and missing lengths of rectilinear shapes Find perimeter of regular and irregular polygons.	**Number** **Fractions** Count beyond 1 in fractions Partition, compare and order a mixed number Improper fractions →mixed numbers Find equivalent fractions Add two or more fractions Subtract fractions including from a whole and mixed numbers. **Decimals** Write tenths and hundredths as fractions and decimals.	**Number** **Decimals** Make a whole with 10ths and 100ths Partition decimals flexibly. Compare, order and round decimals to the nearest whole number. **Measurement** **Money** Write money using decimals Convert £ and p Estimate money Calculate & solve problems with money. **Time** Recap Years, months, weeks and days Tell the time using hours, minutes and seconds Convert between analogue and digital Convert 24h clock Solve time problems.	**Geometry** **Shape,** Identify angles and turns (acute, obtuse , right angle etc) Compare & order angles Properties of triangles and quadrilaterals and polygons Finding lines of symmetry Complete a symmetrical figure. **Position & Direction** Describe a position using coordinates Plot coordinates Draw 2D shapes on a grid Describe a translation on a grid. **Statistics** **Interpreting Charts , Line Graphs.** Interpret a range of charts Comparison, sum and difference Interpret and draw line graphs