



Maths Long Term Plan

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Nursery	<p>Colours Red, blue, yellow, green, purple</p> <p>Matching Matching objects</p>	<p>Sorting Sorting by colour shape and size. Recognising sorting rules</p> <p>Number 1 Subitising, counting, numeral</p> <p>Number 2 Subitising - dice pattern, random pattern, different sizes Counting, numeral</p> <p>Patterns Extend AB and ABC patterns (colour, outdoor, movement) Fixing patterns</p>	<p>Numbers 3, 4 & 5 1:1 counting Subitising Number Composition Shapes: triangles, squares, rectangles, pentagons Number songs</p>	<p>Number 6 10 frame - introduction</p> <p>Height & Length Tall, long and short</p> <p>Mass Explore the mass of objects Use a balance scale</p> <p>Capacity Full and empty, nearly full and nearly empty Comparing capacity</p>	<p>Sequencing Sequencing: a nursery rhyme, daily routine, familiar story</p> <p>Positional Language On or under, in or out, in front or behind</p> <p>More than/Fewer than More, fewer, more or fewer</p> <p>2D and 3D Shape Circles, triangles, rectangles Cubes, cuboids, cylinders, spheres</p>	<p>Number Composition Composition of 3, 4, 3 and 4</p> <p>What comes after? Using a number track, hidden number, build a number line</p> <p>What comes before? Using a number track, missing number</p> <p>Numbers to 5 Problem solving Match numeral to amount</p>
Reception	<p>Getting to know you!</p> <p>Match, sort and compare Match objects and pictures Identify a set Sort objects to a type Explore sorting techniques Create sorting rules Compare amounts</p> <p>Talk about measure and patterns Compare size and mass Compare capacity Explore simple patterns Copy, continue and create simple patterns</p>	<p>Its me 1, 2, 3 Find 1, 2 and 3 Subitise 1, 2 and 3 Step 3 Represent 1, 2 and 3 1 more and 1 less Composition of 1, 2 and 3</p> <p>Circles and triangles Identify and name circles and triangles Compare circles and triangles Shapes in the environment Describe position</p> <p>1,2,3,4,5 Find, subitise and represent 4 and 5 1 more/ 1 less Composition of 4 and 5 Composition of 1 - 5</p> <p>Shape with 4 sides Identify and name shapes with 4 sides Combine shapes with 4 sides Shapes in the environment My day and night</p>	<p>Alive in 5 Introduce zero Find 0 to 5 Subitise 0 to 5 Represent 0 to 5 1 more/ 1 less Composition Conceptual subitising to 5</p> <p>Mass and capacity Compare mass Find a balance Explore capacity Compare capacity</p> <p>Growing 6, 7,8 Find and represent 6, 7 and 8 1 more/ 1 less Composition of 6, 7 and 8 Make pairs-odd and even Double to 8 (find a double) Combine 2 groups Conceptual subitising</p> <p>Length, Height and time Explore length Compare length Explore height Compare height</p>	<p>Length, height and Time (cont) Talk about time Order and sequence time</p> <p>Building 9 and 10 Find 9 and 10 Compare numbers to 10 Represent 9 and 10 Conceptual subitising to 10 1 more/ 1 less Composition to 10 Bonds to 10 (2 parts) Make arrangements of 10 Bonds to 10 (3 parts) Doubles to 10 (find a double) Doubles to 10 (make a double) Explore even and odd</p> <p>Explore 3D shapes Recognise and name 3-D shapes Find 2-D shapes within 3-D shapes Use 3-D shapes for tasks 3-D shapes in the environment Identify more complex patterns Copy and continue patterns Patterns in the environment</p>	<p>To 20 and beyond Build numbers beyond 10 (10 -13) Continue patterns beyond 10 (10-13) Build numbers beyond 10 (14-20) Continue patterns beyond 10 (14-20) download Verbal counting beyond 20 Verbal counting patterns</p> <p>How many now? Add more How many did I add? Take away How many did I take away?</p> <p>Manipulate, compose and decompose Select shapes for a purpose Rotate shapes Manipulate shapes Explain shape arrangements Compose shapes Decompose shapes Copy 2-D shape pictures Find 2-D shapes within 3-D shapes</p> <p>Sharing and Grouping Explore sharing</p>	<p>Sharing and grouping (continued) Grouping Even and odd sharing Play with and build doubles</p> <p>Visualise, build and map Identify units of repeating patterns Create own pattern rules Explore own pattern rules Replicate and build scenes and constructions Visualise from different positions Describe positions Give instructions to build Explore mapping Represent maps with models Create own maps from familiar places</p> <p>Create own maps and plans from story situations</p> <p>Make connections Deepen understanding Patterns and relationships</p>

					Sharing Explore grouping	
Year 1	<p>Place Value (within 10) Sorting, counting and representing objects Recognise numbers as words Count on from any number 1 more, 1 less Count backwards within 10 Compare and order numbers Number lines</p> <p>Addition and Subtraction (within 10) Write number sentences Fact families Number bonds within and to 10</p>	<p>Addition and Subtraction (within 10) Add together/add more Subtraction - take away and on a number line Add or subtract 1 or 2</p> <p>Geometry Recognise, name and sort 3D shapes Recognise, name and sort 2D shapes Patterns with 2D and 3D shapes</p>	<p>Place Value (within 20) Count forwards and backwards, write numbers to 20 in words and numerals 10s and 1s One more/one less Compare and order groups and numbers</p> <p>Addition and Subtraction (within 20) Add by counting on Add by making 10 Subtraction not crossing/crossing 10 Related facts</p>	<p>Place Value (within 50) Counting forwards and backwards Compare and order numbers Partition numbers One more/one less</p> <p>Length and Height Compare lengths and height Measure lengths Add and subtract lengths</p> <p>Mass and Volume Introduce, measure and compare mass and capacity Introduce volume</p>	<p>Multiplication and Division Count in 2s, 5s and 10s Make equal groups Make arrays Doubles Make equal groups - grouping Make equal groups - sharing</p> <p>Fractions Making and finding halves and quarters</p> <p>Position and Direction Describe turns Describe position - left, right, forwards, backwards, above and below Ordinal numbers</p>	<p>Place Value (within 100) Count from 50 to 100 Tens to 100 Partition into tens and ones The number line to 100 1 more, 1 less Compare numbers with the same number of tens Compare any two numbers</p> <p>Money Recognising coins Recognising notes Counting in coins</p> <p>Time Before/after Dates Time to the house/half hour Writing time Comparing time</p>
Year 2	<p>Place Value Numbers to 20 Recognise the place value of each digit in a two digit number Partition numbers to 100 Use place value chart</p> <p>Ordering, comparing and estimating numbers Reading and writing numbers to 100 in numerals and in words Counting in 2s, 3s, 5s and 10s</p> <p>Addition and subtraction Addition and subtraction bonds to 20 Bonds to 100</p>	<p>Addition and Subtraction Adding and subtracting 1s/ 10s 10 more /10 less than any 2-digit number Adding and subtracting two 2-digit numbers Missing number problems</p> <p>Shape Recognise and sort 2D and 3D shapes Count sides and vertices of 2D shapes Count faces, vertices and edges of 3D shapes Lines of symmetry on shapes Make patterns with 2D and 3D shapes</p>	<p>Money Recognising coins and notes Counting money -pence, pounds Counting money -notes and coins Making the same amount Comparing money Finding the total and giving change Finding the difference</p> <p>Multiplication and Division Recognising,making and adding equal groups Multiplication sentences using the x symbol Multiplication sentences from pictures Arrays Doubles 2 &,5 times tables</p>	<p>Length and height Compare lengths and height Measure length Compare and order lengths Four operations within length Problem solving</p> <p>Mass, Capacity and Temperature Measure and compare mass Measure mass in grams and kilograms Measure capacity Compare volume Millilitres and litres Four operations with mass and volume Write and order temperature</p>	<p>Fractions Finding a $\frac{1}{2}$, $\frac{1}{4}$ $\frac{1}{3}$ $\frac{3}{4}$ Unit/ non- unit fractions Equivalent fractions Counting in fractions Problem solving with fractions</p> <p>Time Telling and writing the time to o'clock, half past, quarter past,and in 5 minute intervals Compare and sequence intervals of time Know the number of minutes in an hour and the number of hours in a day</p>	<p>Statistics Make tally charts Draw and interpret pictograms Block diagrams</p> <p>Position and Direction Describing position and Movement Problem solving with position Describing turns Making patterns with shape</p>
Year 3	<p>Time A Months, years, hours in a day Telling time to 5 minutes, the minute</p> <p>Place Value Represent, partition, compare and order numbers to 100, 1000 Find 1, 10, 100 more or less Count in 50s</p>	<p>Addition and Subtraction Add and subtract 2 then 3 digit numbers, including exchange Complements to 100 Estimating Inverse operations</p> <p>Multiplication and Division A Arrays Multiples of 2, 5 and 10 Sharing and grouping</p>	<p>Multiplication and Division B Multiply by 2 ,4 and 8 (cont) Multiplying and dividing 2 digit number by single digit Divide 100 into 2,4 5 and 10 parts Divide with remainders Scaling</p> <p>Length and Perimeter Measure and compare lengths Equivalent lengths cm and m</p>	<p>Fractions A Recap on halves, quarters and thirds, equivalences, unit fractions and non unit fractions</p> <p>Mass and Capacity Measure, compare, add and subtract mass Measure, compare, add and subtract capacity Temperatures</p>	<p>Fractions B Making the whole Tenths as decimals Fractions on a number line Fractions of amounts Equivalent Compare, order, add and subtract fractions</p> <p>Money Pounds and pence</p>	<p>Time B am/pm, 24hr clock Durations Measuring time on seconds</p> <p>Shape Right angles Comparing and drawing angles Horizontal, vertical Parallel and perpendicular Recognise 2D and 3D shapes Make 3D shapes</p>

	Addition and Subtraction Apply number bonds within 10 Add and subtract 1's, 10's, 100's, including across tens and hundreds	The three times table Multiply by 2, 4 and 8	Add and subtract lengths Measure and calculate perimeters		Convert pounds and pence Add money Subtract money Find change	Statistics Tally charts Pictograms Bar charts tables
Year 4	Shape Identify, compare and order angles Triangles Quadrilaterals Lines of symmetry Completing symmetrical patterns Place Value Represent, order, partition and compare numbers to 1000, 10,000 1, 10, 100, 1000 more and less Roman Numerals Rounding to nearest 10, 100 and 1000 Addition and Subtraction Add and Subtract 4-digit numbers, including exchange	Addition and Subtraction Add and Subtract 4-digit numbers, including exchange Estimate and checking strategies Measurement: Area Counting squares Calculating and comparing areas Multiplication and Division A Multiples of 3 Multiplying and dividing by 3, 6 and 9 Multiplying by 7, 11 and 12 Multiplying by 1 and 0 Dividing a number by 1 and itself Multiplying 3 numbers	Multiplication and Division B Factor pairs Multiplying 3 digit numbers by a single digit Divide 3 digit numbers by a single digit Length and perimeter Measuring and equivalent lengths: mm, cm, m and km Measure perimeter Perimeter of rectangles and rectilinear shapes Fractions Unit and non-unit fractions	Fractions Tenths Equivalent fractions Fractions greater than 1 Adding and subtracting fractions Fractions of quantities Decimals Tenths and hundredths as decimals, on number lines and on place value grids Divide 1 and 2 digit numbers by 10 and 100	Decimals Write, compare and order decimals Round decimals Halves and quarters Money Pounds and pence Ordering, estimating	Time Hours, minutes, seconds Years, months, days Analogue to digital 12 hr and 24 hr Statistics Read and interpret charts Line graphs Position and Direction Draw and move on a grid Describe movement on a grid
Year 5	Position and Direction Coordinates, translation, symmetry, reflection Place Value Roman Numerals Numbers to 1,000,000 Rounding to nearest 10, 100, 1000, 1 within 100,000 and 1,000,000 Addition and Subtraction Mental strategies Written methods up to 6 digits Rounding Inverse operations Multi-step problems	Multiplication and division A Multiples, factors, prime numbers, square numbers, cube numbers Multiplying and dividing by 10, 100, 1000 Fractions A Equivalent fractions Improper fractions Mixed numbers Comparing and ordering fractions Adding and subtracting fractions	Multiplication and division B Multiply up to 4 digit numbers by 2 digits Divide 4 digit numbers by a single digit, including remainders Fractions B Multiplying fractions by an integer Fractions of amount Fractions as operators	Decimals and percentages Decimals up to 3 digits Rounding, ordering and comparing decimals Understanding percentages Equivalent F. D. P. Perimeter and Area Measure and calculate perimeter of rectangles and rectilinear shapes Area of rectangles, compound shapes and irregular shapes	Statistics Charts Line graphs tables / two way tables timetables Properties of shape Identify, compare and order angles Measuring and drawing angles with a protractor Triangles and quadrilaterals Regular and irregular polygons Reasoning about 3D shape Negative Numbers Comparing, ordering, adding and and subtracting	Decimals Adding and subtracting decimals within 1, beyond 1 Decimal sequences Multiplying and dividing decimals by 10, 100, 1000 Complements to 1 Converting units Weight, length, metric units, imperial units Converting units of time Timetables Measurement : volume Comparing volumes Estimating volumes and capacity
Year 6	Place Value Numbers to 10,000,000 Compare and order any integers Rounding Negative numbers	Addition, subtraction, multiplication and division (cont) Multiply up to 4 digit by 2 digit Short division Long division Order of operations	Fractions, decimals, percentages Understanding percentages Fractions to percentages Equivalent and ordering FDP Percentage of amounts	Shape (cont) Angles in triangles, special quadrilaterals and regular polygons Draw shapes and nets of 3D shapes accurately	Position and direction Four quadrants Reflection Translation Revision and Test Week	Themed projects, consolidation and problem solving

	<p>Addition, subtraction, Multiplication and division Add and subtract integers Factors, multiples, rules of divisibility Prime, cube and square numbers</p>	<p>Mental calculations and estimation</p> <p>Fractions Equivalent fractions Comparing and ordering Adding and subtracting fractions Adding and subtracting mixed numbers Multiplying fractions by integers and fractions Divide fractions by an integer Fractions of amount</p>	<p>Decimals Decimals up to 3 d.p. Multiplying and dividing by 10, 100 and 1000 Multiplying and dividing decimals by integers Decimals as fractions Fractions to decimals</p> <p>Converting Units Metric measures Imperial measures</p> <p>Area, perimeter, volume Calculating area, perimeter and volume Area of triangles Area of parallelograms</p> <p>Shape Measure with protractor Draw lines and angles accurately Angles on a straight line Angles around a point Calculating angles Vertically opposite angles</p>	<p>Algebra Finding rules Forming expressions Substitution Forming equations Solving equations Finding values - single and pairs</p> <p>Statistics Read, interpret and draw line graphs Circles Draw and interpret pie charts Pie charts with percentages Finding the mean</p> <p>Ratio Ratio and fractions Calculating ratio Scale factors Ratio and proportion</p>	<p>Targeted revision and Statutory assessments</p>	
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