Longridge CE Primary Shool – Maths skills progression.

Maths Intent

At Longridge CE Primary school, we believe that everyone can achieve in maths. Therefore, we offer a curriculum that is child centred and fun to teach. A curriculum that will maximise the development of every child's ability and academic achievement. Traditionally, maths has been taught by memorising key facts and procedures, which tends to lead to superficial understanding that can easily be forgotten. At Longridge CE Primary School, we believe that children should be able to select which mathematical approach is most effective in different scenarios. To be able to do this, we use the 'Maths no problem,' an approach that incorporates concrete, pictorial and abstract all of which help children to explore and demonstrate mathematical ideas, enrich their learning experience and deepen understanding.

We believe that maths is essential to everyday life and can be applied in other subject areas. Maths is critical to science, technology and engineering, and necessary for most types of employment. Therefore, we want to equip our pupils with the knowledge and skills to understand the world in which they live, have the ability to reason mathematically, have an appreciation of the power and beauty of mathematics, a sense of enjoyment and curiosity about the subject, and be able to problem solve and apply their learning in real life situations.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Number	Recognise numbers to 5￼Count reliably to 5￼Sorting to 5￼Numbers to 10￼Count reliably to 10￼Numbers to 20￼Sorting to 20￼Odds and evens￼Count objects, actions and rhymes￼Link number symbol with its cardinal number value	Count to 100 (first 0-10, then to 20, then to 40, then to 100)￼Read and write numbers 0-100￼Order numbers from 0-100￼Number bonds to 10￼Number stories￼Number patterns￼Place value – tens and ones￼How much more?￼1 more/less than a 2 digit number	Count to 100￼Read and write numbers to 100￼Compare and arrange numbers to 100￼Make number patterns￼Count in 2s, 5s, 10s	Count to 1000￼Count in hundreds, tens, ones.￼Count in 50s￼Count in 3s, 4s, 8s and 11s￼Tell the value of a digit in a number￼Compare and arrange numbers within 1000￼Complete number patterns	Count to 10,000￼Count in thousands, hundreds, tens and ones.￼Count in 25s￼Count in 6s, 7s, 9s, 12s￼Arrange / order numbers within 10,000￼Complete number patterns￼Round numbers, estimate sum and difference.	Read and write numbers to 1,000,000￼Tell the place value of a digit in a number￼Compare and order numbers within 1,000,000￼Count forwards, backwards in steps of 1000, 10,000 and 100,000	Read and write numbers to 10,000,000￼Order numbers to 10,000,000￼Tell the place value of a digit in a number￼Round numbers to the nearest 10, 100, 1000, 10,000, 100,000 and million￼Order and compare numbers including integer, decimals and negative numbers.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Addition and Subtraction	Number bonds to 5 One more/less to 5 Solve simple problems with numbers to 5 Number bonds to 10 Recall some doubles facts One more/less to 10 Number bonds to 20 One more /less to 20 Count on or back to find an answer.	Add by counting on Make addition stories Written addition equations Subtract by crossing out Subtract using number bonds Subtract counting back Make subtraction stories Write subtraction equations Make family of addition and subtraction facts Add by making 10 Add by adding ones Subtract by subtracting ones Subtracting from 10 Word problems	Add numbers without renaming Add with renaming Subtract without renaming Subtract with renaming Add 3 numbers	Add numbers without renaming Add with renaming Subtract without renaming Subtract with renaming Word problems involving addition and subtraction	Add numbers without renaming Add with renaming Add numbers mentally Subtract without renaming Subtract with renaming Subtract numbers mentally Solve word problems	Add numbers with more than 4 digits Add numbers mentally Subtract numbers with more than 4 digits Subtract numbers mentally Use rounding to check answers Word problems	Perform mental calculations Use an appropriate strategy to solve a calculation Use estimation to check answers Solve problems involving addition and subtraction, multiplication and division. Add and subtract whole numbers and decimals using column addition and subtraction.
Multiplication and division	Halving Sharing Doubling Grouping and counting in 2s, 5s, 10s	Make equal groups Add equal groups to find total Group things equally Share things equally Word problems about multiplication	2 5 10 times tables Writing multiplication equations Divide by 2 5 10 Writing family of multiplication and division facts Odd and even numbers Word problems 2,5,10xtables Word problems involving multiplication and division	3 4 8 11 times tables Divide a number by 3, 4 and 8 Word problems involving 3,4,8,11 times tables Word problems involving the division of 3, 4, 8, 11	Multiply by 6, 7, 9, 11 and 12 Divide by 6, 7, 9, 11 and 12 Divide to find the quotient and remainder Word problems Multiply without regrouping Multiply with regrouping Find the quotient and remainder in division	Multiples and common multiples Factors and common factors Prime and composite numbers Square numbers and cube numbers Multiply 4 digit numbers by 1 digit Multiply 3 digit numbers by 2 digits Multiply and divide mentally Multiply and divide by 10, 100 and 1000 Divide 3 and 4 digit numbers Word problems	Multiply 4 digit numbers by 2 digit numbers Divide 4 digit numbers by 2 digit numbers Remainders in division Common factors, multiples and prime numbers Solve problems involving multiplication and division Perform mental calculations Use estimation and inverse to check answers.

	EYFS	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
Fractions	Halving Sharing Doubling Grouping and counting in 2s, 5s, 10s	Show a half Show a quarter Group objects to get half / quarter	Make and show halves, quarters and thirds Name and write a fraction Name fractions that make 1 whole Compare and order fractions Count wholes with halves, quarters and thirds Find part of a set or quantity.	Count in tenths Show mixed numbers on a number line Find equivalent fractions Simplify fractions and mixed numbers Add and subtract fractions Solve word problems	Count in hundredths Show mixed numbers on a number line Find equivalent fractions Simplify fractions Add and subtract fractions Solve word problems	Find equivalent fractions of a given fraction Recognise mixed numbers and improper fractions Compare and order fractions Add and subtract fractions Multiply proper fractions by whole numbers	Find equivalent fractions using common multiples Simplify fractions using common factors Compare and order fractions Multiply proper fractions Divide proper fractions by whole numbers
Decimals	N/A	N/A	N/A	N/A	Recognise and write tenths Recognise and write hundredths Compare numbers with the same number of decimal places Number patterns involving decimals Round decimals to the nearest whole number Decimal equivalents of a half, quarter and three quarters Solve money and measure problems involving decimals	Read and write decimals up to 3 decimal places Compare and order decimals up to 3 decimal places Write fractions as decimals Add / subtract decimals Solve problems involving decimals Round decimals to the nearest whole number	Relate division of whole numbers to fractions and decimals Write fractions as decimals Multiply and divide decimals with 2 and 2 digit whole numbers.
Percentages	N/A	N/A	N/A	N/A	N/A	Recognise the % symbol Find %s of a given number Interpret a percentage as a fraction of an amount	Calculate the % of a number and a quantity Use % to describe changes Use %s to compare. Solve problems involving the calculation of %s.

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Length	Use everyday language to talk about weight, size, capacity and distance Compare quantities and objects to solve problems Ordering by weight, length, height and capacity	Compare the length of objects Measure the length of objects	Measure length in 'm' Measure length in 'cm' Compare and order length Measure and draw lines Word problems on length	Write length in (m) and (cm) Convert length from 'm' to 'cm' and reverse Write length in 'km' and 'm' Compare different lengths Word problems on length	Measure and estimate length Convert units of length	Convert measurements of length Problem solving involving measurements	Use, read and write standard units of length. Word problems involving length. Converting measurements of length to 3 decimal places.
Area and Perimeter	N/A	N/A	N/A	This unit moved to Year 4	Total length around a shape Perimeter of figures on a grid Perimeter in cm and m Perimeter of square and rectangles	Perimeter of a figure Area of a figure Scale diagrams to find perimeter Estimate the area of a figure	Perimeter / area of rectangles, triangles and parallelograms Use formulae to find the area of rectangles etc..Use the area of rectangles to find the area of other types of polygons
Volume	N/A	Compare volume and capacity Use half and quarter to describe volume Find volume and capacity	Compare volume Measure volume in 'l' and 'ml' Word problems	Measure volume in 'l' and 'ml' Measure capacity in 'ml' and 'l' Write volume in 'l' and 'ml' Word problems	Measure and estimate volume Convert units of volume	Find and compare the volume of solids Find and compare the capacity of rectangular boxes Estimate volume and capacity Convert units of volume Word problems	Use unit cubes to find volume Calculate the volume on mm cubed, cm cubed and km cubed Word problems

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Geometry	Children use everyday language to talk about size, position. Compare objects by size Recognise, complete, create and describe patterns with common shapes. Talk about and identify patterns around them ie wallpaper / clothes. Positional language. Explore characteristics of everyday objects and 2D and 3D shapes and use mathematical language to describe them. Compare and decompose shapes to recognise shapes within shapes.	Name solids and shapes. Look for shapes in solids. Group shapes Make and complete patterns with shapes.	Name quadrilaterals, triangles and polygons. Identify vertices / sides of shapes. Lines of symmetry in a shape. Form different figures with shapes. Name shapes that make up a figure. Sort shapes. Make and complete patterns. Move shapes / turn shapes Recognise flat faces and curved faces Name and describe spheres, cuboids, cubes, cylinders, cones, pyramids and prisms. Identify faces, vertices and edges of a shape. Fold 2D shapes into 3D shapes Group shapes in different ways. Make patterns with shapes.	Recognise an angle Find angles in shapes Find a right angle, acute angle and an obtuse angle. Compare the size of angles Make a half turn, three quarters and a full turn.	Identify acute and obtuse angles Compare and order angles Compare and classify quadrilaterals and triangles Lines of symmetry in 2D shapes	Identify acute angles, right angles, obtuse angles and reflex angles. Identify angles on a straight line and angles that meet at a point Find unknown angles in squares and rectangles. Identify regular polygons. Identify 2D and 3D shapes from drawings	Recognise angles that meet at a point, angles on a straight line, and vertically opposite angles. Find unknown angles in triangles, quadrilaterals and regular polygons. Identify the radius, diameter and centre of a circle. Draw 2D shapes using given dimensions and angles. Identify and draw nets of 3D shapes.
Mass		Compare the mass of objects Find the mass of objects	Measure mass in kg Measure mass in grams Solve word problems on mass.	Read the scales for mass in kg and 'g'. Solve word problems on mass	Measure and estimate mass. Convert units of mass	Convert measurements of mass Solve problems involving measurements	Use, read and write standard units of mass. Word Problems involving mass
Temperature	N/A	N/A	Read a thermometer Measure and write down the temperature.	N/A	N/A	Tell the temperature Solve problems involving measurements	Calculate differences in temperature, including those that involve a positive and negative temperature.

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Money	Children use everyday language to talk about money	Recognise coins Recognise notes	Name coins and notes Count an amount of money Show an amount of money in different ways Exchange coins and notes Compare amounts of money Calculate change Word problems on money.	Name the amount of money in pounds and pence Use different ways to show the same amount of money. Add money in pounds and pence Subtract money in pounds and pence Calculate change in pounds and pence Word problems on money	Count an amount of money and write it in decimals Compare different amounts of money Round money to the nearest pound and £10 Estimate total amounts of money Word problems on money	Word problems involving money	Converting units of money Word problems involving money
Time	Use everyday language to talk about time	Tell time to the hour Tell time to the half hour Compare different times Recognise dates on a calendar	Tell and write the time to 5 minutes Draw hands on a clock face to show time Find the duration of time Find the ending or starting time Compare and sequence intervals of time Know minutes in an hour Number of hours in a day	Tell and write the time in a.m and p.m Recognise 'past' and 'to' in time Tell and write time on different clocks Measure time in seconds, hours and minutes Find starting/ending time and duration Change minutes to seconds and vice versa Find number of days using a calendar Know number of days in each month, year and leap year.	Tell the time using 24 hour clock Change time in minutes to seconds Change time in hours to minutes Change time in years to months Change time in months to years. Find the duration, starting and finishing time Word problems	Convert measurements of time. Solve problems involving measurements	Converting various units of time. Word problems involving time
Graphs	N/A	N/A	Read information from pictograms, block diagrams, tally charts and tables. Make pictograms, tally charts and tables Solve problems	Draw picture graphs and bar graphs Read and interpret bar graphs Word problems	Use a table to show information Draw, read and interpret tables, picture graphs, bar graphs and line graphs. Word problems	Read and interpret information in a timetable. Read, interpret and complete information in a table. Read and interpret information from a line graph Word problems	Calculate and interpret the mean as an average. Draw and read pie charts. Draw and read graphs Solve problems using information provided by graphs.

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Position and movement	Children use everyday language to talk about position. Ordering by position and distance. Positional language	Name positions in a race and a queue Name positions from the left and from the right Use words such as before, next to, last and between. Describe positions Describe movements Describe turns	N/A	N/A	Describe positions using coordinates Plot points and form figures on the grid Describe movement including translation of figures	Write the coordinates of points Describe the translations and reflections Find the position of a shape after translation or after reflection	Use coordinate grids with negative numbers Describe positions of points with coordinates Draw, translate and reflect simple shapes on the coordinate plane
Ratio	N/A	N/A	N/A	N/A	N/A	N/A	Compare quantities and numbers using ratios. Solve problems involving ratios
Negative numbers	N/A	N/A	N/A	N/A	N/A	N/A	Add and subtract negative numbers Use negative numbers in context Solve problems involving negative numbers
Algebra	N/A	N/A	N/A	N/A	N/A	N/A	Describe and complete a pattern Write and evaluate algebraic expressions Write and use formulae Solve equations
Roman numbers	N/A	N/A	N/A	N/A	Read and write Roman Numerals 1 to 20 Read and write Roman Numerals to 100	Write Roman Numerals to 1000 Write years in Roman numerals	Write the date in Roman Numerals Write years in Roman Numerals