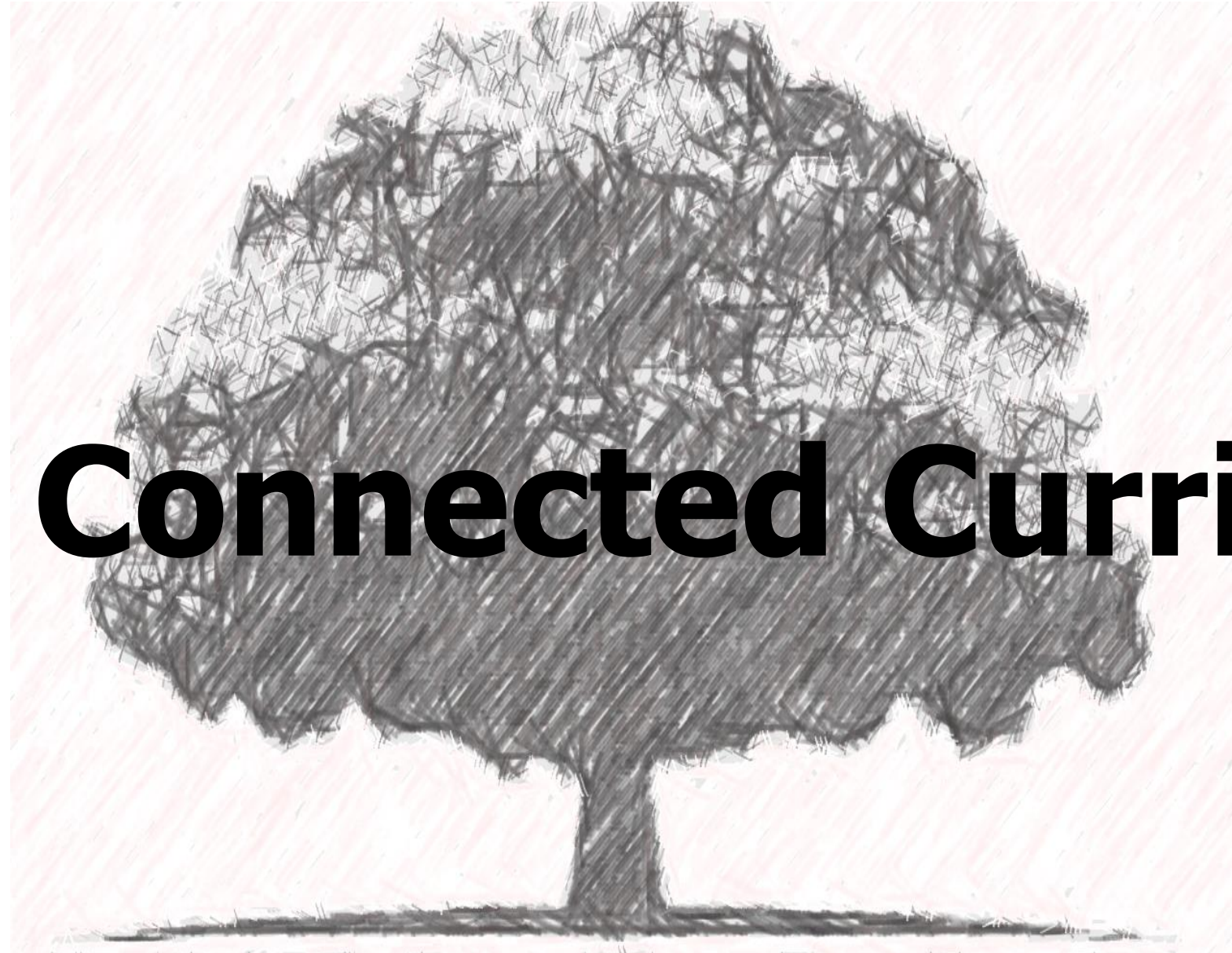# Kelsall Connected Curriculum

'A Love for Learning'

Kelsall Primary & Nursery School

Maths Overview

Cheshire Academies Trust
Inspiring hearts and minds

KELSALL
PRIMARY AND
NURSERY SCHOOL

Maths at Kelsall

At Kelsall, we teach using a mastery approach which means pupils acquire a deep, long-term, secure and adaptable understanding of the subject. The mastery approach recognises the value of developing the power to think rather than just do. It also recognises the value of making a coherent journey in which whole-class groups tackle concepts in very small steps, one by one. We believe that every child can achieve and we aim to foster a love for maths that they can continue to nurture in the future. We understand that mistakes are valuable opportunities to re-think and understand more deeply and we believe that learning is richer when children and teachers alike focus on spotting and sharing mistakes as well as solutions.

Here at Kelsall, we use Power Maths which is a clearly structured teaching and learning process that supports teachers to ensure that every child masters each maths concept securely and deeply. Complex mathematical concepts are built on simpler conceptual components and when children understand every step in the learning sequence, maths becomes transparent and makes logical sense. We carefully design interactive lessons to establish deep understanding in small steps, as well as fluency in key facts such as tables and number bonds. Our ethos is that the whole class works on the same content and no child is left behind.

Following a 5-part mastery lesson structure (fluency, discover, think together, independent practice, problem solving), we aim to provide opportunities for the children to explore their reasoning and problem solving skills and to challenge themselves and their thinking. Within each lesson, children follow a procedure called *MICE*. This represents Manipulatives, Illustrations, Calculations and Explanations. This procedure is a microcosm of our maths philosophy; children work through real-life contextual problems using concrete resources, draw and represent these in different ways and then use this to support them in calculating. We use a variety of STEM sentences to allow children to explain their reasoning in every lesson.

Children master concepts one step at a time in lessons that embrace a Concrete-Pictorial-Abstract (C-P-A) approach, avoid overload, build on prior learning and help them see patterns and connections. To ensure sustained progress we use same-day intervention so all children 'keep up' not 'catch up'. We aim to provide children with the confidence to explain their methods and thought process using mathematical vocabulary as they work through a problem and then reflect on their learning at the end of the lesson.

Year 1	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Mathematics Curriculum	Numbers to 10 Part-whole within 10 Addition and subtraction with 10	Addition and subtraction with 10 2D and 3D Shapes Numbers to 20	Addition with 20 Subtraction within 20 Numbers to 50	Introducing length and height Introducing weight andvolume	Division Halves and Quarters Position and Direction Numbers to 100	Time Money

Year 2	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Mathematics Curriculum	Numbers to 100 Addition and Subtraction	Addition and Subtraction Money Multiplication and Division	Multiplication and Division Statistics Length and Height	Properties of Shapes Fractions	Problem Solving and Efficient Methods	Time Weight, Volume and Temperature

Year 3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Mathematics Curriculum	Place Value with 1000 Addition and Subtraction	Additional and Subtraction Multiplication and Division	Multiplication and Division Money Statistics	Length Fractions	Fractions Time Angles and properties of shapes	Mass Capacity

Year 4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Mathematics Curriculum	Place Value- 4 digits Addition and subtraction	Measurement- Perimeter Multiplication and Division	Multiplication and Division Measure- Area Fractions	Fractions Decimals	Decimals Money Time	Statistics Geometry- Angles and 2-D shapes Geometry-Position and Direction

Year 5	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Mathematics Curriculum	**Place Value within 1,000,000 Addition and subtraction Graphs and Table**	**Multiplication and division Measure: Area and perimeter**	**Multiplication and Division Fractions**	**Fractions Decimals and percentages**	**Decimals Geometry: properties of shape Geometry: position and direction**	**Measure: converting units Measure: volume and capacity**

Year 6	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Mathematics Curriculum	**Place value Four Operations Fractions + & -**	**Fractions x & ÷ Fractions as Operators Geometry: Position and direction**	**Decimals Percentages Algebra**	**Measures Perimeter and area and volume Ratio and Proportion**	**Geometry: Properties of Shapes Problem Solving**	**Problem Solving Statistics**