Hallaton Primary School – The Big Picture – Mathematics

Our Over-arching Intent	That every child grows and flourishes through enjoying learning and has access to a rich, rounded, connected, coherent and progressive curriculum.		
Aims of our Curriculum	To develop successful, engaged learners who enjoy learning and who are knowledgeable and skilled, make progress and achieve	To develop confident, articulate individuals, who can lead safe, healthy and fulfilling lives in the communities in which they live now and in the future.	To develop responsible, happy citizens of the world who have the capacity to make positive contributions to society.
School Motto	**Learn, Grow, Flourish**		

Learning Powers	**Be Responsible**	**Be Respectful**	**Be Resilient**	**Be Reflective**	**Be Remarkable**

We will develop the knowledge and skills that children need to succeed	**Develop children's vocabulary acquisition and oracy skills so that they can articulate their thoughts both verbally and in written form, in order to communicate effectively in a range of situations.**	**Provide opportunities for children to be exposed to a wide variety of cultures, topics, themes and points of view to counter-balance the lack of diversity in our local demographic at our largely white British school, in order to prepare them for life in modern Britain.**

The Intrinsic Core of Maths – our Intent	**Mathematics is an interconnected subject in which pupils need to be able to move between representations and ideas, therefore pupils should make rich connections across mathematical ideas as these are essential to everyday life.**		
	To become fluent in the fundamentals of mathematics	**To reason mathematically using mathematical language**	**To solve problems applying mathematical knowledge**

How do we organise learning in Maths?

	Number	**Measurement**	**Statistics**	**Geometry**
Explore and Investigate Whole School Big Ideas	Place value Calculations (addition, subtraction, multiplication, division) Negative numbers Fractions Decimals Percentages Ratio Algebra	Length Height Mass Volume Capacity Temperature Time Money Perimeter Area Converting units	Pictograms Tally charts Tables Graphs Pie charts	Shape Position Direction

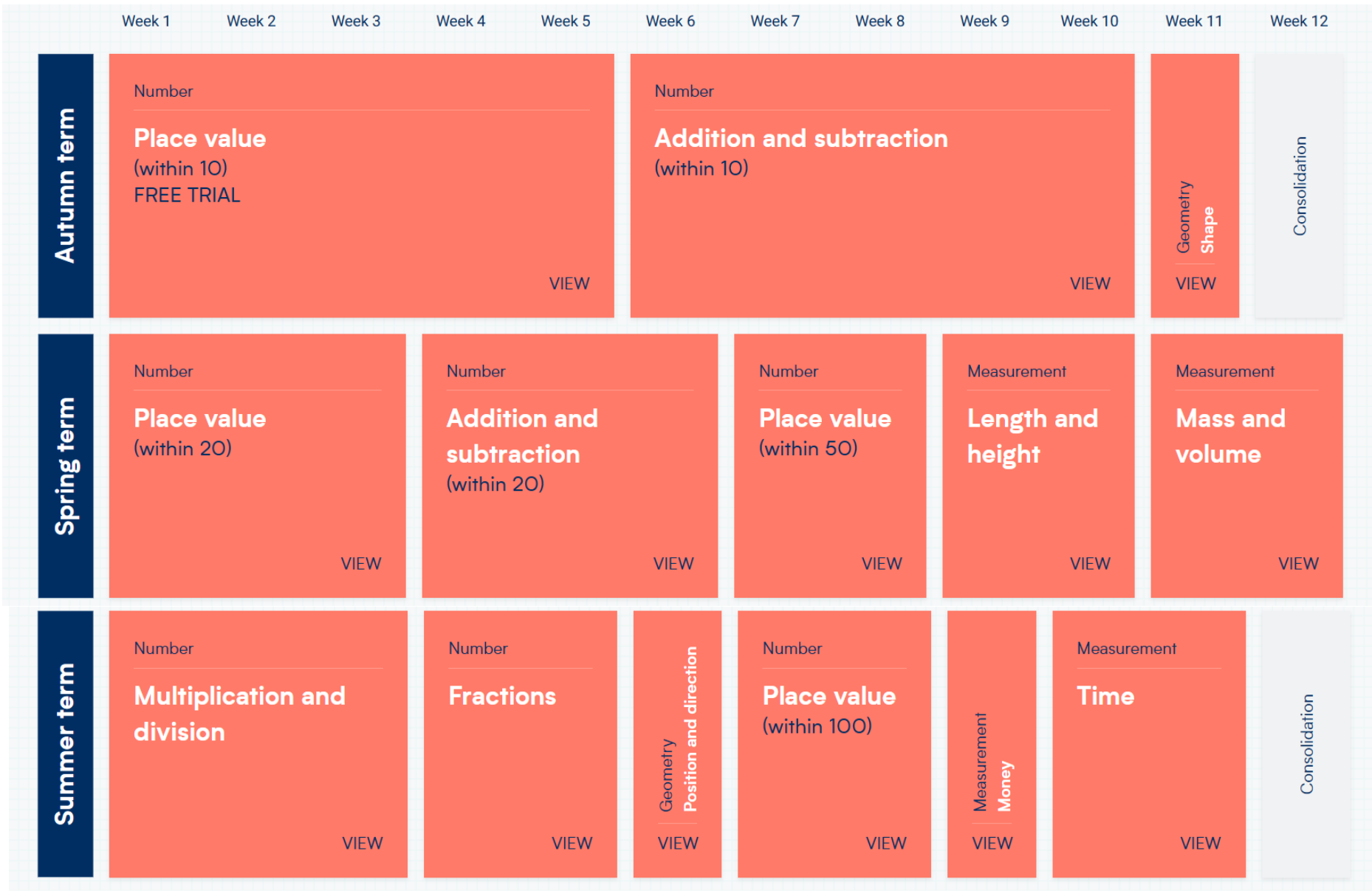
Implementation: How do we deliver our Curriculum?

Early Years	Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. We use the White Rose small steps progression: Reception small steps Autumn.pdf (whiteroseeducation.com) (although not always in the timeframe or order shown in the overviews). This provides frequent and varied opportunities to build and apply their understanding and develop vocabulary from which mastery of mathematics is built.

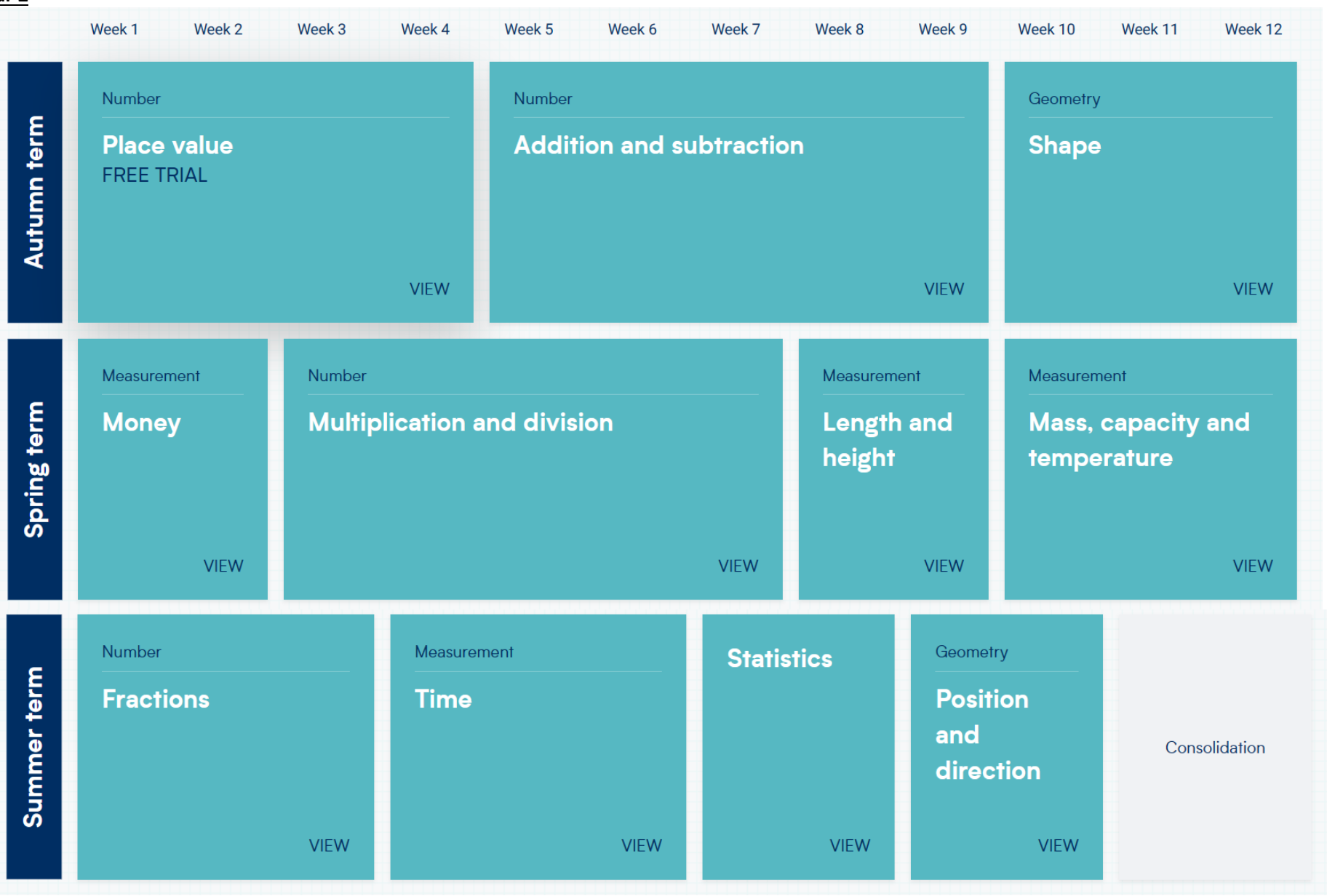
Key Stage One

The principal focus of mathematics teaching in Key Stage 1 is to ensure that pupils develop confidence and mental fluency with whole numbers, counting and place value. This should involve working with numerals, words and the four operations, including with practical resources. We use the White Rose Small Steps Progression: Year 1 Scheme of Learning Small Steps.pdf (whiteroseeducation.com) Year 2 Scheme of Learning Small Steps.pdf (whiteroseeducation.com) (although not always in the set timeframe or order shown in the overviews).

Year 1



Year 2



Lower Key Stage Two

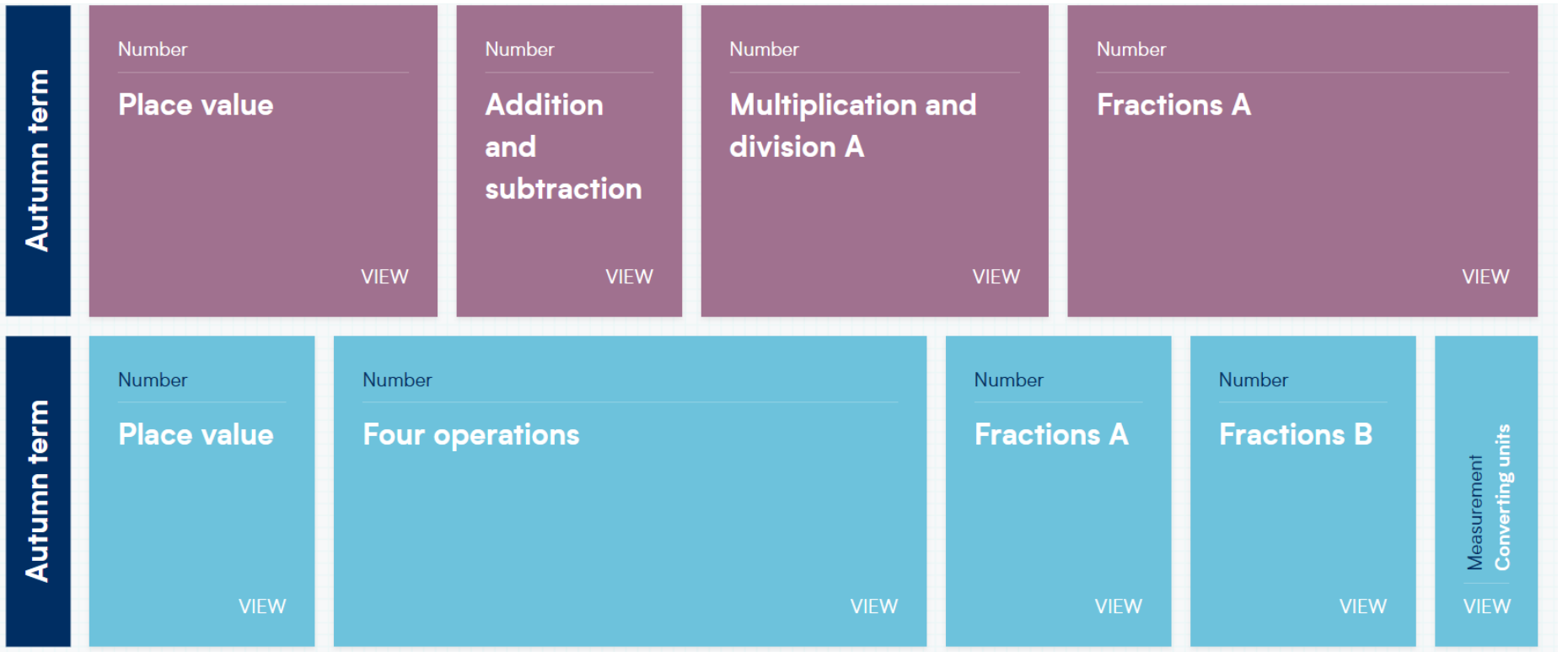
The principal focus of mathematics teaching in Lower Key Stage 2 is to ensure that pupils become increasingly fluent with whole numbers and the four operations, including number facts and the concept of place value. This should ensure that pupils develop efficient written and mental methods and perform calculations accurately with increasingly large whole numbers. Pupils should develop their ability to solve a range of problems, including with simple fractions and decimal place value. Teaching should also ensure that pupils draw with increasing accuracy and develop mathematical reasoning so they can analyse shapes and their properties, and confidently describe the relationships between them. It should ensure that they can use measuring instruments with accuracy and make connections between measure and number. We use the White Rose Small Steps Progression: PowerPoint Presentation (whiteroseeducation.com) (although not always in the set timeframe or order shown in the overviews).

Year 3 (orange) & 4 (green)

Upper Key Stage Two

The principal focus of mathematics teaching in Upper Key Stage 2 is to ensure that pupils extend their understanding of the number system and place value to include larger integers. This should develop the connections that pupils make between multiplication and division with fractions, decimals, percentages and ratio. Pupils should develop their ability to solve a wider range of problems, including increasingly complex properties of numbers and arithmetic, and problems demanding efficient written and mental methods of calculation. With this foundation in arithmetic, pupils are introduced to the language of algebra as a means for solving a variety of problems. Teaching in geometry and measures should consolidate and extend knowledge developed in number. Teaching should also ensure that pupils classify shapes with increasingly complex geometric properties and that they learn the vocabulary they need to describe them. By the end of Year 6, pupils should be fluent in written methods for all four operations, including long multiplication and division, and in working with fractions, decimals and percentages. We use the White Rose Small Steps Progression: PowerPoint Presentation (whiteroseeducation.com) (although not always in the set timeframe or order shown in the overviews).

Year 5 (purple) & 6 (blue)



Spring term

Number **Multiplication and division B** VIEW	Number **Fractions B** VIEW	Number **Decimals and percentages** VIEW	Measurement **Perimeter and area** VIEW	**Statistics** VIEW

Spring term

Number **Ratio** VIEW	Number **Algebra** VIEW	Number **Decimals** VIEW	Number **Fractions, decimals and percentages** VIEW	Measurement **Area, perimeter and volume** VIEW	**Statistics** VIEW

Summer term

Geometry **Shape** VIEW	Geometry **Position and direction** VIEW	Number **Decimals** VIEW	Number **Negative numbers** VIEW	Measurement **Converting units** VIEW	Measurement **Volume** VIEW

Summer term

Geometry **Shape** VIEW	Geometry **Position and direction** VIEW	Themed projects, consolidation and problem solving

Impact	**Most children achieve the early learning goals in Mathematics** **Most KS1 and KS2 children will achieve at least the age-related expectations in Mathematics, as outlined in the National Curriculum and the Teacher Assessment Frameworks.**		
	Children become…		
	Reflective, engaged learners who enjoy learning and who are knowledgeable and skilled, make progress and show how **remarkable** they are.	**Resilient**, articulate, independent individuals, who can lead safe, healthy and fulfilling lives in the communities in which they live now and in the future.	**Responsible** and **respectful** citizens of the world who have the capacity to make positive contributions to society.