Maths Curriculum

Intent

Our Maths curriculum follows the White Rose Maths scheme. This provides detailed planning, a clear sequence and strong development with good differentiation, clear challenge and fair pace. Our teachers supplement this with other resources and practical activities to ensure learning is concrete and progressive. We try as much as possible to link Mathematics concepts and understanding to real life scenarios whilst exposing children to word based problems. New Mathematical concepts are introduced using a clear, 'Concrete, Pictorial and Abstract' approach. Through this our aims are as follows:

To ensure pupils become fluent in the fundamentals of mathematics and that key facts are imbedded in order to be able to access increasingly complex problems over time. Pupils will develop conceptual understanding and the ability to recall and apply knowledge rapidly and accurately.

To ensure pupils develop mathematical reasoning skills.

To ensure pupils can solve problems by applying their mathematics to a variety of problems with increasing sophistication, including breaking down problems into a series of simpler steps and persevering in seeking solutions.

Implement

Our Approach

We understand that Maths is a subject with lots of new concepts, lots of linking ideas, and building on number skills and times tables. We understand that the teaching and learning of Maths can be pacey, and that Cognitive Load Theory is a factor particularly in Maths. This coupled with lack of confidence can

make this subject a more challenging one for some of our children. As such we use a range of approaches and resources to support children's learning as well as their memory and recall.

How it works?

KS1 Fluent in Five – Each morning children in Key Stage One will be given 5 minutes to complete a few questions around the four operations. This supports their fluency and ensures skills are fresh and regularly practiced.

KS2 Weekly Arithmetic Session– Each week children in Key Stage Two will complete 20 mental maths questions. This supports their fluency and ensures skills are fresh and regularly practiced.

Problem Solving – Problem solving and reasoning style questions form part of each lesson. Children are supported, the process modelled and discussions had to help children really unpick the concept.

Times Tables – Key Stage Two children have access to TT Rockstars, which can be played both in school and at home to improve their recall. When walking around the school Mr Mann also asks children a random number bond or times table question every time he passes someone!

STEM (Science, Technology, Engineering and Mathematics) sentences – These are sentences used in Maths lessons to support children with their understanding and vocabulary. These will be modelled and used by all to share the 'why' and 'how' elements of an answer. These sentences will also be part of the working wall display.

Use of manipulatives – We understand the importance of equipment, resources and hands-on learning. All teachers, across all year groups are encouraged to use manipulatives to support their maths teaching and enhance the learning experience.

Reception

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Place Value - Numbers to 5 Addition and Subtraction - Sorting Place Value - Comparing groups Addition and Subtraction - Change within 5 Measurement - Time											
Spring	Addition and Subtraction - Numbers to 5 Place Value - Numbers to 10 Addition and Subtraction - Addition to 10 Geometry - Shape and space											
Summer	Geometry - Exploring patterns Addition and Subtraction - Count on and back Place Value - Numbers to 20 Multiplication and Division - Numerical patterns Measurement - Measure											

Year 1 – Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value (within 10)				Number: Addition and Subtraction (within 10)				Geometry: Shape	Number: Place Value (within 20)		Consolidation
Spring	Number: Addition and Subtraction (within 20)				Number: Place Value (within 50) (Multiples of 2, 5 and 10 to be included)			Measurement: Length and Height		Measurement: Weight and Volume		Consolidation
Summer	Number: Multiplication and Division (Reinforce multiples of 2, 5 and 10 to be included)			Number: Fractions		Geometry: position and direction	Number: Place Value (within 100)		Measurement : money	Time		Consolidation

Year 2

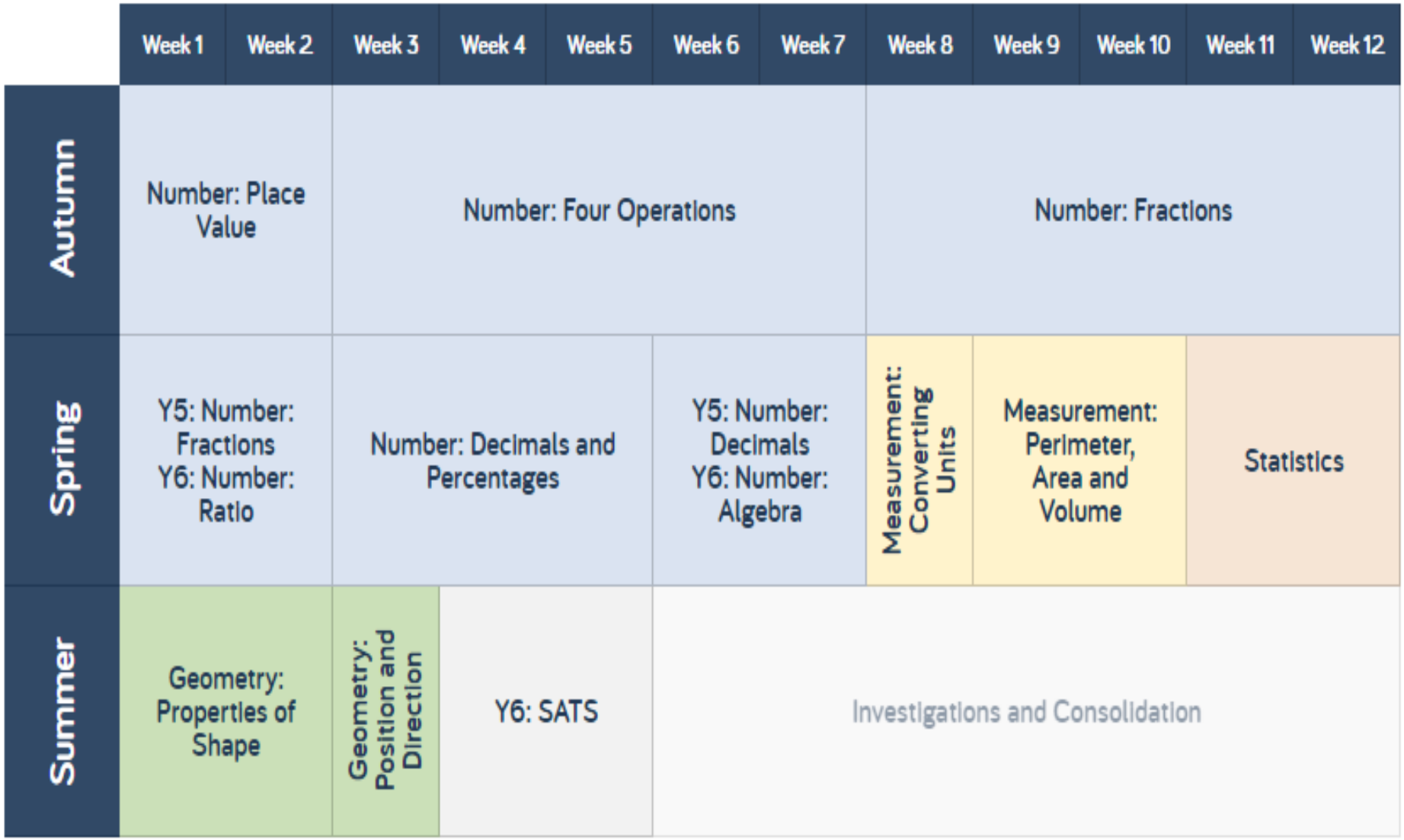
Year 2 – Yearly Overview

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place value			Number: Addition and Subtraction					Measurement: Money		Number: Multiplication and Division	
Spring	Number: Multiplication and Division		Statistics	Geometry: Properties of Shape				Number: Fractions			Measurement: length and height	Consolidation
Summer	Position and direction			Problem solving and efficient methods		Measurement: Time		Measurement: Mass, Capacity and Temperature			Investigations	

Year 3 / 4

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Number: Place Value				Number: Addition and Subtraction				Number: Multiplication and Division			
Spring	Number: Multiplication and Division		Measurement: Length, Perimeter and Area		Number: Fractions				Y3: Measurement: Mass and Capacity Y4: Number: Decimals			Consolidation
Summer	Number: Decimals (including Money)				Measurement: Time		Statistics		Geometry: Properties of Shape (including Y4 Position and Direction)			Consolidation

Year 5 / 6


Week 1
Week 2
Week 3
Week 4
Week 5
Week 6
Week 7
Week 8
Week 9
Week 10
Week 11
Week 12
Autumn
Number: Place Value
Number: Four Operations
Number: Fractions
Spring
Y5: Number: Fractions
Y6: Number: Ratio
Number: Decimals and Percentages
Y5: Number: Decimals
Y6: Number: Algebra
Measurement: Converting Units
Measurement: Perimeter, Area and Volume
Statistics
Summer
Geometry: Properties of Shape
Geometry: Position and Direction
Y6: SATS
Investigations and Consolidation

Impact

As a result of our Math's teaching at Langford Budville you will see:

Engaged children who are confident but all challenged.

Children who can all talk about Maths and their learning

Lessons that follow the 'Concrete, Pictorial and Abstract' approach – children feel confident to use resources when required.

Different representations of mathematical concepts.

Learning that is tracked and monitored to ensure all children make good progress