

## Maths Overview

The 2014 National Curriculum for maths aims to ensure that all children:

- become fluent in the fundamentals of mathematics;
- are able to reason mathematically;
- can solve problems by applying their mathematics.

At Snarestone, these skills are embedded within our maths lessons and developed consistently over time. We are committed to ensuring that children are able to use their mathematical skills and knowledge confidently in a range of different contexts. We want to raise standards across the school and provide more opportunity to revisit fluency skills and reasoning tasks. We use a variety of teaching methods and resources that allow all pupils equal access to mathematics. Children are appropriately challenged and supported through varied fluency, reasoning and problem-solving activities. Irrespective of personal starting points, children explore maths in depth, and use a range of mathematical vocabulary to reason and explain their methods and make links.

We want all children to enjoy mathematics, to recognise the importance of maths in the wider world and to experience success. We are committed to developing the children's curiosity and resilience for the subject, as well as their ability to reason and problem-solve.

Our approach is through high quality teaching and by embedding a mastery approach across the school. The delivery of appropriately pitched work for all groups of learners is supported by the materials from the White Rose Maths scheme of learning, as well as other high-quality resources such as Mastering Number, 'Ready to Progress' and NRich. In Reception, children use a combination of Mastering Number and White Rose maths. Numberblocks programmes and related activities also deepen their number sense.

EYFS Overview						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
	<p>Developing a <b>strong grounding in number</b> is essential so that all children develop the necessary <b>building blocks</b> to excel mathematically. Children should be able to <b>count confidently</b>, develop a deep understanding of the <b>numbers to 10</b>, the <b>relationships between them</b> and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using <b>manipulatives</b>, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which <b>mastery of mathematics</b> is built.</p> <p>In addition, it is important that the curriculum includes <b>rich opportunities for children to develop their spatial reasoning</b> skills across all areas of mathematics including shape, space and measures. It is important that children develop <b>positive attitudes and interests in mathematics</b>, look for <b>patterns and relationships</b>, <b>spot connections</b>, <b>'have a go'</b>, <b>talk to adults and peers</b> about what they notice and not be afraid to make mistakes.</p>					
Number and Numerical Patterns	<p><b>Mastering Number:</b> Creating patterns and exploring numbers within 4, including perceptually subitising within 3</p>	<p><b>Mastering Number:</b> Creating patterns and exploring numbers within 5, including perceptually subitising within 5; begin to count beyond 5; begin to recognise numerals; explore the composition of numbers within 5.</p>	<p><b>Mastering Number:</b> Continue to explore patterns within 5 and explore the composition of 6; develop verbal counting to 20 and beyond</p>	<p><b>Mastering Number:</b> Explore symmetrical patterns, linking this to 'doubles'; become more familiar with the counting pattern beyond 20; explore odd and even numbers; explore the composition of numbers within 10.</p>	<p><b>Mastering Number:</b> Practise increasingly familiar subitising arrangements; develop verbal counting to 20 and beyond; explore the composition of 10; order sets of objects.</p>	<p><b>Mastering Number:</b> Consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers.</p>
Shape, Space, Measures	<p><b>Shape, space and measures (WRM):</b></p> <ul style="list-style-type: none"> <li>• Talking about the routine of the day and using language like, 'before' and 'after';</li> <li>• Using comparative language such as, 'taller', 'shorter' and 'the same';</li> <li>• Being more confident in identifying shapes in the environment;</li> <li>• Recognising particular shapes that may be useful for certain tasks;</li> <li>• Making more meaningful pictures, patterns and arrangements with shapes.</li> </ul>		<p><b>Shape, space and measures (WRM):</b></p> <ul style="list-style-type: none"> <li>• Beginning to experiment with length, height and capacity;</li> <li>• Beginning to compare length, weight and capacity;</li> <li>• Identifying money and using money in play;</li> <li>• Recalling the names of some 2D and 3D shapes;</li> <li>• Ordering and sorting according to simple properties;</li> <li>• Using the language of direction when programming toys.</li> </ul>		<p><b>Shape, space and measures (WRM):</b></p> <ul style="list-style-type: none"> <li>• Use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities;</li> <li>• Create and describe patterns;</li> <li>• Explore characteristics of everyday objects and shapes, and use mathematical language to describe them;</li> <li>• Use money with increased confidence.</li> </ul>	

Year 1 Yearly Plan (White Rose Maths)

	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	Consolidation
Spring	Number Place value (within 20)			Number Addition and subtraction (within 20)			Number Place value (within 50)		Measurement Length and height		Measurement Mass and volume	
Summer	Number Multiplication and division			Number Fractions		Geometry Position and direction	Number Place value (within 100)		Measurement Money	Measurement Time		Consolidation

Year 2 Yearly Plan (White Rose Maths)

	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					Geometry Shape		
Spring	Measurement Money	Number Multiplication and division					Measurement Length and height		Measurement Mass, capacity and temperature			
Summer	Number Fractions			Measurement Time			Statistics		Geometry Position and direction	Consolidation		

Year 3 Yearly Plan (White Rose Maths)

	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 A				
Spring	Number Multiplication and division B			Measurement Length and perimeter			Number Fractions A		Measurement Mass and capacity			
Summer	Number Fractions B		Measurement Money		Measurement Time			Geometry Shape		Statistics		Consolidation

Year 4 Yearly Plan (White Rose Maths)

	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 Area	Number Multiplication and division A				Consolidation
Spring	Number Multiplication and division B			Measurement Length and perimeter		Number Fractions			Number Decimals A			
Summer	Number Decimals B		Measurement Money		Measurement Time		Consolidation	Geometry Shape		Statistics	Geometry Position and direction	

### Year 5 Yearly Plan (White Rose Maths)

	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 <b>Place value</b>			Number <b>Addition and subtraction</b>		Number <b>Multiplication and division A</b>			Number <b>Fractions A</b>			
Spring	Number <b>Multiplication and division B</b>			Number <b>Fractions B</b>		Number <b>Decimals and percentages</b>			Measurement <b>Perimeter and area</b>		Statistics	
Summer	Geometry <b>Shape</b>			Geometry <b>Position and direction</b>		Number <b>Decimals</b>			Number <b>Negative numbers</b>	Measurement <b>Converting units</b>		Measurement <b>Volume</b>

### Year 6 Yearly Plan (White Rose Maths)

	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 <b>Place value</b>		Number <b>Addition, subtraction, multiplication and division</b>					Number <b>Fractions A</b>		Number <b>Fractions B</b>		Measurement <b>Converting units</b>
Spring	<b>Ratio</b>		<b>Algebra</b>		Number <b>Decimals</b>		Number <b>Fractions, decimals and percentages</b>		Measurement <b>Area, perimeter and volume</b>		<b>Statistics</b>	
Summer	Geometry <b>Shape</b>			Geometry <b>Position and direction</b>	Themed projects, consolidation and problem solving							

## Times Tables

The national expectation is that children should be able to quickly recall all their times tables to 12x12 by the end of Year 4, and all Year 4 children take the national Multiplication Tables Check in June. This chart illustrates when children should have mastered their times tables facts (these are by the end of each year group):

	x2	x5	x10	x3	x4	x8	x6	x7	x9	x11	x12
Year 2											
Year 3											
Year 4											
Year 5											
Year 6											

At Snarestone, we use Times Tables Rock Stars (TTRS), which is proven to help children in Years 3 and 4 develop the fluency and speed needed to complete the check, whilst supporting and motivating those children in Years 5 and 6 who have already completed the check to gain even better quick recall of their tables. All children from the summer term in Year 2 onwards have their own TTRS log-in. Here, they can access games and practice targeted times tables set by the teacher.

