Reception Maths Curriculum

Mastering Number

In Reception class, we follow the Mastering Number programme which aims to develop good number sense. The key knowledge and understanding that will be taught in Reception Class is detailed on the following pages. There will be a daily 15 minute maths session led by the class teacher where children will use a variety of resources, including a rekenrek to develop confidence and fluency in number.

White Rose Maths

Alongside the Mastering Number programme, we will also refer to the White Rose scheme for teaching mathematics in Reception class. This scheme supports our rationale for teaching maths in the Early Years, which focuses on embedding mathematical thinking and talk. Underpinning the scheme are five key principles of counting:

1. The one-to- one principle.
2. The stable-order principle.
3. The cardinal principle.
4. The abstraction principle.
5. The order-irrelevance principle.

As well as the Mastering Number 15 minute maths session per day, pupils will take part in adult-led small group activities at least twice a week. There will also be opportunities to practise new skills through play in the different areas of provision.

Mastering Number Programme

Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison
1 Children will:	• perceptually subitise within 3 • identify sub-groups in larger arrangements • create their own patterns for numbers within 4 • practise using their fingers to represent quantities which they can subitise • experience subitising in a range of contexts, including temporal patterns made by sounds.	• relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set • have a wide range of opportunities to develop their knowledge of the counting sequence, including through rhyme and song • have a wide range of opportunities to develop 1:1 correspondence, including by coordinating movement and counting • have opportunities to develop an understanding that anything can be counted, including actions and sounds • explore a range of strategies which support accurate counting.	• see that all numbers can be made of 1s • compose their own collections within 4.	• understand that sets can be compared according to a range of attributes, including by their numerosity • use the language of comparison, including 'more than' and 'fewer than' • compare sets 'just by looking'.
2 Children will:	• continue from first half-term • subitise within 5, perceptually and conceptually, depending on the arrangements.	• continue to develop their counting skills • explore the cardinality of 5, linking this to dice patterns and 5 fingers on 1 hand • begin to count beyond 5 • begin to recognise numerals, relating these to quantities they can subitise and count.	• explore the concept of 'wholes' and 'parts' by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot • explore the composition of numbers within 5.	• compare sets using a variety of strategies, including 'just by looking', by subitising and by matching • compare sets by matching, seeing that when every object in a set can be matched to one in the other set, they contain the same number and are equal amounts.
3 Children will:	• increase confidence in subitising by continuing to explore patterns within 5, including structured and random arrangements	• continue to develop verbal counting to 20 and beyond • continue to develop object counting skills, using a range of strategies to develop accuracy	• continue to explore the composition of 5 and practise recalling 'missing' or 'hidden' parts for 5	• continue to compare sets using the language of comparison, and play games which involve comparing sets

	• explore a range of patterns made by some numbers greater than 5, including structured patterns in which 5 is a clear part • experience patterns which show a small group and '1 more' • continue to match arrangements to finger patterns.	• continue to link counting to cardinality, including using their fingers to represent quantities between 5 and 10 • order numbers, linking cardinal and ordinal representations of number.	• explore the composition of 6, linking this to familiar patterns, including symmetrical patterns • begin to see that numbers within 10 can be composed of '5 and a bit'.	• continue to compare sets by matching, identifying when sets are equal • explore ways of making unequal sets equal.
4 **Children will:**	• explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles'.	• continue to consolidate their understanding of cardinality, working with larger numbers within 10 • become more familiar with the counting pattern beyond 20.	• explore the composition of odd and even numbers, looking at the 'shape' of these numbers • begin to link even numbers to doubles • begin to explore the composition of numbers within 10.	• compare numbers, reasoning about which is more, using both an understanding of the 'howmanyness' of a number, and its position in the number system.
5 **Children will:**	• continue to practise increasingly familiar subitising arrangements, including those which expose '1 more' or 'doubles' patterns • use subitising skills to enable them to identify when patterns show the same number but in a different arrangement, or when patterns are similar but have a different number • subitise structured and unstructured patterns, including those which show numbers within 10, in relation to 5 and 10 • be encouraged to identify when it is appropriate to count and when groups can be subitised.	• continue to develop verbal counting to 20 and beyond, including counting from different starting numbers • continue to develop confidence and accuracy in both verbal and object counting.	• explore the composition of 10.	• order sets of objects, linking this to their understanding of the ordinal number system.
6	In this half-term, the children will consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers.			

White Rose Units

Autumn	Getting to Know You	Just Like Me!	It's Me 1 2 3!	Light and Dark
Spring	Alive in 5!	Growing 6, 7, 8	Building 9 and 10	Consolidation
Summer	To 20 and Beyond	First Then Now	Find my Pattern	On the Move

White Rose: Overview of Content

Autumn Term	Getting to know you	Just like me	Its me 1 2 3!	Light and dark
	• Opportunities for settling in and getting to know pupils. • Key times of the day and class routines. • Positional language.	• Matching • Sorting • Comparing amounts • Comparing size, mass and capacity. • Making simple patterns.	• Representing 1, 2, 3 • Comparing 1, 2, 3 • Composition of 1, 2, 3 • Spatial awareness	• Numbers to 5. • One more, one less • Shapes • Night and day.
Spring Term	Alive in 5!	Growing 6, 7 and 8	Building 9 and 10	
	• One less • Composition of numbers to 5 • Comparing numbers to 5 • Equal and unequal groups	• Composition of 6,7 and 8 • Matching 6, 7 and 8 • 1 more and less.	• Representing and sorting 9 and 10. • Order numerals to 10. • Composition of 9 and 10. • Counting back from 10.	
Summer Term	To 20 and beyond.	First, then and now	Find my pattern	On the move
	• Number patterns to 20 • Match picture to numeral • Ten frames • Ordering numbers to 20 • Shapes	• Adding on • Counting more • Taking away • Making new shapes	• Doubling • Sharing • Grouping • Odd and even	• Problem solving activities linked to stories.