

## Kirkby-in-Malhamdale Primary School

### Prerequisite Skills/End Points for Mathematics within the National Curriculum

Mathematical Vocabulary			
Three and Four-Year-Olds	Communication and Language		<ul style="list-style-type: none"> <li>• Use a wider range of vocabulary.</li> <li>• Understand 'why' questions, like: "why do you think the caterpillar is sofat?"</li> </ul>
Reception	Communication and Language		<ul style="list-style-type: none"> <li>• Learn new vocabulary.</li> <li>• Use new vocabulary throughout the day.</li> </ul>
ELG	Communication and Language	Speaking	<ul style="list-style-type: none"> <li>• Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary.</li> </ul>

Number and Place Value			
Counting			
Three and Four-Year-Olds	Mathematics		<ul style="list-style-type: none"> <li>• Recite numbers past 5.</li> <li>• Say one number name for each item in order: 1, 2, 3, 4, 5.</li> <li>• Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle').</li> </ul>
Reception	Mathematics		<ul style="list-style-type: none"> <li>• Count objects, actions and sounds.</li> <li>• Count beyond ten.</li> </ul>
ELG	Mathematics	Numerical Patterns	<ul style="list-style-type: none"> <li>• Verbally count beyond 20, recognising the pattern of the counting system.</li> </ul>

Identifying, Representing and Estimating Numbers		
Three and Four-Year-Olds	Mathematics	<ul style="list-style-type: none"> <li>• Develop fast recognition of up to 3 objects, without having to count them individually ('subitising').</li> <li>• Show 'finger numbers' up to 5.</li> <li>• Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</li> <li>• Experiment with their own symbols and marks as well as numerals.</li> </ul>
Reception	Mathematics	<ul style="list-style-type: none"> <li>• Subitise.</li> <li>• Link the number symbol (numeral) with its cardinal number value.</li> </ul>
ELG	Mathematics	Number <ul style="list-style-type: none"> <li>• Subitise (recognising quantities without counting) up to 5.</li> </ul>

Reading and Writing Numbers		
Three and Four-Year-Olds	Mathematics	<ul style="list-style-type: none"> <li>• Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5.</li> <li>• Experiment with their own symbols and marks as well as numerals.</li> </ul>
Reception	Mathematics	<ul style="list-style-type: none"> <li>• Link the number symbol (numeral) with its cardinal number value.</li> </ul>

Compare and Order Numbers		
Three and Four-Year-Olds	Mathematics	<ul style="list-style-type: none"> <li>Compare quantities using language: 'more than', 'fewer than'.</li> </ul>
Reception	Mathematics	<ul style="list-style-type: none"> <li>Compare numbers.</li> </ul>
ELG	Mathematics	Numerical Patterns <ul style="list-style-type: none"> <li>Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.</li> </ul>

Understanding Place Value		
Reception	Mathematics	<ul style="list-style-type: none"> <li>Understand the 'one more than/one less than' relationship between consecutive numbers.</li> <li>Explore the composition of numbers to 10.</li> </ul>
ELG	Mathematics	Number <ul style="list-style-type: none"> <li>Have a deep understanding of numbers to 10, including the composition of each number.</li> </ul>

Solve Problems		
Three and Four-Year-Olds	Mathematics	<ul style="list-style-type: none"> <li>Solve real world mathematical problems with numbers up to 5.</li> </ul>

Addition and Subtraction		
Mental Calculations		
Reception	Mathematics	<ul style="list-style-type: none"> <li>Automatically recall number bonds for numbers 0-5 and some to 10.</li> </ul>
ELG	Mathematics	Number <ul style="list-style-type: none"> <li>Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.</li> </ul>

Solve Problems			
ELG	Mathematics	Numerical Patterns	<ul style="list-style-type: none"> <li>Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed evenly.</li> </ul>

Measurement			
Describe, Measure, Compare and Solve (All Strands)			
Three and Four-Year-Olds	Mathematics		<ul style="list-style-type: none"> <li>Make comparisons between objects relating to size, length, weight and capacity.</li> </ul>
Reception	Mathematics		<ul style="list-style-type: none"> <li>Compare length, weight and capacity.</li> </ul>
Telling the Time			
Three and Four-Year-Olds	Mathematics		<ul style="list-style-type: none"> <li>Begin to describe a sequence of events, real or fictional, using words, such as 'first', 'then...'</li> </ul>

Properties of Shapes			
Recognise 2D and 3D Shapes and their Properties			
Three and Four-Year-Olds	Mathematics		<ul style="list-style-type: none"> <li>Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'.</li> <li>Select shapes appropriately: flat surfaces for a building, a triangular pattern for a roof, etc.</li> <li>Combine shapes to make new ones – an arch, a bigger triangle, etc.</li> </ul>
Reception	Mathematics		<ul style="list-style-type: none"> <li>Select, rotate and manipulate shapes in order to develop spatial reasoning skills.</li> </ul>
Compare and Classify Shapes			

Reception	Mathematics	<ul style="list-style-type: none"> <li>• Compose and decompose shapes so that children can recognise a shape can have other shapes within it, just as numbers can.</li> </ul>
-----------	-------------	---

## Position and Direction

### Position, Direction and Movement

Three and Four-Year-Olds	Mathematics	<ul style="list-style-type: none"> <li>• Understand position through words alone – for example, “The bag is under the table,” – with no pointing.</li> <li>• Describe a familiar route.</li> <li>• Discuss routes and locations, using words like ‘in front of’ and ‘behind’.</li> </ul>
Reception	Understanding the World	<ul style="list-style-type: none"> <li>• Draw information from a simple map.</li> </ul>

### Patterns

Three and Four-Year-Olds	Mathematics	<ul style="list-style-type: none"> <li>• Talk about and identify the patterns around them. For example, stripes on clothes, designs on rugs and wallpaper. Use informal language like ‘pointy’, ‘spotty’, ‘blobs’, etc.</li> <li>• Extend and create ABAB patterns – stick, leaf, stick, leaf.</li> <li>• Notice and correct an error in a repeating pattern.</li> </ul>
Reception	Mathematics	<ul style="list-style-type: none"> <li>• Continue, copy and create repeating patterns.</li> </ul>

## Statistics

### Record, Present and Interpret Data

Three and Four-Year-Olds	Mathematics	<ul style="list-style-type: none"> <li>• Experiment with their own symbols and marks, as well as numerals.</li> </ul>
--------------------------	-------------	---

