

# Maths Curriculum Map – Nursery

**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. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

At Stocksbridge Nursery Infant School we use the [Development Matters](#) non statutory guidance to enable us to make a holistic best fit judgement for observation, assessment and next steps. We understand that all children are unique, and that they develop in different ways. We nurture and encourage this using a play-based approach. We use the statutory Early Learning Goals to assess children at the end of Reception as Emerging or Expected.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
KIRFS	<p>I can recite the number names to 5.</p> <p>I can touch count to 3.</p>	<p>I can recite the number names in order to 5.</p> <p>I can touch count to 5.</p>	<p>I can use the language: before, after, next.</p> <p>I can sort objects and say which group is more/less.</p> <p>I can name simple shapes.</p>		<p>I can recite numbers in order to 10.</p>	
Nursery	<ul style="list-style-type: none"> <li>To know routines</li> <li>Know how to count to 3 in sequence</li> <li>Know how to count to show how many</li> <li>Know some basic shapes</li> <li>Know focused daily nursery rhymes</li> </ul>	<ul style="list-style-type: none"> <li>To know routines using now and next</li> <li>To know counting and pointing out the last number</li> <li>Collecting objects</li> <li>To know finger rhymes to 5</li> <li>To know and link numerals to amounts</li> <li>Know to sort and categorise objects</li> <li>Know simple positional language to find objects</li> </ul>	<ul style="list-style-type: none"> <li>To follow instructions first, then</li> <li>Know positional language to describe a simple route around classroom</li> <li>Know numerals through play and blank tracks</li> <li>Experience real life maths problems during routines</li> <li>Comparing amounts</li> <li>Explore small 2D and 3D shape play</li> </ul>	<ul style="list-style-type: none"> <li>To describe an event</li> <li>Know positional language to describe a simple route beyond the classroom</li> <li>Know simple prepositions</li> <li>Explore large 2D and 3D shape play</li> <li>Explore and know there are patterns around us</li> </ul>	<ul style="list-style-type: none"> <li>Know the sequence of a simple story</li> <li>Know we can compare lengths</li> <li>Know we can compare weights</li> <li>Know language of first, then, next to talk about trip</li> <li>Know numeral amounts and count accurately in play</li> </ul>	<ul style="list-style-type: none"> <li>Know the sequence stories in play</li> <li>Know positional language whilst on a journey around our community</li> <li>Know there are patterns in other cultures</li> <li>Know, copy and create simple patterns e.g. stripes</li> <li>Know and copy musical patterns</li> </ul>

<ul style="list-style-type: none"> <li>• Baseline: counting, sorting, basic shapes.</li> <li>• Know we can count objects in sequence (forwards, backwards, using actions and through songs and games)</li> <li>• Know focused nursery rhymes involving numbers and counting.</li> <li>• Know how when we count objects, we point out the last object to show how many</li> <li>• Introducing basic shapes in focus and play. Point out names of shapes circle, square, triangle. Use in play. Know some names.</li> <li>• Know the routines in sequence. E.g. coat away, bag away, then play.</li> </ul>	<ul style="list-style-type: none"> <li>• Know when we count objects, pointing out the last number shows how many.</li> <li>• Know a variety of number games and collect a specific number of items.</li> <li>• Know finger numbers up to 5. Know how to show me on fingers and singing number rhymes up to 5.</li> <li>• Know and link numerals and amounts throughout the setting. Show and point out in focus. Introduce independence in play.</li> <li>• Know how to sort objects by size and capacity (for example vehicles or different sized containers)</li> <li>• Know how to categorise toys and objects by colour. Know how to sort into different groups using this criteria.</li> <li>• To know routines when asked questions like now and next.</li> <li>• Know positional language to play hide and seek. Hide a toy and use language like 'under'.</li> </ul>	<ul style="list-style-type: none"> <li>• Know how to subitise up to 3 — play games to include 1, 2, 3 objects.</li> <li>• Explore numerals and blank tracks through play and practitioner modelling.</li> <li>• Introduce real world mathematical problems with numbers up to 5 during, snack time, group time etc. be very clear and use visuals to enable children to solve the simple question. E.g we have 5 children at the table. How many cups do we need? We have 3 children how many chairs do we need? Children know they can physically count the children / chairs and physically hand out the objects and count together.</li> <li>• Know simple visual comparisons introducing more than and fewer than. Which table has more children? Who has fewer blocks? Use numbers within 5 and visually count out. Children know they must move an object to count.</li> <li>• Exploring 2D and 3D shapes through play activities. Know they can make pictures and models with shapes and discuss shapes as we play.</li> <li>• To know routines and follow a sequence first, then, next.</li> <li>• Know positional language to plan a 'route' for example a route from the classroom to the hall. (Not a map — a journey)</li> </ul>	<ul style="list-style-type: none"> <li>• Know prepositions in real life contexts. Introduce in focus activities and then model and support in play. E.g. in, on, under.</li> <li>• Know positional language to plan a 'route' / 'journey' to the trip on the farm. (Not a map)</li> <li>• Know we can use loose parts for den making, talking about shapes and how their properties suit the purpose.</li> <li>• To know a sequence of events like a trip or family event.</li> <li>• Know and search for patterns around us. Use loose parts to copy simple patterns.</li> </ul>	<ul style="list-style-type: none"> <li>• Know we can compare lengths and weights (vegetables, farm animals). Long / short, big / small, heavy, light. Explore with hands.</li> <li>• Use photographs from our trip to the farm to talk about real life events. Know to talk about what we did throughout the day using, 'first, then, next' language.</li> <li>• Know we can link numerals to amounts accurately in both focused activities and opportunities in play.</li> <li>• Know a sequence in a simple story first, then, next.</li> </ul>	<ul style="list-style-type: none"> <li>• Know there are simple patterns from different cultures e.g fabrics. Introduce vocabulary to describe patterns.</li> <li>• Know and describe a pattern we see, copy a pattern and create their own patterns using a variety of materials</li> <li>• Create musical patterns using clapping and stamping.</li> <li>• Know and sequence a story or event in their play.</li> <li>• Know positional language on a walk around our community. Make a journey plan. (No a map)</li> </ul>
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	We will be learning to	Through activities such as	Throughout the year the children will learn	
	<ul style="list-style-type: none"> <li>Follow the nursery routine</li> <li>Listen to number songs and rhymes</li> <li>Number names and shapes</li> </ul>	<ul style="list-style-type: none"> <li>Sequencing of the day – visual timetable</li> <li>Days of the week song</li> <li>Counting children in line as line up</li> <li>How many people live in my house?</li> </ul>	<ul style="list-style-type: none"> <li>To count through songs, stories and in their play</li> <li>To recognise quantities of objects</li> <li>To recognise numerals in the environment</li> <li>To use some number names and language</li> <li>To show awareness of numbers in the environment</li> <li>To explore 2d shapes in the environment</li> <li>To show awareness of time through class routines</li> </ul>	<ul style="list-style-type: none"> <li>To compare objects by size</li> <li>To recite number rhymes</li> <li>To explore different shapes, spaces and measures</li> <li>To recognise without counting (subitise) how many objects there are in a set (1 – 3)</li> <li>To use fingers and marks on paper to represent numbers</li> <li>To count objects, sounds or actions</li> </ul>
Developmental Matters	Number		Shape, Space Measure	
	<ul style="list-style-type: none"> <li>Fast recognition of up to 3 objects, without having to count them individually ('subitising').</li> <li>Recite numbers past 5.</li> <li>Say one number 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> <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. Solve real world mathematical problems with numbers up to 5.</li> </ul>		<ul style="list-style-type: none"> <li>Compare quantities using language: 'more than', 'fewer than'.</li> <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>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> <li>Make comparisons between objects relating to size, length, weight and capacity.</li> <li>Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc.</li> <li>Combine shapes to make new ones – an arch, a bigger triangle etc.</li> <li>Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc.</li> </ul>	