



St. Peters Early Years Maths Curriculum Nursery



Development Matters Statement	The Nursery children can.....
Develop fast recognition of up to 3 objects, without having to count them individually ('subitising')	• Say when there is 1 object without having to count it, but still count 2 or 3 objects individually when asked 'How many?' in a variety of contexts – through continuous provision, whole class maths activities and number rhymes with concrete resources. • Say when there are 1 and 2 objects without having to count them, but still need to count 3 objects, in a variety of contexts. • Subitise up to 3 objects when asked in a variety of contexts, just by looking.
Recite numbers past 5	• Learn and join in with number songs initially with numbers to 5 (eg Five in the bed, Five cheeky Monkeys, Five Little Ducks, Five Fat Sausages, Once I caught a Fish Alive etc), stories and counting aloud in a group.

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| | <ul style="list-style-type: none">• With support, say some number names as they play in different areas of the environment, eg hide and seek, roleplay.• Count aloud up to 5 in order, in teacher led activities such as banging the drums in Boogiemites, counting claps/jumps, maths activities etc and in a variety of other contexts in their play, both indoors and outdoors.• Count aloud past 5 with support eg when counting children here today on the register, or joining in with the teacher counting how many children are in the line.• Count aloud up to 5 in order independently as part of a group, or individually in the above activities.• Say the counting sequence to 5 in a variety of playful contexts, forwards and backwards eg rocket launch countdowns.• Count aloud past 5 independently in their play, sometimes to high numbers. |
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	Count backwards from beyond 5 in their play eg rocket launch countdowns.
Say one number for each item in order: 1,2,3,4,5.	- Join in counting 'how many' whilst the teacher points to each item eg. children here today on the register/number of children in a group, objects used when singing a number rhyme such as 5 fat sausages, 5 little ducks. Teacher repeats the last number – 6 children, 5 ducks. - Put objects in a line (if possible). Begin to count objects in a small set (1-5) with some support, pointing to each object and saying 1 number for each item with the teacher repeating the last number to show how many are in the group eg. 4 holes in the Numicon shapes, 5 cars, 3 pretend cookies in the roleplay. - Independently, point to each item in a group or small set with accurate 1-1 correspondence as they count, saying each number in the correct order, in a variety of contexts within play. - Give an adult a small number of objects when asked counting them out.

	• Remember how many they have counted in a small set without having to 'recount' each time ie Count out 1-5 objects and repeat the correct last number to the teacher when asked, saying 5 cups, 3 bricks. • Know there are still the same number of objects in a small set, even if the objects have been moved slightly.
Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle')	• Put objects in a line (if possible), then count 1-5 objects, with the teacher repeating the last number to show how many are in the group eg saying 4 children, 3 cups, 5 holes in the Numicon shapes, and in number rhymes - for example 2 ducks, 3 sausages. • Learn the number represented by the Numicon shapes, counting the holes or Numicon pegs, recognising that the same shape always represents the same number. • Put objects in a line (if possible), count out 1-5 objects and then repeat back the correct last number to the teacher when asked, saying 5 cars, 3 bricks. • Say 'how many' after they have counted a small set of objects using a 5 frame and begin to recognise there is still the same amount when asked again,

	without having to recount them, eg red buttons when sorting into colours, conkers or counters. • Count different arrangements of the same small number of objects after they have been moved (eg in a 5 frame) and begin to recognise there is still the same amount. • Say how many objects there are in a small set after they have been moved (eg in a 5 frame), without having to recount them.
Show 'finger numbers' up to 5.	• Begin to count aloud up to 5, pointing to each finger with support or as part of a group eg. when singing Once I caught a fish alive. • Count aloud to 5, pointing to each finger independently. • With support, can represent numbers 1-5 using fingers, sometimes counting each finger to check. • Show numbers 1-5 using fingers by themselves, without having to count them first.
Link numerals and amounts: for	• Begin to recognise some numbers of personal significance in the environment eg their age.

example, showing the right number of objects to match the numeral, up to 5	• Become more aware of the numerals 1 to 5 in the environment, on displays and on resources/storage pots and boxes inside and outside the classroom eg number jigsaws, match the correct bike to the right number on the gate of the bike sheds, candle numerals in dough area. • Recognise and know the names of numerals 1-5, eg using the class number line to point to spoken numbers. • Count out 1-5 Numicon pegs onto a Numicon shape and match the shape to the correct numeral. • Count out 1-5 objects to match the correct number eg on a plate/pot in the maths area, interactive whiteboard number games, 4 pencils in a pot when tidying up etc. • Link the quantity 1-5 to the cardinal number it represents in a variety of contexts such as when playing number games or doing number puzzles.
Experiment with their own symbols and marks as well as numerals.	• Draw pictures to represent amounts, eg members of my family. • When encouraged, begin to make marks to represent 'how many' in their play eg writing a shopping list in the roleplay – 3 apples, goals scored outside, how many children like red.

	• Begin to copy numerals in their play inside and outside eg copying the magnetic numerals on the large whiteboard in the maths area, recording scores in games - how many bean bags are in the hoop. • Make marks and write numerals to represent 'how many' independently in their play.
Solve real-world mathematical problems with numbers up to 5	• Use their knowledge of number to talk about and solve problems in their everyday play, both inside and outside eg. How many plates will we need to lay the table in the roleplay for 3 children? Are there enough cups? How many plant pots do we need to plant these seeds? • Use their knowledge of number to play maths games which involve counting and recognising numbers.
Compare quantities using language 'more than' and 'fewer than'	• Talk about quantities and changes of amounts while reading stories eg the Enormous Turnip, singing songs eg 5 Little Ducks • Say which of 2 amounts has more than the other (up to 5) just by looking, eg which group has more children here on the register.

	• Say which of 2 amounts has fewer than the other (up to 5) just by looking. • Say when 2 amounts are not the same or the same (up to 5) just by looking. • Understand and use the words more, lots, same, fewer and less to find/show quantities and talk about different amounts when I play.
Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language such as: • Sides • Corners • Straight • Flat • Round	• Explore shape and space when they play in different areas across the indoor and outdoor environment eg. building with different shaped blocks in the block area or with construction, finding an appropriate shaped box when junk modelling, making 'sausage' shapes or using different shape cutters with the playdough, making 'shape pictures' with 2D shapes in the maths area or 2D stencils in the mark making area, completing basic inset puzzles by matching shapes and turning the pieces, building with the large construction outside (lego, crates, tyres etc). • Begin to recognise and name simple 2D shapes - square, circle, rectangle and triangle and notice them in the environment around them.

	• Begin to understand language such as corners, sides, flat, straight, curved and round to describe the objects they find and sometimes be able to point to these features when asked. • Identify and talk about what is the same or different between the 2D shapes they notice in the indoor and outdoor environment using informal (eg sharp corner, pointy, curvy) and mathematical language (see above). • Use informal and mathematical language to describe 3D objects. • Talk about their own models and pictures using the language of shape and space including flat, curved, round, straight, side, corner and some shape names.
Understand position through words alone, for example, “the bag is under the table,” with no pointing.	• Follow simple positional language instructions using words such as ‘on, in under, up, down, in front, on top, next to, behind’ when tidying up resources and using the cloakroom with support ie guiding and pointing eg Put your coat on your peg, your wellies are in your bag, stand next to John. • Understand position language suggested and shown to them by adults to support them in their play both indoors and outdoors eg lets put this block on the top, move your foot to the next step (when supporting on the climbing frame).

	• Follow positional language instructions when tidying up resources and using the cloakroom independently with no pointing. • Follow multistep positional instructions such as 'Put the book in the box and then push the box under the table'. • Use position language and spatial words in and about their own play both indoors and outdoors eg the playdough fell under the table, I ran up the hill, my tower fell down.
Describe a familiar route. Discuss routes and locations, using words like 'in front of' and 'behind'.	• Talk about where things are and the location of places in the classroom and the outside environment. • Discuss routes and journeys characters take in books during story time eg Bear Hunt.

	• Recall a simple familiar route and the order of things they see on the way eg on their way to school, when walking around school, such as up to the hall for lunch. • Talk about routes and journeys characters take in books when drawing story maps, such as Rosie's Walk. • Discuss routes created and the location of objects during their play eg road and train tracks as they build, water flowing or balls rolling along guttering outside, making routes out of outdoor equipment such as stepping stones and planks, marble runs etc
Make comparisons between objects relating to size, length, weight and capacity	• Teacher model vocabulary related to size changes etc in the classroom environment during play eg sand – can you make your castle bigger, water – what happens if you squeeze your sponge, play doh – what happens if you stretch your dough?

	• Begin to line up ends of lengths, straightening ribbons, line children up next to each other to compare length or height. • Say which is long, longest, tall, tallest or small, smallest, short, shortest or are the same length or height. • Begin to use simple measuring equipment to compare sizes/length eg. Using rubber hands and feet for measuring objects. • Notice when something feels heavy or light in their hands and begin to use simple balance scales to see that heavy objects make the scales go down. • Use language such as heavy, heavier, light, lighter. • Discuss when containers are full, fullest, 'have more', 'have less', 'have the same' or are empty when playing in the sand or water inside and outside. • Talk about comparing size, length, weight and capacity in everyday ways.
Select shapes appropriately such as flat surfaces for	• Sort blocks and construction shapes into different, specific containers and match them with silhouettes at tidy up time.

building or a triangular prism for a roof	• Explore shape and space when they play in different areas across the environment eg. building objects with different shaped blocks in the block area or with construction, completing jigsaws and inset puzzles by matching shapes and turning the pieces. • Finding an appropriate shape for a purpose eg when junk modelling, making 'shape pictures' with 2D shapes in the maths area or 2D stencils in the mark making area, building dens or using the large construction outside. • Use the appropriate shapes in their play to construct models and create pictures and can talk about the shapes and how they suit the purpose.
Combine shapes to make new ones, for example, an arch or a bigger triangle	• Explore shape and space when playing in different areas across the environment, combining shapes to make other shapes eg with mobilo and wooden blocks. • Use different shape resources to make their own more complex constructions.

	• Talk about the different designs they make.
Talk about and identify the patterns around them, for example, stripes on clothes or designs on rugs and wallpaper use informal language like 'pointy', 'spotty' or 'blobs'	• Identify and match different patterned objects such as mittens or in puzzle games • Begin to talk about patterns they can draw eg tracing over zig zag handwriting patterns, print own patterns for Christmas wrapping paper. • Talk about patterns they can draw eg tracing over zig zag handwriting patterns, draw own patterns on pictures such as Easter eggs. • Explore and talk about patterns around them from different cultures such as on fabrics, using everyday language.
Extend and create ABAB patterns – stick, leaf, stick, leaf	• Follow then create their own simple patterns using body percussion in Phonics and Music activities (Boogiemites).

Notice and correct an error in a repeating pattern	• Continue patterns already made using a variety of natural and everyday objects and materials in the indoor and outdoor environments eg coloured sorting objects/coloured beads in the maths area, transient art resources. • Spot mistakes in patterns already made. • Create their own patterns using a variety of natural and everyday objects and materials. • Talk about the patterns they have made and how to continue them.
Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...'	• Follow and talk about the patterns of events linked to routines in Nursery eg when putting on our wellies and coats to go outside, getting ready for snack time, visual timetable for the day. • Join in with the 'Good Morning Song' to identify the current day of the week. • Use words such as 'next' and 'then' to talk about the sequence of events during a typical day at Nursery.

	• Talk about sequences of events outside of school eg later I am going swimming, this morning I was late getting up. • Use vocabulary such as morning, afternoon, evening, night-time, earlier, later, too soon, too late, in a minute. • Count down to coming events in terms of days or sleeps eg tomorrow it is my birthday, next week I am going on holiday. • Use words such as 'next' and 'then' to talk about the sequence of events in stories.
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