



EYFS Progression Documents - Nursery and Reception

Maths

Long Row Primary and Nursery School
Inspire, Respect, Belong

Nursery	What the children will know	How the children will learn
Autumn Term	Recognise numbers of significance e.g. their age or house number Begin to say numbers in order Begin to understand cardinality e.g. takes or gives 2 or 3 items from a group Subitise 1 and 2 Fits objects into spaces	Count in everyday activities Sing number songs and rhymes and play games Model counting on fingers Encourage mark making in play Use daily routines as an opportunity to count and emphasise counting
Spring Term	Begins to show an awareness and recognise numerals in the environment. Count using their fingers Use mathematical language – more, lots & the same Understand near and far away Notices patterns and joins in with action and sound patterns – repeat back to an adult Opportunities to explore size – length, mass and capacity	As above and... Singing number rhymes and songs and ask questions such as, ‘how many now?’ Mark making with different materials both indoors and outdoors Begin matching numerals to quantities within continuous provision (to 5) Use positional language within routines – make and use obstacle courses Build tracks, roads and other structures and discuss position within play Language of shape developed during play
Summer Term	Compare 2 groups/sets of objects (3-5) Count 1:1 to 5 Begin to recognise numbers to 10 Subitise to 3 (without counting) Link numerals to amounts (to 5) Understand cardinality and count in order up to 5 Continue developing and using positional language in play Create arches and enclosures in construction and other play Create and develop simple repeating patterns Compare amounts/quantities – more than, fewer than Talk about and compare shapes using a range of vocabulary – sides, corners, straight, curved, flat & round	As above and... Share amounts between toys and friends and discuss amounts – more than, fewer than & the same as Count forwards and backwards (to 10) within provision and activities Model writing the numeral in play Demonstrate cardinality when counting e.g. 1, 2, 3 – I have 3 cups/there are 3 cups Loose part play to encourage subitising and exploring composition of number Fine motor activities to explore pattern – transient art, threading beads, peg boards & natural materials outdoors Book talk – maths stories, number books and pattern and shape books Differing sized blocks, shape and construction available in provision Five and ten frames in provision for exploration and play

Reception	What the children will know	How the children will learn
Autumn Term	Counts to 10 (out loud e.g. songs, rhymes and through play). Begin to sort objects and identify a set. Compare amounts. Separates 3, 4 or 5 objects in different ways. Copy and continue simple patterns. Can make and talk about simple patterns they have created. Finds the longest, shortest, heaviest & lightest within play. Find & represent numbers 1 – 5: say number verbally, match to correct numeral, count objects. Matches numerals to correct quantity (to 5) Subitise 1, 2, 3 and beyond to 5 Begins to understand composition of numbers 1- 5 e.g. 2, 2 & 1 Begins to recognise that the next number in the sequence is the number one more than and the number before is 1 less than Predicts which objects might fit into space and moves and rotates objects to fit. Talk about everyday shapes and use mathematical language to discuss and compare shapes in the environment (2d & 3d) Identify, name and compare circles and triangles. Describe position. Identify and name shapes with 4 sides and combine shapes with 4 sides.	<i>As above and...</i> Counting as part of everyday activities (at least once a day). Book talk – mathematical stories available within play Loose parts play allowing collections of objects to be separated and grouped. Selection of objects to explore and investigate patterns, sorting and grouping Numerals within environment and available to enhance activities Using mathematical language (one more than, one less than) Dice play and patterns readily available Problem solving opportunities indoors and outdoors for comparing mass, length, capacity and amounts – water, sand, mud and construction/block play Ordering by size within play (clothes in role play, cups, bowls and so on) Subitising opportunities within play and games Use Numicon to explore numeral and quantity Use 5 and 10 frames within play White Rose units: Match, sort & compare, Talk about measure & patterns, It's me 1, 2, 3, Circles & Triangles, 1,2,3,4,5 and Shapes with 4 sides.

Spring Term	Introduce zero Develop conceptual subitising to 5 and beyond Further develop, through comparison and exploration, capacity and mass Find a balance Find & represent numbers 6-10: say number verbally, match to correct numeral, count objects. Matches numerals to correct quantity (0 to 10) Composition of numbers to 10 Continue 1 more and 1 less Make pairs – odd & even Double to 10 – find a double Double to 10 – make a double Combine 2 groups to find a total Follows and gives simple instructions/directions Explore and compare length & height Talks about time in everyday life – yesterday, tomorrow, morning, afternoon, evening. Bonds to 10 – 2 parts Bonds to 10 – 3 parts Further explore doubling and odd & even Makes own models, talking about shapes and objects used: recognise and name 2D shapes, find 2D shapes within 3D shapes and find 3D shapes in the environment. Spot and identify more complex patterns Copy and continue patterns and find patterns in the environment.	<i>As above and...</i> Variety of counting songs to count forwards and backwards (sometimes starting from different numbers). Provide estimation opportunities within play. Use Numicon and Cuisenaire rods to explore numeral and quantity and pattern e.g. staircase, odds and evens, addition (combining groups), doubles & halves... Play subitising games – dice and dominoes Discuss daily routines and familiar experiences modelling correct vocabulary Provide simple problem-solving opportunities (muddled up number lines, missing numbers, dropping marbles into a tin – how many?) Model making in large and small ways (including obstacle courses). Story time discussions – encourage children to ask and answer questions. Bee Bot play and exploration White Rose units: Alive in 5! Mass and Capacity, Growing 6,7 & 8, Length, height & time, Building 9 & 10 and Explore 3D shapes.
---------------------------	--	---

Summer Term	To count beyond 10. Further compare numbers. To build numbers – 10 to 13 and then 14 to 20. Continue patterns – 10 to 13 and then 14 to 20. Verbal counting beyond 20. Verbal counting patterns – twos, tens and fives. Add more – How many did I add? Take away – How many did I take away? Select shapes for a purpose. Rotate shapes, manipulate shapes and explain shape arrangements. Compose shapes. Decompose shapes. Copt 2D shape pictures. Explore, investigate and find 2D shapes within 3D shapes. Sharing and grouping – even and odd sharing. Play with and build doubles. Identify units of repeating patterns. Create own pattern rules and explore own pattern rules. Replicate and build scenes and constructions. Visualise from different positions. Describe positions. Give instructions to build. Explore mapping. Represent maps with models. Create own maps and plans from story situations.	<i>As above and...</i> Number tracks, number lines, 100 squares to show numerical patterns in the number system. Count beyond 10 in different ways (2s, 5s, 10s) Provide collections to compare (small/large, more/less) and distribute items equally (sharing) Provide staircase patterns in Numicon & Cuisenaire rods to show that the next counting number is the previous number plus one. Provide problem solving for bonds for 10 e.g. 6 are outside the tent, how many are inside? Use 10 frames to explore bonds and how many are missing. Use 5 frames for addition and subtraction facts within play. Compose and decompose shapes - look for patterns e.g. square faces in cubes, two triangles making a square or diamond. Make patterns with AB, ABB, ABBC rules – making deliberate mistakes for the children to correct. Build using workshop resources and construction toys – describe and explain. Map drawing through play and linked to story work and Understanding the World work. White Rose units: To 20 & beyond, How many now? Manipulate, compose & decompose, Sharing & grouping, Visualise, build & map and Make connections.
	Statutory ELG: Number Children at the expected level of development will: - Have a deep understanding of number to 10, including the composition of each number;- Subitise (recognise quantities without counting) up to 5; - 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. Statutory ELG: Numerical Patterns Children at the expected level of development will: - Verbally count beyond 20, recognising the pattern of the counting system; - Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity; - Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.	
	Statutory Educational Programme: Mathematics 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.	