

Penketh South Early Years – Maths Progression of Skills and Knowledge

Curriculum Area	Autumn			Spring			Summer		
	Nursery 1 2-3 years	Nursery 2 3-4 years	Reception 4-5 years	Nursery 1 2-3 years	Nursery 2 3-4 years	Reception 4-5 years	Nursery 1 2-3 years	Nursery 2 3-4 years	Reception 4-5 years
Number - Comparison	<ul style="list-style-type: none"> Responds to words like lots or more 	<ul style="list-style-type: none"> Beginning to compare and recognise changes in the number of things using words like more, lots and 'same' 	<ul style="list-style-type: none"> Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, I've got two. Same! 	<ul style="list-style-type: none"> Compare amounts using words like 'lots', 'more' and 'same.' 	<ul style="list-style-type: none"> Beginning to compare and recognise changes in number of things. 	<ul style="list-style-type: none"> Uses number names and symbols when comparing numbers, showing interest in large numbers. Estimates of numbers of things, showing understanding of relative size. 	<ul style="list-style-type: none"> Compare quantities using language: 'more than', 'fewer than' 	<ul style="list-style-type: none"> Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. You've got two, I've got two. Same! 	<ul style="list-style-type: none"> Count objects, actions and sounds. Compare quantities of objects to 10 and know more/less with groups of objects.
Number – Counting	<ul style="list-style-type: none"> Says some counting words. Take part in finger rhymes with numbers. May engage in counting-like behaviour, making sounds and pointing or saying some numbers in sequence. 	<ul style="list-style-type: none"> Begins to say numbers in order, some of which are in the right order (ordinality). Beginning to count on their fingers. 	<ul style="list-style-type: none"> Enjoys reciting numbers from 0 to 10 (and beyond) and back from 10 to 0. Points or touches (tags) each item, saying one number for each item, using the stable order of 1,2,3,4,5. Counts objects from 0 – 10 in order and back using 1-1 correspondence. Uses number names from 0 to 10. 	<ul style="list-style-type: none"> Count in everyday contexts, sometimes skipping numbers. 	<ul style="list-style-type: none"> Can count alongside actions in games, rhymes and songs. Show 'finger numbers' up to 3. Can say one number name for each item in order: 1,2,3. 	<ul style="list-style-type: none"> Begin to recognise numerals 0 to 10. Increasingly confident at putting numerals in order 0 to 10 (ordinality). 	<ul style="list-style-type: none"> Begins to say numbers in order, some of which are in the right order (ordinality). 	<ul style="list-style-type: none"> Recites numbers to 5. Show 'finger numbers' up to 5. Counts up to 4 objects. 	<ul style="list-style-type: none"> Count to 20. Recognise and order numerals to 10.
Number - Cardinality	<ul style="list-style-type: none"> Subitises one object (without counting). 	<ul style="list-style-type: none"> Subitises one, two and three objects (without counting). Beginning to count on their fingers. 	<ul style="list-style-type: none"> Match the numeral with a group of items to show how many there are up to 5. Understand that to subitise means to know an amount without counting. Subitises one, two and three objects confidently (without counting). 	<ul style="list-style-type: none"> Subitises one and two objects (without counting). Uses number words such as <i>one</i> or <i>two</i> and sometimes responds accurately when asked 	<ul style="list-style-type: none"> In everyday situations, takes or gives two or three objects from a group. Beginning to notice numerals (number symbols). 	<ul style="list-style-type: none"> Be able to subitise (know amount without counting) to 5. Matches the numeral with a group of items to show how many there are (up to 5). 	<ul style="list-style-type: none"> Reacts to changes of amount in a group of up to 3 items. Beginning to count on their fingers. 	<ul style="list-style-type: none"> Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). 	

			<ul style="list-style-type: none"> Counts out up to 10 objects from a larger group. 	to give one or two.				<ul style="list-style-type: none"> Explores using a range of their own marks and signs to which they ascribe mathematical meanings. Links numerals with amounts up to 5. Confidently subitises to 3. 	
Number - Composition			<ul style="list-style-type: none"> Through play and exploration, beginning to learn that numbers are made up (composed) of smaller numbers. Beginning to recognise that each counting number is one more than the one before. Understand the 'one more than/one less than' relationship between consecutive numbers. Separates a group of three or four objects in different ways, beginning to recognise that the total is the same. Shows awareness that numbers are made up (composed) of smaller numbers, exploring partitioning in different ways with a wide range of objects. 			<ul style="list-style-type: none"> Concretely adds one and subtracts one with numbers up to 10. Can partition with a wide range of objects up to 5. Explore the composition of numbers to 10. Begin to automatically recall number bonds for numbers 0–5 and some to 10. 		<ul style="list-style-type: none"> Begin to automatically recall number bonds for numbers 0–5 and some to 10. Begins to conceptually subitise larger numbers by subitising smaller groups within the number, e.g. sees six raisins on a plate as three and three. Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and "+" or "-" 	
Shape, Space and Measure –	<ul style="list-style-type: none"> Responds to simple language of position – in / out. 	<ul style="list-style-type: none"> Responds to some spatial and positional language – 	<ul style="list-style-type: none"> Responds to and uses language of position and direction. 	<ul style="list-style-type: none"> Investigates fitting themselves inside and moving 	<ul style="list-style-type: none"> Moves their bodies and toys around objects and explores fitting into spaces. 	<ul style="list-style-type: none"> Investigates turning and flipping objects in order to make 	<ul style="list-style-type: none"> Uses words such as in and on to describe position. 	<ul style="list-style-type: none"> Discuss routes and locations, using words like 'in front 	<ul style="list-style-type: none"> Uses spatial language, including following and giving

Spatial Awareness		in, on, under, over, behind.		through spaces.		shapes fit and create models; predicting and visualising how they will look (spatial reasoning).		of' and 'behind'	directions, using relative terms and describing what they see from different viewpoints. <ul style="list-style-type: none"> • May enjoy making simple maps of familiar and imaginative environments, with landmarks.
Shape, Space and Measure – Shape	<ul style="list-style-type: none"> • Enjoys using blocks to create their own simple structures and arrangements. • Pushes objects through different shaped holes, and attempts to fit shapes into spaces on inset boards or puzzles. 	<ul style="list-style-type: none"> • Select shapes appropriately. • Makes simple constructions. • Recognises that two objects have the same shape. 	<ul style="list-style-type: none"> • Talk about and explore 2D shapes (for example, circles, rectangles, triangles) using informal and mathematical language. • Enjoys partitioning and combining shapes to make new shapes with 2D shapes. • Shows awareness of shape similarities and differences between objects. 	<ul style="list-style-type: none"> • Beginning to select a shape for a specific space. • Build with a range of resources. 	<ul style="list-style-type: none"> • Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc. • Combine shapes to make new ones – an arch, a bigger triangle, etc. • Can name simple geometric shapes in their play. 	<ul style="list-style-type: none"> • Enjoys composing and decomposing shapes, learning which shapes combine to make other shapes • Uses own ideas to make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build. • Talk about and explore 3D shapes. 	<ul style="list-style-type: none"> • Recognises that two objects have the same shape. 	<ul style="list-style-type: none"> • Talk about and explore 2D shapes (for example, circles, rectangles, triangles) using informal and mathematical language: 'sides', 'corners', 'straight', 'flat', 'round'. 	<ul style="list-style-type: none"> • Uses informal language and analogies, (e.g. heart-shaped and hand-shaped leaves), as well as mathematical terms to describe shapes . • Can notice shapes in the environment.
Shape, Space and Measure – Pattern	<ul style="list-style-type: none"> • Joins in with and predicts what comes next in a story or rhyme. • Becoming familiar with patterns in daily routines. 	<ul style="list-style-type: none"> • Is able to arrange items in their own patterns. • Is interested in what happens next using the pattern of everyday routines. • Talk about and identify the patterns around them. 	<ul style="list-style-type: none"> • Explores and adds to simple linear patterns of two or three repeating items. • Joins in with simple patterns in sounds, objects, games and stories, dance and movement, predicting what comes next. • Creates their own spatial patterns showing some 	<ul style="list-style-type: none"> • Beginning to arrange items in their own patterns. 	<ul style="list-style-type: none"> • Joins in and repeats repeated sound and action patterns. 	<ul style="list-style-type: none"> • Spots patterns in the environment, beginning to identify the pattern "rule" • Chooses familiar objects to create and recreate repeating patterns beyond AB patterns and 	<ul style="list-style-type: none"> • Notices patterns and arrange things in patterns. • Begins to join in and repeat repeated sound and action patterns. 	<ul style="list-style-type: none"> • Explores and adds to simple linear patterns of two repeating items, e.g. stick, leaf (AB). • Notice and correct an error in a repeating pattern. 	

			organisation or regularity.			begins to identify the unit of repeat.			
Shape, Space and Measure – Measures	<ul style="list-style-type: none"> • Explores capacity by selecting, filling and emptying containers • Shows an interest in size. 	<ul style="list-style-type: none"> • Begin to explore differences in size and capacity. 	<ul style="list-style-type: none"> • In meaningful contexts, finds the longer or shorter, heavier or lighter and more/ less full of two items. • Explores differences in size, length, weight and capacity. • Is increasingly able to order and sequence events using everyday language related to time. 	<ul style="list-style-type: none"> • Compares sizes using gesture and language. 	<ul style="list-style-type: none"> • Make comparisons between objects relating to size. 	<ul style="list-style-type: none"> • Enjoys tackling problems involving prediction and discussion of comparisons of length, weight or capacity, paying attention to fairness and accuracy. • Becomes familiar with measuring tools in everyday experiences and play. • Beginning to experience measuring time with timers and calendars. 		<ul style="list-style-type: none"> • Can use everyday vocabulary to describe and compare measures such as size, weight, capacity or time. 	<ul style="list-style-type: none"> • Compare length, weight and capacity.