

Kingway Primary School – Maths pacing document for EYFS

Nursery (Ducklings)				
DMs statements –				
Number				
<ul style="list-style-type: none"> • Combine objects like stacking blocks and cups. Put objects inside other and take them out again. • Take part in finger rhymes with numbers • React to changes of amount in a group of up to three items • Compare amounts saying ‘lots’, ‘more’, or ‘same’ • Counting like behaviour, such as making sounds, pointing or saying some numbers in sequence • Count in every day contexts, sometimes skipping numbers – ‘1-2-3-5’ • Climb and squeezing selves into different types of spaces • Build with a range of resources • Complete inset puzzles • Compare sizes, weights etc. using gesture and language – bigger/smaller, ‘high/low’, ‘tall’, ‘heavy’ • Notice patterns and arrange things in patterns 				
		Autumn	Spring	Summer
Number	Number rhymes	Round and round the garden Two little dicky birds Baa baa black sheep Incy Wincy spider Five little Ducks		
	Provision	Stacking blocks Stacking cups Interesting shaped objects to manipulate e.g. vegetables, wooden pegs, spoons, pans, corks, cones, balls Pots and pans (mud kitchen) Boxes with objects to sort		
	Key vocabulary	More, lots, same Number names in order (first to 3 and then to 5)		
Shape and pattern	Provision	Climbing equipment Building blocks Inset puzzles Objects of different sizes Cups and bowls Containers Patterns and patterned material		

	Key vocabulary	On top of, up, down, through Big, little, smaller Up, down High, low Tall, short Heavy/light Pattern, repeated, the same
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Nursery (pre-school year: Cygnets)

DM statements:

- Fast recognition of up to 3 objects, without having to count them individually (subitizing)
- Recite numbers past 5
- Say one number for each item in order 1,2,3,4,5
- Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle')
- Show 'finger numbers' up to 5
- Link numerals and amounts: for example, showing the right number of objects to match numeral up to 5.
- Experiment with their own symbols and marks as well as numerals
- Solve real world mathematical problems with numbers up to 5
- Compare quantities using language 'more than', 'fewer than'
- 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'
- Understand position through words alone for example 'The bag is under the table,' with no pointing
- Describe a familiar route
- Discuss routes and locations using words like 'in front of' and 'behind'
- Make comparisons between objects relating to size, length, weight and capacity
- 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.
- 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.
- Extend and create ABAB patterns – stick, leaf, stick, leaf
- Notice and correct an error in a repeating pattern.
- Begin to describe a sequence of events, real or fictional using words such as 'first', 'then'...

		Autumn	Spring	Summer
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Number	Counting concepts	Saying numbers in order up to at least 5 1-1 counting of at least 3 objects Cardinality principle up to 3 'Grow' finger numbers up to 3 Begin to be aware of numbers in the environment	Saying numbers in order up to at least 10 Count backwards from 5 Fast recognition of up to 3 objects 1-1 counting of at least 5 objects Cardinality principle up to 5 'grow' finger numbers up to 5 'show' finger numbers up to 3 Link numerals to amounts up to 3 'numberness' of numbers 1-3 (subitizing) Comparing quantities using more and less	Saying numbers in order up to and beyond 10 Count backwards from 10 Fast recognition of up to 5 objects 1-1 counting beyond 5 objects Cardinality principle beyond 5 'Show and throw' finger numbers up to 5 Link numerals to amounts up to 5 'numberness' of numbers up to 5 Exploring with their own symbols
	Vocabulary	Count Point Number names to at least 5	Number names to at least 10 More than Fewer than The same as	Number names to at least 10
	Manipulatives	Numicon (large and small) to 3 Five frames Subitizing cards to 3 Range of interesting objects to count Numberblocks to 3 Numerals in the environment	Numicon (large and small) to 5 Five frames Subitizing cards to 5 Range of interesting objects to count Numberblocks to 5 Numerals to 5	Numicon (large and small) to 5 Five and ten frames Subitizing cards to 5 Range of interesting objects to count Numberblocks to 10 Numerals to 10
Shape and pattern	Key concepts	Naming and talking about 2D shapes: squares, triangles and circles Use positional language with pointing Comparing size and length Recognising patterns in the environment Putting familiar events in order (e.g. getting dressed)	Naming and talking about 2D shapes: squares, rectangles, circles and different types of triangles Use positional language without pointing Comparing size, length and weight Continuing ABAB patterns Recognising day and night + today, tomorrow	Naming and talking about 3D shapes: cubes, cones, cuboids Use positional language in a range of contexts Comparing size, length, weight and capacity Spotting mistakes in repeating patterns Recognising different times of the day: morning, afternoon, evening, tomorrow, yesterday
	Vocabulary	Square, circle, triangle Straight, round Under, over, next to, between, Bigger, smaller, longer, shorter, the same as Pattern First, next, then	Rectangle, triangle Straight, curved, round, corner Under, over, next to, between, in front of, behind Bigger, smaller, taller, shorter, heavier, lighter, the same as Next Daytime, night time, earlier, later, today, tomorrow	Cube, cone, cuboid Flat, curved Under, over, next to, between, in front of, behind More, less, the same as Repeat Afternoon, evening, night time, earlier, later, too late, too soon, in a minute
	Manipulatives/provision	Building blocks (large and small both inside and outside) Obstacle courses Pattern shapes Dressing up clothes/role play (related to time) Sand and water Puzzles with a small number of pieces		

Year	Reception
	<p>Count objects, actions and sounds.</p> <p>Subitize</p> <p>Link the number symbol (numeral) with its cardinal number value</p> <p>Count beyond ten</p> <p>Compare numbers</p> <p>Understand 'one more than/one less than' relationship between consecutive numbers</p> <p>Explore the composition of numbers to 10</p> <p>Mathematically recall number bonds for numbers 0-10</p> <p>Select, rotate and manipulate shapes in order to develop spatial reasoning skills</p> <p>Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can.</p> <p>Continue, copy and create repeating patterns</p> <p>Compare length, weight and capacity.</p>

Number – Mastering Maths Programme:

Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison
<p>1</p> <p>Children will:</p>	<ul style="list-style-type: none"> perceptually subitize within 3 identify sub-groups in larger arrangements create their own patterns for numbers within 4 practise using their fingers to represent quantities which they can subitize experience subitising in a range of contexts, including temporal patterns made by sounds. 	<ul style="list-style-type: none"> relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set have a wide range of opportunities to develop their knowledge of the counting sequence, including through rhyme and song have a wide range of opportunities to develop 1:1 correspondence, including by coordinating movement and counting have opportunities to develop an understanding that anything can be counted, including actions and sounds explore a range of strategies which support accurate counting. 	<ul style="list-style-type: none"> see that all numbers can be made of 1s compose their own collections within 4. 	<ul style="list-style-type: none"> understand that sets can be compared according to a range of attributes, including by their numerosity use the language of comparison, including 'more than' and 'fewer than' compare sets 'just by looking'.

<p>2</p> <p>Children will:</p>	<ul style="list-style-type: none"> • continue from first half-term • subitise within 5, perceptually and conceptually, depending on the arrangements. 	<ul style="list-style-type: none"> • continue to develop their counting skills • explore the cardinality of 5, linking this to dice patterns and 5 fingers on 1 hand • begin to count beyond 5 • begin to recognise numerals, relating these to quantities they can subitise and count. 	<ul style="list-style-type: none"> • explore the concept of 'wholes' and 'parts' by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot • explore the composition of numbers within 5. 	<ul style="list-style-type: none"> • compare sets using a variety of strategies, including 'just by looking', by subitising and by matching • compare sets by matching, seeing that when every object in a set can be matched to one in the other set, they contain the same number and are equal amounts.
<p>3</p> <p>Children will:</p>	<ul style="list-style-type: none"> • increase confidence in subitising by continuing to explore patterns within 5, including structured and random arrangements • explore a range of patterns made by some numbers greater than 5, including structured patterns in which 5 is a clear part • experience patterns which show a small group and '1 more' • continue to match arrangements to finger patterns. 	<ul style="list-style-type: none"> • continue to develop verbal counting to 20 and beyond • continue to develop object counting skills, using a range of strategies to develop accuracy • continue to link counting to cardinality, including using their fingers to represent quantities between 5 and 10 • order numbers, linking cardinal and ordinal representations of number. 	<ul style="list-style-type: none"> • continue to explore the composition of 5 and practise recalling 'missing' or 'hidden' parts for 5 • explore the composition of 6, linking this to familiar patterns, including symmetrical patterns • begin to see that numbers within 10 can be composed of '5 and a bit'. 	<ul style="list-style-type: none"> • continue to compare sets using the language of comparison, and play games which involve comparing sets • continue to compare sets by matching, identifying when sets are equal • explore ways of making unequal sets equal.
<p>4</p> <p>Children will:</p>	<ul style="list-style-type: none"> • explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles'. 	<ul style="list-style-type: none"> • continue to consolidate their understanding of cardinality, working with larger numbers within 10 • become more familiar with the counting pattern beyond 20. 	<ul style="list-style-type: none"> • explore the composition of odd and even numbers, looking at the 'shape' of these numbers • begin to link even numbers to doubles • begin to explore the composition of numbers within 10. 	<ul style="list-style-type: none"> • compare numbers, reasoning about which is more, using both an understanding of the 'howmanyness' of a number, and its position in the number system.
<p>5</p> <p>Children will:</p>	<ul style="list-style-type: none"> • continue to practise increasingly familiar subitising arrangements, including those which expose '1 more' or 'doubles' patterns • use subitising skills to enable them to identify when patterns show the same number but in a different 	<ul style="list-style-type: none"> • continue to develop verbal counting to 20 and beyond, including counting from different starting numbers • continue to develop confidence and accuracy in both verbal and object counting. 	<ul style="list-style-type: none"> • explore the composition of 10. 	<ul style="list-style-type: none"> • order sets of objects, linking this to their understanding of the ordinal number system.

	<p>arrangement, or when patterns are similar but have a different number</p> <ul style="list-style-type: none"> • subitise structured and unstructured patterns, including those which show numbers within 10, in relation to 5 and 10 • be encouraged to identify when it is appropriate to count and when groups can be subitised. 			
6	In this half-term, the children will consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers.			

Shape and pattern	Key concepts	<p>Naming and talking about 2D shapes: squares, rectangles, circles and different types of triangles.</p> <p>Match shapes on top of pictures and patterns using 2D and 3D shapes.</p> <p>Copy and continue an ABAB pattern</p> <p>Compare the length, weight or capacity of up to 3 objects.</p>	<p>Decompose shapes into component parts.</p> <p>Recognise shapes within shapes.</p> <p>Copy pictures and patterns containing shapes.</p> <p>Begin to create their own pictures and patterns containing shapes.</p> <p>Copy and continue an ABAB pattern that where shapes are rotated. Begin to copy and continue other patterns e.g. ABBA</p> <p>Compare length, weight and capacity of 3-4 objects.</p>	<p>Compose shapes from component parts in different ways.</p> <p>Copy increasingly complex pictures and patterns</p> <p>Create their own ABAB patterns which include rotation. Copy and continue other patterns e.g. ABBA, AABB etc.</p> <p>Compare length, weight and capacity of 3-4 objects with increasing accuracy, verbalising reasoning.</p>
	Vocabulary	<p>Square, circle, triangle, rectangle</p> <p>Cube, cone, cuboid</p> <p>Flat, curved</p> <p>Under, over, next to, between, in front of, behind</p> <p>Bigger, smaller, Longer, shorter, taller</p> <p>More, less, the same as</p> <p>Repeat</p> <p>Afternoon, evening, night time, earlier, later, too late, too soon, in a minute, day, night</p>	<p>Side, face, corner, flat, curved, copy</p> <p>Turn, arch, round</p> <p>Around, next to, continue, above, below</p> <p>'than'</p> <p>Longest, tallest, shortest,</p> <p>Continue</p> <p>Afternoon, evening, night time, earlier, later, too late, too soon, in a minute, day, night</p>	<p>Side, face, corner, flat, curved, copy</p> <p>Turn, arch, round</p> <p>In the middle, in the corner, between, higher than, lower than</p> <p>'than'</p> <p>Longest, tallest, shortest,</p> <p>Continue</p> <p>Afternoon, evening, night time, earlier, later, too late, too soon, in a minute, day, night</p>
	Manipulatives/provision (for number and shape)	<p>Resources to support children's understanding of number and become familiar with the equipment they will use in school:</p>	<p>Resources to encourage problem solving and further development of the skills they learn in maths lessons.</p> <ul style="list-style-type: none"> • Ten frames 	<p>Challenges and resources to deepen children's understanding from maths lessons.</p> <p>Equipment from previous terms +</p> <ul style="list-style-type: none"> • More challenging games and jigsaws

		<ul style="list-style-type: none"> • Building blocks (large and small both inside and outside) • Obstacle courses • Pattern blocks and tangrams • Puzzles with increasing numbers of pieces. • Numberblocks • Access to manipulatives used in lessons: five and ten frames, numicon, Hungarian number frames • Subitising cards • Range of interesting things to count • Abacus • Dice • Numeral cards • Number lines • Books related to numbers. 	<ul style="list-style-type: none"> • Part-part whole models • Dice beyond six • Subitizing dice • Calculator • Pattern blocks • Number games • Jigsaws • Tangrams • Rulers and metre sticks • Weighing scales • Books with number themes • Number track games • Unifix cubes • Money (2p and 5p coins) 	<ul style="list-style-type: none"> • Bead strings • Tape measures • Hungarian number frames • Unifix cubes (towers of 10) • Money (1, 2, 5, 10)
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