**Mathematics Progression Map**

 **Lockington CE VC Primary School**  

Blue objectives are for 3 and 4 year olds, black objectives are for children in Reception.

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|  | Autumn Term | Spring Term | Summer Term |
| Number | Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). 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.Develop the key skills of counting objects including saying the numbers in order and matching one number name to each item.Count objects, actions and sounds with numbers 1, 2, 3 to begin with then 4 – 10.Estimate and guess how many there might be before counting.Joins in and sings counting songs and number rhymes. Listen to and enjoy stories that involve counting.Can subitise to 5 and is beginning to talk about the different ways that amounts of 5 can be made.To link the number symbol with the cardinal value. | Develop fast recognition of up to 3 objects, without having to count them individually (‘subitising’). Recite numbers past 5. Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. Experiment with their own symbols and marks as well as numerals. Look at small quantities in familiar patterns – for example a dice – and random arrangements, saying how many they can see.To be able to count objects, actions and sounds.Subitise (recognise without counting) up to 5.Use 5 frames and 10 frames to become familiar with the tens structure of the number system.Talk about how many spaces are filled or unfilled.Link the number symbol (numeral) with its cardinal number value.Confidently talks about the different ways that numbers can be made to 5 and is now applying this knowledge to automatically recall number bonds for numbers 1-10.Explore the composition of numbers to 10.Links subtraction facts to composition of numbers to 5. Recalls some double facts to 10.To be able to recognise numbers 1-20.Double facts, halving and sharing. | Solve real world mathematical problems with numbers up to 5.Explore the composition of numbers to 10Automatically recall number bonds for numbers 0-5/0-10.Numbers 10-20.To recognise numbers 1-20.Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or of the same as the other quantity.**ELG Number**Have a deep understanding of number 10, including the composition of each number.**ELG Number**Subitise (recognise quantities without counting) up to 5.**ELG Number**Automatically recall – without reference to rhymes, counting or other aids – number bonds up to 5.Recall some number bonds to 10, including doubling facts. |
| Numerical Patterns | Compare quantities using language: ‘more than’, ‘fewer than’. Use vocabulary ‘more than’, ‘less than’, ‘fewer’, ‘the same as’, ‘equal to’.Understand the one more/one less than relationship between consecutive numbers.Become familiar with two digit numbers and start to notice patterns within them.Distribute items evenly from a group.Counts objects accurately to 10 using one to one correspondence and can identify when objects have the same, less that or more than. Recognises numbers to 10 and puts them in order.Continue, copy and create repeating patterns. | Compare quantities using language: ‘more than’, ‘fewer than’. Understand position through words alone – for example, “The bag is under the table,” – with no pointing. Use positional language in play (For example, “teddy is lying on top of the bed”.) 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.Understand the ‘one more than/one less than’ relationship between consecutive numbers.Count beyond 10, noticing patterns within the structure of counting.Recognises patterns within number.Continue, copy and create repeating patterns.Explore and represent patterns within numbers up to 10, including even and odds, double facts and how quantities can be distributed equally.  | Describe a familiar route. Discuss routes and locations, using words like ‘in front of’ and ‘behind’Begin to describe a sequence of events, real or fictional, using words such as ‘first’, ‘then...’  Verbally count beyond 20 recognising the pattern of the counting system.**ELG Numerical Patterns**Verbally count beyond 20, recognising the pattern of the counting system.**ELG Numerical Patterns**Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less that or the same as another quantity.**ELG Numerical Patterns**Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. |
| Shape | Talk about and explore 2D shapes (for example, circles, rectangles, triangles, squares and ovals) using informal and mathematical language: ‘sides’, ‘corners’; ‘straight’, ‘flat’, ‘round.’Talk about and explore 2D and 3D shapes.Select, rotate and manipulate shapes in order to develop spatial reasoning skills.Uses some shape names appropriately and understands prepositional language. Creates a repeated pattern with colour and shape. | 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.Talk about and explore 2D and 3D shapes.Compare length, weight and capacity.Continue, copy and create repeating patterns.Uses mathematical language to compare and talk about shape and size. | 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’ 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 etcMake comparisons between objects relating to size, length, weight and capacity.Select, rotate and manipulate shapes in order to develop spatial reasoning skills.Compose and decompose shapes so that children recognise a shape can have other shapes *within* it, just as numbers can.**No ELG relating to Shape and Space** |