## EYFS Mathematics Progression -

## Numbers and Shape, Space and Measures

| Area / subject | Skills \& Knowledge | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
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| Maths <br> Number <br> Numerical <br> Patterns | Pre School <br> N1 2-3 YRS | React to changes of amount in a group of up to three items. <br> Beginning to recite number names in sequence. <br> Take part in finger rhymes with numbers. <br> Say some number names randomly <br> Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like 'pointy', 'spotty', 'blobs' etc. | Combine objects like stacking blocks and cups. <br> Put objects inside others and take them out again. <br> Build with a range of resources. <br> Complete inset puzzles. <br> Beginning to categorise objects according to properties such as shape or size | React to changes of amount in a group of up to three items. <br> Count in everyday contexts, sometimes skipping numbers - '1-2-3-5.' <br> Recites some number names in sequence <br> Beginning to recite numbers past 5. <br> Beginning to show finger numbers up to 5 . <br> Beginning to recognise numerals of personal significance. | Beginning to categorise objects according to properties such as shape or size. Beginning to use positional language. <br> Notices patterns and arrange things in patterns. <br> Climb and squeezing selves into different types of spaces <br> Talk about and identifies the patterns around them. For example: stripes on clothes, designs on rugs and wallpaper. Use informal language like | Recites numbers in order to 10. <br> Counts up to three or four objects by saying one number name for each item. <br> Recognise some numerals of personal significance. <br> Fast recognition of up to 3 objects, without having to count them individually ('subitising'). <br> Recite numbers past 5. <br> Say one number for each item in order: 1,2,3,4,5. | Uses positional language. <br> Make comparisons between objects relating to size, length, weight and capacity <br> Select shapes appropriately: flat surfaces for building, a triangular prism for a roof etc. <br> Combine shapes to make new ones - an arch, a bigger triangle etc. <br> Talk about and identifies the patterns around them. For example: stripes on clothes, |








|  |  |  | Ordering <br> Ordering numerals from 05 digit cards/on a washing line/number line. Can you match the correct numicon piece? How do you know that number goes there? | children to work out which shape is hidden by asking indirect questions. E.g. is it bigger than 7 or is it smaller than the red shape? Encourage children to reason by asking - Which ones couldn't it be? Why? |  | justify which one isn't seven/six/four/et c. <br> On Rosies walk she saw... give children a number of things and children to match with an amount. |  |
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| Autumn Term 2 | Calculations <br> Number bonds <br> Stage 6 <br> Use objects and pictures to make addition number bonds for numbers 0-5. Begin to automatically recall addition number bonds for numbers 0-5. <br> Session 1: <br> Firework Maths. <br> The rocket needs 5 bangs Each cube represents a bang. | Calculations: additionapplications with money Stage 6 <br> Finds one more from a group of up to 5 objects. Finds the total number of objects in two groups by counting all of them (up to 10). In practical activities and discussion, begin to use the vocabulary involved in adding (e.g.plus, add, | Number patterns Stage 6 <br> Explore patterns of numbers within numbers up to 5 . Begin to recognise the pattern of the counting system. <br> Space Race | Calculations <br> Number bonds <br> Stage 6 <br> Use objects and pictures to make addition number bonds for numbers 0-5. Begin to automatically recall addition number bonds for numbers 0-5. <br> Session 1: <br> Gingerbread man has 5 buttonswhat colour combinations can he have? | Calculations: addition Stage 6 Finds one more from a group of up to 5 objects. Finds the total number of objects in two groups by counting all of them (up to 10). In practical activities and discussion, begin to use the vocabulary involved in adding (e.g.plus, add, total, altogether, addition, more). | Measures- Stage <br> 6 <br> Beginning to use <br> language related <br> to time (next, then, before, after, first). <br> Begins to use clues from the environment to determine what time of day it is e.g. day time, night time, lunch time. <br> Orders and sequences familiar events. Begins to measure time in | Shape 2D and 3D shapes Stage 6 Names and recognises simple 2D (circle, square, triangle, rectangle). Begins to draw marks to represent shapes e.g. straight lines, curves, circles and draw/print with 2D shapes to make designs. Names and recognises simple 3D shapes (cube, cuboid, sphere, cone). |


|  |  | I have 2 how many more bangs make 5. <br> Children to begin to rapidly recall facts rather than work it out. <br> Children build rockets using cubes. Record on tapestry. <br> Repeat with other no.s if confident. Session 2: <br> Part-whole <br> Draw part-whole representations for different numbers. Use a part part whole frame to allow children to use and move representations and manipulatives and write on numbers. <br> Children create a part-whole model to represent a firework scene e.g. 5 fireworks: 3 blue and 2 green. <br> Session 3: Double sided counters Not on IWB | total, altogether, addition, more). Begins to recognise coins. Begins to use more advanced language related to money e.g. change, dear, costs more, cheap, costs less, cheaper, costs the same as how much...? how many...? Total, coin names. <br> Session 1: <br> Coin recognitionhow many pennys make a? <br> Play toy shop online game making amounts. <br> Session 2: <br> Add monsters together- Part part whole using caves- show number sentence. <br> Session 3: Children buy their monster some dinner choosing tummy ache cards. Children make amounts for each card using |  | Session 2: <br> How many different ways can you make $x$ ? Use fingers and list on w/bs <br> Session 3: <br> Empty box number sentences. Answer at end and beginning. |  | meaningful contexts. | Uses everyday language to describe shapes e.g. pointy, curved, smooth, flat. <br> Uses familiar objects and common shapes to build models. |
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|  |  | Provide the children with 5 double sided counters; allow them to experiment with different combinations of colours and encourage them to record their answers. This could be in a fives frame, a number sentence, as a part-whole model, etc. <br> Or provide the children with the five counters in a cup; allow them to shake the cup and tip out the counters. Discuss how many of each colour there are; if we repeat this again do we get the same combination? | coins (1ps, ext 5p, 2ps) How much did the monster spend if you add two cards together? Record on tapestry and not yet file. |  |  |  |  |  |
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|  | Spring 1 <br> Maths <br> Stage 7 |  | Recognising and representing number Stage 7 <br> Consistently counts backwards with numbers in | Composing numbers Stage 7 <br> Have a deep understanding of composition of numbers up to | Calculation Stage 7 Number bonds to 5 subtraction. <br> Use objects and pictures to solve subtraction | Comparing numbers Stage 7 <br> Compare sets of objects up to 10 in different contexts, | Number Patterns Stage 7- doubling facts and money <br> Explore and represent patterns within | CalculationSharing Stage 7 <br> Shares objects equally between containers one at a time, counting |




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|  | Spring 2 Stage 7 | Spring 2 <br> Stage 7 | Recognising and representing number Stage 7 <br> Consistently counts backwards with numbers in order from 10. Begins to verbally count to 20. <br> Count objects, actions and sounds. <br> Link the number symbol (numeral) with its cardinal number value. Beginning to count objects beyond 10. Counts an irregular arrangement of up to 10 objects. Counts up to 6 objects from a larger group. Recognises and orders numerals 0 to 10. <br> Selects the correct numeral to represent 0-10 | Number Patterns Stage 7- doubling facts and money <br> Explore and represent patterns within numbers up to 10 , including double facts. <br> Begin to recognise the pattern of the counting system. | Calculation Stage <br> 7 Number bonds to 5 subtraction. <br> Use objects and pictures to solve subtraction number bonds for numbers 0-5. <br> Begin to automatically recall addition number bonds for numbers 0-5 to solve subtraction from 5 . | Comparing numbers Stage 7 <br> Compare sets of objects up to 10 in different contexts, considering size and difference, using the language of more and fewer. <br> Use vocabulary: 'more than', 'less than', 'fewer', 'the same as', 'equal to' | Calculation: <br> Subtraction Stage <br> 7 <br> Applications with money <br> Finds one less from a group of up to 10 objects <br> Solves a simple subtraction problem (takeaway and difference) using pictures. <br> Uses the language of subtraction, including take away, less, subtract, minus, difference. | CalculationSharing Stage 7 <br> Shares objects equally between containers one at a time, counting how many are in each container. <br> Identifies when objects/quantities have been shared equally (by counting). <br> Halves an object/shape and quantity of objects. |




|  |  |  |  |  |  | language and symbols of subtraction (take away, less, subtract, minus, difference, -, =) <br> Slippery snail trail - The snail has slid to the numeral one more/one less than. <br> Solve the number sentence using the snail trailcounting on/back <br> Use first/then/now stories and record as a number sentence <br> Counting forwards and back on the snail trail <br> Snail races on track- adding or taking away |  |
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|  |  |  | Have a deep <br> understanding of number to 10 , including the composition of each number; Subitise (recognise quantities without counting) up to 5. <br> 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. | Verbally count beyond 20 , recognising the pattern of the counting system. <br> Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. <br> Explore and represent patterns within numbers up to 10 , including evens. |  | Number and Place Value • Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number. • Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens. • Given a number, identify one more and one less. - Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least. - Read and write numbers from 1 to 20 in numerals and words. <br> Addition and Subtraction - Read, write and interpret mathematical statements involving addition ( + ), subtraction $(-)$ and equals (=) signs. • Represent and use number bonds and related subtraction facts within 20. Add and subtract one-digit and two-digit numbers to 20, including zero. Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as $7=$ []-9. Multiplication and Division • Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher. <br> Measurement Compare, describe and solve practical problems for: • lengths and heights (long/short, longer/shorter, tall/short, double/half) • mass or weight (heavy/light, heavier than, lighter than) • capacity/volume (full/empty, more than, less than, quarter) • time (quicker, slower, earlier, later) Measure and begin to record: lengths and heights • mass/weight • capacity and volume • time (hours, minutes, seconds) - Recognise and know the value of different denominations of coins and notes. Sequence events in chronological order using language, such as before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening. - Recognise and use language relating to dates, including days of the week, weeks, months and years. - Tell the time to the hour and |
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|  |  |  |  |  | half past the hour and draw the hands on a clock face to <br> show these times. |
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| Position and Direction • Describe position, directions and |  |  |  |  |  |
| movements, including half, quarter and three-quarter turns. |  |  |  |  |  |
| ShapeRecognise and name common 2D and 3D shapes, <br> including circles, triangles, rectangles (including squares), <br> pyramids, spheres and cuboids (including cubes). |  |  |  |  |  |

