

# Mathematics Progression of Skills

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Area of Learning	Autumn	Spring	Summer	ELG Children at the expected level of development will:
Number Sense	<p><b>-Subitising</b>            Perceptual Subitising 1-3            Subitising 4 (with 1,2,3)            Subitising 5 (with 1,2,3,4,)            Conceptual Subitising – Number bonds to 5 (link to addition and subtraction)            Through noticing, sorting.</p>	<p><b>Subitising</b>            - Perceptual and conceptual subitising moving on from 5            Conceptual Subitising – Number bonds to 5 (link to addition and subtraction)            Noticing early doublings through subitising.            Through games, dot cards, ten frames, match em, cookie game, bean bag, skittles.</p>	<p><b>Subitising</b>            Perceptual and conceptual subitising            Noticing (Splat game – whats hiding, how do you know?)</p>	<p>-have a deep understanding of number to 10, including the composition of each number;            -subitise up to 5;            -automatically recall number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts</p>
Daily Routines & opportunities	<p>Self registration-subitising, counting, addition and subtraction, more/less/fewer            Voting for a Story at the end of the day – subitising, counting, more/less            Sequencing the day on Visual Timetable- time/ordering/measure            Snack shop – subitising, counting, comparing, sorting/classifying/shape            Calendar – Birthdays/Seasons, measure, time            Poems, Stores, Rhymes – pattern, sequence, ordinality, cardinality            Tidy time – matching, sorting, spatial awareness            Welly Walks – spatial awareness, noticing, subitising, sorting, classifying, nominal number, time, shape</p>			
Vocabulary	<p>What do you see? How do you see it?            Some, lots, more, less, fewer, compare, same, different (see mid term plans)</p>			
Numerical Patterns	<p><b>Counting</b>            -number songs and rhymes, things you cannot subitise like claps and jumps.  <b>Counting for Ordinality</b>  <b>Addition and subtraction</b>            Linking 1 more and 1 less language  <b>Number and place value</b>            Comparing groups – sorting, matching, identical and non-identical            Finished 5 frame, not finished yet.  <b>Comparison</b>            Comparing amounts using language of more/less/fewer – equivalence (linking to size/measures)  <b>Sorting and Classifying</b></p>	<p><b>Counting</b>            -counting to 10 forwards and backwards            -Counting beyond 10 (Jack Hartman)            -match numerals to amounts to 5,  <b>cardinality</b> ‘match them’ games, dot games, cookie game            - ordinal number through rhymes and songs  <b>Number and place value</b>            Finished 10 frames – self registration, story voting, merit points – towers of 10 and x of the next 10 – teen numbers and beyond  <b>Cardinality</b> through games ‘bean bag throw’ keeping score on ten frames, car races, target practise. Skittles, bus game  <b>Addition and subtraction</b></p>	<p><b>Counting</b>            Counting forward/backwards to 20 and beyond (Jack Hartman)            Counting noticing patterns – 2’s, 5’s, 10’s            Track Games – moving forwards and backwards along a number line  <b>Number and place value</b>            Finished 10 frames – self registration, story voting, merit points – towers of 10 and x of the next 10 – teen numbers and beyond  <b>Comparison</b>  <b>Addition and Subtraction</b>            Conceptual subitising            More/less/fewer            Finished tens – place value</p>	<p>- 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.</p>

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	<p>Noticing – identifying an <b>attribute</b> (rule), matching same/different – Perceptual comparison i.e. Knowing which has more.</p> <p><b>Pattern</b> Arrangement and sequence, rules of a pattern, through music, songs, rhymes, clapping and body movements. i.e. <b>Growing Pattern, Repeat Pattern</b></p> <p><b>Sequencing</b> before, after, first, next through stories and rhymes, look at patterns in nature i.e. pine cones, shells and in environment i.e. bricks, Christmas wrapping paper</p>	<p>Conceptual subitising 1 more/1 less Finished 5 (5 frames), then finished 10 (10 frames)</p> <p>Number songs /rhymes</p> <p><b>Comparison</b> Comparing amounts – more, less, fewer, equivalence</p> <p><b>Sorting and Classifying</b> Loose parts – Junk DNA</p> <p><b>Pattern</b> Dot patterns <b>arrays</b> triangular, square, pattern blocks, numicon, <b>odd and even/uneven</b> 'Hungry Caterpillar' pattern blocks – copying a pattern.</p>	<p>Number songs – rhymes</p> <p><b>Multiplication and Division (link to stories, snack time, cooking, in their play, subitising)</b></p> <p><b>Numerical patterns- doubling halving, sharing. (The Door Bell Rang)</b></p> <p><b>Numerical Patterns (link to subitising, patterns)</b></p> <p>odds and evens Patterns of 2, 5, 10's</p> <p><b>Sorting and Classifying</b> Seeds, plants</p>	
<p>Vocabulary</p>	<p>Above, below, over, in between, in front of, behind. Next, Then, now, before, long ago, next, later, yesterday, first, second, then, everyday, morning, afternoon, evening, yesterday, today, tomorrow, days of the week, months of the year, seasons of the year (see mid term plans for vocab)</p>			
<p>Spatial Reasoning and shape, measures</p>	<p>Understanding where things are in the class inside and outside (welly walks) Follow/listen to instructions Lining up one after the other PE and GYM Windsor Walk</p> <p><b>Shape</b> Properties – comparing/sorting/matching (noticing) Patterns around them Shape/pattern – link to Diwali/fireworks. Christmas Shoes</p> <p><b>Measures (comparison)</b> Attributes; Language of tall/short</p>	<p>PE &amp; Gym, Welly Walks, Bee Bots, Map making – Pirates, Space rockets play project.</p> <p><b>Measure</b> Comparisons – order objects, compare self registration cubes towers of ten, then over the week compared to themselves Tall, taller, tallest Short, shorter, shortest Heavy, heavier, heaviest Dinosaur footprints and size</p> <p><b>Exchange and equivalence</b> – snack shop – exchange cubes for fruit</p> <p><b>Shape</b> Footprints of 3D shapes drawing around and shadow play</p>	<p><b>Shape</b> Exploring patterns – seeds, flowers – spirals, mini beasts</p> <p><b>Spatial Awareness</b> Maps and orienteering, welly walk Obstacle Course Track Games moving along a number line</p> <p><b>Measure</b> Understanding and applying and using language of measures in their play. -comparison – sunflowers, trees, plants -Volume and Capacity Distance – races Comparison <b>equivalence</b> using <b>Dienes</b></p> <p><b>Time</b></p>	

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	<p>Short/long Heavy/light Day/night Full/empty</p> <p><b>Conservation and Transformation</b> (i.e playdough) , <b>Equivalence (scales)</b> <b>Time – recorded time</b> (birthday) <b>time interval</b> (play time, time table) My day, night and day, routines, visual timetable, calendar (photo of children under the tree throughout the year), birthday, noticing change of seasons. Clock Comparing quantities Comparing –height all about me.</p>	<p>Copying 3D and 2D shapes through drawing and replication. Junk modelling – guess my shape</p>	<p>Timing yourselves in a minute/o'clock what's the time Mr Wolf. Length and height –linked to growing plants</p>	
<p>Texts &amp; Resources</p>				
<p>Vocabulary</p>	<p>Circle, triangle, square, footprint, quadrilateral,</p>			

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