



Nursery Mathematics Yearly Overview

Continuous provision will provide lots of opportunities for all Birth to 5 Matters Mathematics objectives. Each week, there will be an overt focus on a specific objective, as detailed below. *Activity ideas* are only a suggestion; children's interests and next steps inform daily planning.

| | Birth to 5 matters | Objective | Week | Focus | Linked objectives |
|----------|--------------------|---|------|--|---|
| Autumn 1 | Counting | <p>Range 3: Says some counting words. May engage in counting-like behaviour, making sounds and pointing or saying some numbers in sequence.</p> <p>Range 4: Begins to say numbers in order.</p> | 1 | <p>Settling into school - nursery rhymes with a number focus.</p> <ul style="list-style-type: none"> - Five little ducks - 1, 2, 3, 4, 5 Once I caught a fish alive - Five little monkeys. <p><u>Daily Routine</u> : Getting to know nursery and the school day. Now and next.</p> <p>Pattern: Range 3 - becomes familiar with patterns in daily routines.</p> <p>Range 4 - Is interested in what happens next using the pattern of everyday routines.</p> <p><i>Activity ideas: themed tough trays linking to the key rhymes, story sacks, use a visual timetable.</i></p> | <p>Pattern: Range 3: Joins in with and predicts what comes next in a story or rhyme.</p> <p>Measures: Range 3: Begins to understand that things might happen now or at another time, in routines.</p> |
| | Pattern | <p>Range 3 - becomes familiar with patterns in daily routines.</p> <p>Range 4 - Is interested in what happens</p> | 2 | <p>As above. Settling into school - daily routine & nursery rhymes with a number focus.</p> <p>Time, days of the week, morning, afternoon, dinner time, playtime, today, yesterday, tomorrow, before, after, now, next, last, soon, later</p> | <p>Measures: Range 4: Beginning to anticipate times of the day such as mealtimes or home time.</p> <p>Beginning to understand some talk about immediate past and future.</p> |

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| | next using the pattern of | | | |
| | | 3 | As above. Settling into school - daily routine & nursery rhymes with a number focus. | |
| Comparison | Range 3: Responds to words like lots or more. | 4 | <p>Lots of opportunities for grouping objects, can children recognise which group has 'more'.</p> <p><i>Activity ideas: link to Goldilocks and the three bears - which bowl has more in? Autumn; leaves, conkers - make groups and compare. Creating groups based on colour, shape, animal sorting etc. Filling containers, identifying more.</i></p> <p>Language: more, lots, not many, not enough, less.</p> | Spatial awareness: Range 3: Enjoys filling and emptying containers. |
| | Range 4: Beginning to compare and recognise changes in numbers of things. | 5 | <p>Recognising which group has more, as well as making groups that are 'more'.</p> <p><i>Activity ideas: See above, week 4.</i></p> <p>Continue with using language; more, lots, not many, not enough, less, same, in play.</p> | <p>Cardinality: Range 4: In everyday situations, takes or gives two or three objects from a group.</p> <p>Counting: Range 4: Begins to say numbers in order.</p> |
| Spatial awareness | Range 3: Investigates fitting themselves inside and moving through spaces. | 6 | <p>Physical development - provide opportunities for obstacle courses, prompting the children to move under, over, through etc.</p> <p><i>Activity ideas: obstacle courses, tunnels. Link to 'We're going on a bear hunt' - retell the story practically during play.</i></p> | <p>Spatial awareness: Range 4: Moves their bodies and toys around objects and explores fitting into spaces.</p> <p>Responds to some spatial and positional language.</p> |

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| | | | | <p>over, under, through, above, below, top, bottom, side, outside, inside, around, in front, behind</p> | |
| | | <p>Range 4: Moves their bodies and toys around objects and explores fitting into spaces.</p> | <p>7</p> | <p>Build on learning in week 6, continuing to move and navigate our bodies in different directions. Encourage the use of position within play (small world).</p> <p><i>Activity ideas: using cones to make a track/road, tunnels, ladders.</i></p> <p><i>Lots of opportunities for small world; dolls house - prompting children to put toys in specific places.</i></p> <p><i>Animal parade- lining the animals up to follow the track (drawn out map).</i></p> <p><i>Building - provide shapes for children to build their structure in.</i></p> <p>over, under, through, above, below, top, bottom, side, outside, inside, around, in front, behind</p> | <p>Responds to some spatial and positional language. Begins to remember their way around familiar environments.</p> |

| Autumn 2 | Birth to 5 matters | Objective | Week | Focus | Linked objectives |
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| | Cardinality | Range 3: Uses number words, like one or two and sometimes responds accurately when asked to give one or two things. | 1 | <p>Explore making one and two in a range of different ways. Extend to matching the amount with the numeral.</p> <p><i>Activity ideas: Link to Halloween or Bonfire night - 'can you find two pumpkins' etc.</i> <i>Use numicom, blocks, counters, counting bears.</i> <i>Use number buckets / sorting containers labelled with the numeral - can children sort the pictures/objects of one and two.</i> <i>Go on a number hunt - use environment.</i></p> <p>count, one, two, how many? same, more, less, show me.. make me..</p> | <p>Cardinality: Range 4: Beginning to notice numerals (number symbols). Beginning to count on their fingers. Counting: Range 4: Begins to say numbers in order.</p> |
| | | Range 4: In everyday situations, takes or gives two or three objects from a group. | 2 | <p>Explore identifying and making one, two and three. Extend to matching the amount with the numeral.</p> <p><i>Activity ideas: See week one and extend to 3. Week one may focus more on concrete and pictorial representations. Introduce more numeral representations in week two.</i></p> <p>count, one, two, three, how many? same, more, less, show me.. make me..</p> | <p>Cardinality: Range 4: Beginning to notice numerals (number symbols). Beginning to count on their fingers. Counting: Range 4: Begins to say numbers in order.</p> |
| | Measures | | 3 | | |

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| | Range 3: Shows an interest in size and weight. | | <p>Provide opportunities for children to explore size and weight, using the language of size and weight during play.</p> <p><i>Activity ideas: Counting bears - focussing on the difference in sizes. Different sized animals or dinosaurs. Balancing scales. Fruit/veg, bakery or sweet shop role play - using scales, filling and emptying containers.</i></p> <p>Big, small, large, little, huge, tiny, massive, teeny, long, short, tall, size, weight, heavy, light, balance, the same, full, empty</p> | Measures: Range 3: Explores capacity by selecting, filling and emptying containers. |
| | Range 4: Explores differences in size, length, weight and capacity. | 4 | <p>Describe everyday items using the language of size, weight, length and capacity. Support children in noticing differences and ordering and sorting objects based on their size, weight, and length.</p> <p><i>Activity ideas: See week three ideas and extend based on children's understanding and interests. Lots of opportunities for small world - will the doll fit in the bed, will the dinosaur fit in the cave. Lining objects up from biggest to smallest, shortest to tallest etc.</i></p> <p>Big, small, large, little, huge, tiny, massive, teeny, long, short, tall, size, weight, heavy, light, balance, the same, full, empty</p> | |
| Shape | Range 3: Pushes objects through different shaped holes, and | 5 | <p>Lots of opportunities for puzzles and shape sorters, model using the language of shape to describe properties.</p> | Shape: Range 3: Beginning to select a shape for a specific space. |

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| | attempts to fit shapes into spaces on inset boards or puzzles. | | <p><i>Activity ideas: Shape sorters, puzzles, wooden blocks, 3D shapes</i></p> <p>Shape, round, circular, curved, square, rectangle, straight, triangle, pointy, corner, fit, too big, too small.</p> | Enjoys using blocks to create their own simple structure or arrangements. |
| | Range 4: Recognises that two objects have the same shape. | 6 | <p>Matching objects that have the same shape. Recognising the shapes of everyday objects and shapes within the environment.</p> <p><i>Activity ideas: Shape hunt ‘can you find something round like a..’, shape sorting, junk modelling, construction materials.</i></p> <p>Shape, round, circular, curved, square, rectangle, straight, triangle, pointy.</p> | Shape: Range 4: Chooses puzzles pieces and tries to fit them in. Makes simple constructions. |
| Pattern | Range 3: Beginning to arrange items in their own patterns, e.g. lining up toys. | 7 | <p>Model creating patterns with everyday items</p> <p><i>Activity ideas: Creating repeating patterns using: small world models, shapes (link to previous weeks learning), coloured bears, pom poms, pasta shapes, winter of Christmas themed items.</i></p> <p>Pattern, repeat.</p> | Shape: Range 3: Enjoys using blocks to create their own simple structure or arrangements. |
| | Range 4: Joins in and anticipates repeated sound and action patterns. | 8 | <p>Build on week seven’s learning, focussing on patterns. Explore musical, sound and action patterns.</p> | Range 3: Beginning to arrange items in their own patterns, e.g. lining up toys. |

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| | | | <p>Activity ideas: Nursery rhymes and stories with repeated language, copy the action games, musical instruments - listening and copying the pattern</p> | |
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Pattern, repeat.

| Spring 1 | Birth to 5 matters | Objective | Week | Focus |
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| | Comparison | Range 4- Beginning to compare and recognise changes in numbers of things, using words like more, lots of 'same'. | 1 | <p>Encourage children to explore the collections they make, comparing amounts and counting some of the items, emphasising the last number, e.g. 1,2,3. <i>There are 3 leaves.</i></p> <p>Include the number sequence in everyday contexts and songs so children experience the order of the numbers (ordinality)</p> <p>Activity: Provide buckets and bags for children to create collections of objects which they can count.</p> <p>Big, small, wide, narrow, compare.</p> |
| | Cardinality | Range 4- Beginning to notice numerals (Number Symbols) | 2 | <p>Encourage children to use marks to represent their mathematical ideas in role play.</p> <p>Point out the number of things whenever possible, e.g. rather than just <i>chairs</i>, say <i>four chairs</i>.</p> <p>Activity: Sing counting songs and rhymes which help to develop children's understanding of number. E.g 1,2,3,4,5 and 3 little men in a flying saucer.</p> <p>More, Less, How Many, number.</p> |
| | Cardinality | Range 4- Beginning to | 3 | <p>When singing number rhymes with props, draw attention to contrasting differences and changes in numbers, checking together. <i>How many now?</i></p> |

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| | count on their fingers. | | <p>Activity: To sing number songs such as Five Little Ducks, holding fingers up and checking as they go.</p> <p>One, Two, Three, Four, Five, What's next, How Many</p> |
| Spatial Awareness | Range 4- Explores how things look from different viewpoints including things that are near or far away | 4 | <p>Encourage children to predict what they will see next on a familiar route.</p> <p>Activity: Create Transporting ideas outside, use crates, decking planks and tyres. Children can then change the view/structure and talk about it.</p> <p>On, under, behind, next to, inside, outside.</p> |
| Spatial Awareness | Range 5- Responds to and uses language of position and direction | 5 | <p>Help children to create simple roads and rail tracks and talk about position. Value children's explorations of spaces and viewpoints and their interest in how things look different.</p> <p>Activity: Provide opportunities for children to explore position themselves <i>inside, behind, on top</i> and so on. Use the large play equipment outside. E.g. can you go under the slide?</p> <p>Through, around, in front, outside.</p> |
| Cardinality | Range 4- In everyday situations, takes or gives two or three objects from a group | 6 | <p>Help children to give or get two or three items, e.g. during snack time help children to take two pieces of fruit.</p> <p>Activity: Provide opportunities for children to explore cardinality in the environment using self-correcting resources, e.g. jigsaw with two ducks and the number two, or displays showing the numeral and the number of items.</p> |

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| Spring 2 | Birth to 5 matters | Objective | Week | Focus | Linked objectives |
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| | Comparison | Range 5- Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. <i>You've got two, I've got two. Same!</i> | 1 | <p>Encourage children to share items between two people or toys.</p> <p><i>Activity: Dive into the bag and select 2 handfuls of objects. Count each object and then see if we have the same amount in each in each group.</i></p> <p>Big, small, wide, narrow, compare.</p> | |
| | Counting | Range 5- May enjoy counting verbally as far as they can go | 2 | <p>Enjoy counting forwards and back (sometimes to much higher numbers). Use different voices, e.g. high or growly.</p> <p><i>Activity: On the large bricks outside, can they count each step they take. Children to be encouraged to count the steps when going for dinner too.</i></p> | |
| | Counting | Range 5- Points or touches (tags) each item, saying one | 3 | <p>Use opportunities within daily routines to support children's developing sense of number.</p> | |

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| | number for each item, using the stable order of 1,2,3,4,5. | | Activity: Count what's in the box- children to be encouraged to touch count each object, saying the number names in order. | |
| Cardinality | Range 5- Subitises one, two and three objects (without counting) | 4 | When counting objects with children emphasise the cardinal principle: <i>1, 2, 3, there are three cups.</i> Activity: Explore different arrangements of the same number, e.g. partitioning five in different ways; hiding one group and "guessing" the hidden number. IWB- subitise the gingerbread Man's buttons. | |
| Cardinality | Range 5- Counts up to five items, recognising that the last number said represents the total counted so far (cardinal principle) | 5 | Invite children to count out a number of things from a larger group, e.g. <i>Can you get five crackers?</i> Activity: Go into the forest and find 5 sticks, children to count the sticks, realising that the last number they said, represents the total counted. | |
| Composition | Range 5- Through play and exploration, beginning to learn that numbers are made up (composed) of smaller | 6 | Model and encourage counting and representing numbers within role play, e.g. making a telephone call using a list of numbers. Activity: Use the telephones to push numbers, children encouraged to recognise that 5 cupcakes in the home corner is the same as the number 5 on the telephone. | |

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| Summer 1 | Birth to 5 matters | Objective | Week | Focus |
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| | Shape | Range 5- Shows awareness of shape similarities and differences between objects | 1 | <p>As children experience shapes, use informal language (e.g. <i>slanty, pointy, twisty, wiggly, bumpy</i>), common shape names (e.g. <i>cylinder, cone, circle, square</i>) and “nearly” shapes (e.g. <i>This is almost a square but it’s got curvy corners</i>). Find out and use equivalent terms for shapes in home languages.</p> <p>Activity: Provide differently shaped resources to handle, carry, move and explore.</p> |
| | Shape | Range 5- Enjoys partitioning and combining shapes to make new shapes with 2D and 3D shapes | 2 | <p>Discuss how shapes can be partitioned in everyday contexts, e.g. cutting food in different ways.</p> <p>Activity: Provide large and small blocks and boxes for construction both indoors and outdoors.</p> |
| | Pattern | Range 5- Explores and adds to simple linear patterns of two | 3 | <p>Demonstrate arranging objects in spatial patterns when building, collaging or playing with loose parts.</p> <p>Activity: Pause to encourage prediction when enjoying stories and rhymes with repeating elements,</p> |

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| | or three repeating items, e.g. stick, leaf (AB) or stick, leaf, stone (ABC) | | sometimes using props. |
| Measure | Range 5- In meaningful contexts, finds the longer or shorter, heavier or lighter and more/less full of two items | 4 | <p>Look out for meaningful opportunities for children to compare by length, weight, capacity and time using comparative language (<i>longer/ shorter, heavier/lighter, holds more/holds less, longer time/shorter time</i>).</p> <p>Activity: Provide problem-solving opportunities indoors and outdoors for comparing length, weight and capacity, e.g. <i>Which is the best bottle so we'll have enough drink for everyone at the picnic?</i></p> |
| Comparison | Range 5- Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. <i>You've got two, I've got two. Same!</i> | 5 | <p>Capitalise on children's fascination with counting by joining in when they count in games.</p> <p>Activity: Provide numerals that children can pick up and use within all aspects of their play. Provide resources indoors and outside for children to explore and talk about higher numbers.</p> |
| Counting | Range 5- Points or touches (tags) each item, saying one | 6 | <p>Use opportunities within daily routines to support children's developing sense of number.</p> <p>Activity: Model using objects to illustrate counting songs, rhymes and number stories, sometimes using</p> |

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| | number for each item, using the stable order of 1,2,3,4,5. | | pictures and numerals, to enable children to use those resources independently. |
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Summer 2

| Birth to 5 matters | Objective | Week | Focus | Linked objectives |
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| Cardinality | Range 5- Explores using a range of their own marks and signs to which they ascribe mathematical meanings | 1 | Value and support children to use their own graphics when problem solving. Activity: Support children to choose how to arrange collections of two, three and four objects in different ways. | |
| Cardinality | Range 5- Links numerals with amounts up to 5 and maybe beyond | 2 | Invite children to count out a number of things from a larger group, e.g. <i>Can you get five crackers?</i> Activity: Model counting items rhythmically, including objects into a container, claps or drumbeats. | |
| Composition | Range 5- Beginning to use understanding of number to solve practical problems in play and meaningful activities | 3 | Model wondering and talking about how you might solve a number problem. Activity: Provide spaces to display children's ongoing mathematical thinking, e.g. their own ways of representing their thinking, and scribing children's words. | |

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| Composition | Range 5- Beginning to recognise that each counting number is one more than the one before | 4 | <p>Emphasise the <i>one more, one less</i> pattern in rhymes and traditional tales, asking children to predict the next number.</p> <p>Activity: Support children to choose how to arrange collections of two, three and four objects in different ways.</p> | |
| Comparison | Range 5- Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. <i>You've got two, I've got two. Same!</i> | 5 | <p>Capitalise on children's fascination with counting by joining in when they count in games.</p> <p>Activity: Model using objects to illustrate counting songs, rhymes and number stories, sometimes using pictures and numerals, to enable children to use those resources independently.</p> | |
| Comparison | Range 5- Compares two small groups of up to five objects, saying when there are the same number of objects in each group, e.g. <i>You've got two, I've got two. Same!</i> | 6 | <p>Enjoy counting forwards and back (sometimes to much higher numbers). Use different voices, e.g. high or growly.</p> <p>Activity: To sing number songs, 10 Green Bottles. Focussing on counting backwards.</p> | |