Early Years 1 Mathematics Termly Mapping Document

## Mathematics: Number Numerical Patterns Other (Shape, space and measure)

| Development Matters 2021 3 and 4 year-olds will be learning to: | Examples of how to support this: | Advent | Lent | Pentecost |
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| Develop fast recognition of up to 3 objects, without having to count them individually ('subitising'). | Point to small groups of two or three objects: "Look, there are two!" Occasionally ask children how many there are in a small set of two or three. |  | Phase 3 <br> Phase 4 | Phase 5 |
| Recite numbers past 5. | Regularly say the counting sequence, in a variety of playful contexts, inside and outdoors, forwards and backwards, sometimes going to high numbers. For example: hide and seek, rocket-launch countdowns. |  | Phase 3 <br> Phase 4 | Phase 5 |
| Say one number for each item in order: 1,2,3,4,5. |  |  | Phase 3 <br> Phase 4 | Phase 5 |
| Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). | Count things and then repeat the last number. For example: "1, 2, 3-3 cars". Point out the number of things whenever possible; so, rather than just 'chairs', 'apples' or 'children', say 'two chairs', 'three apples', 'four children'. |  | Phase 3 <br> Phase 4 | Phase 5 |
| Show 'finger numbers' up to 5. | Ask children to get you several things and |  | Phase 3 | Phase 5 |


|  | emphasise the total number in your conversation with the child. |  | Phase 4 |  |
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| Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5 . | Use small numbers to manage the learning environment. Suggestions: have a pot labelled '5 pencils' or a crate for '3 trucks'. Draw children's attention to these throughout the session and especially at tidy-up time: "How many pencils should be in this pot?" or "How many have we got?" etc. |  | Phase 3 <br> Phase 4 | Phase 5 |
| Experiment with their own symbols and marks as well as numerals. | Encourage children in their own ways of recording (for example) how many balls they managed to throw through the hoop. Provide numerals nearby for reference. Suggestions: wooden numerals in a basket or a number track on the fence. |  | Phase 3 <br> Phase 4 | Phase 5 |
| Solve real world mathematical problems with numbers up to 5 . | Discuss mathematical ideas throughout the day, inside and outdoors. Suggestions: <br> - "I think Jasmin has got more crackers..." <br> - support children to solve problems using fingers, objects and marks: "There are four of you, but there aren't enough chairs...." <br> - draw children's attention to differences and changes in amounts, such as those in stories like 'The Enormous Turnip'. |  |  | Phase 5 |
| Compare quantities using language: ‘more than', 'fewer than'. |  | Phase 2 |  | Phase 5 |
| Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides’, 'corners'; | Encourage children to play freely with blocks, shapes, shape puzzles and shape-sorters. Sensitively support and discuss questions like: "What is the same and what is different?" |  |  | Phase 5 |


| 'straight', 'flat', 'round'. | Encourage children to talk informally about <br> shape properties using words like 'sharp <br> corner',' 'pointy' or ''urvy'. Talk about shapes as <br> you play with them: "We need a piece with a <br> straight edge." |  |  |
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| Understand position through words alone <br> - for example, "The bag is under the <br> table," - with no pointing. | Discuss position in real contexts. Suggestions: <br> how to shift the leaves off a path or sweep <br> water away down the drain. <br> Use spatial words in play, including 'in', 'on', <br> 'under', 'up', 'down', 'besides' and 'between'. <br> Suggestion: "Let's put the troll under the bridge <br> and the billy goat beside the stream." |  | Phase 6 |
| Describe a familiar route. <br> Discuss routes and locations, using words <br> like 'in front of' and 'behind'. | Take children out to shops or the park: recall <br> the route and the order of things seen on the <br> way. <br> Set up obstacle courses, interesting pathways <br> and hiding places for children to play with <br> freely. When appropriate, ask children to <br> describe their route and give directions to each <br> other. |  | Phase 6 |
| Provide complex train tracks, with loops and <br> bridges, or water-flowing challenges with <br> guttering that direct the flow to a water tray, for <br> children to play freely with. Read stories about <br> journeys, such as 'Rosie's Walk'. |  |  |  |
| Make comparisons between objects <br> relating to size, length, weight and | Provide experiences of size changes. <br> Suggestions: "Can you make a puddle larger?", | Phase 2 | Phase 3 |


| capacity. | "When you squeeze a sponge, does it stay <br> small?", "What happens when you stretch <br> dough, or elastic?" <br> Talk with children about their everyday ways of <br> comparing size, length, weight and capacity. <br> Model more specific techniques, such as lining <br> up ends of lengths and straightening ribbons, <br> discussing accuracy: "Is it exactly...?" |  | Phase 4 |
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| Select shapes appropriately: flat surfaces <br> for building, a triangular prism for a roof, <br> etc. | Provide a variety of construction materials like <br> blocks and interlocking bricks. Provide <br> den-making materials. Allow children to play <br> freely with these materials, outdoors and <br> inside. When appropriate, talk about the <br> shapes and how their properties suit the <br> purpose. |  | Phase 5 |
| Combine shapes to make new ones - an <br> arch, a bigger triangle, etc. | Provide shapes that combine to make other <br> shapes, such as pattern blocks and <br> interlocking shapes, for children to play freely <br> with. When appropriate, discuss the different <br> designs that children make. <br> Occasionally suggest challenges, so that <br> children build increasingly more complex <br> constructions. <br> Use tidy-up time to match blocks to silhouettes <br> or fit things in containers, describing and <br> naming shapes. Suggestion: "Where does this <br> triangular one /cylinder /cuboid go?" | Phase 5 |  |


| 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. | Provide patterns from different cultures, such as fabrics. |  |  |
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| Extend and create ABAB patterns - stick, leaf, stick, leaf. | Provide a range of natural and everyday objects and materials, as well as blocks and shapes, for children to play with freely and to make patterns with. When appropriate, encourage children to continue patterns and spot mistakes. Engage children in following and inventing movement and music patterns, such as clap, clap, stamp. | Phase 2 |  |
| Notice and correct an error in a repeating pattern. |  | Phase 2 |  |
| Begin to describe a sequence of events, real or fictional, using words such as 'first', 'then...' | Talk about patterns of events, in cooking, gardening, sewing or getting dressed. <br> Suggestions: <br> - 'First', 'then', ‘after', 'before' <br> - "Every day we..." <br> - "Every evening we..." <br> Talk about the sequence of events in stories. <br> Use vocabulary like 'morning', 'afternoon', 'evening' and 'night-time', 'earlier', 'later', 'too late', 'too soon', 'in a minute'. <br> Count down to forthcoming events on the calendar in terms of number of days or sleeps. Refer to the days of the week, and the day before or day after, 'yesterday' and 'tomorrow'. |  | Phase 6 |

