Reception Maths Overview

	Autumn	Spring	Summer
Reception	**Match, sort and compare** Matching and sorting objects and pictures, identifying sets, sorting and creating sorting rules, comparing amounts **Talk about measure and patterns** Comparing size, mass and capacity, exploring, copying and continuing simple patterns **It's me 1, 2, 3** Finding, subitising and representing 1, 2 and 3, 1 more, 1 more, composition of 1, 2 and 3 **Circles and triangles** Identifying, naming and comparing circles and triangles, shapes in the environment, describing position **1, 2, 3, 4, 5** Finding, subitising and representing 4 and 5, 1 more, 1 less, composition of 4 and 5 **Shapes with 4 sides** Identifying and naming shapes with 4 sides, combining shapes with 4 sides, my day and night	**Alive in 5** 0, finding, subitising and representing 0 to 5, 1 more, 1 less, composition **Mass and capacity** Comparing mass, finding a balance, exploring capacity, comparing capacity **Growing 6, 7, 8** Finding and representing 6, 7, 8, 1 more, 1 less, composition, making pairs, odd and even, double to 8, combining 2 groups **Length, height and time** Exploring and comparing length, exploring and comparing height, talking about time, ordering and sequencing **Building 9 and 10** Finding, representing and subitising 9 and 10, comparing numbers to 10, 1 more, 1 less, bonds to 10 (2 parts), arrangements of 10, bonds to 10 (3 parts), doubles to 10 (finding and making), exploring even and odd **Explore 3D shapes** Recognising, naming and using 3D shapes, finding 2D shapes within 3D shapes, 3D shapes in the environment, copying and continuing more complex patterns, patterns in the environment	**To 20 and beyond** Building numbers beyond 10, continuing patterns beyond 10, verbal counting beyond 20, verbal counting patterns **How many now?** Adding more, how many did I add? Taking away, how many did I take away? **Manipulate, compose and decompose** Selecting shapes for a purpose, rotating and manipulating shapes, explaining shape arrangements, composing and decomposing shapes, copying 2D shape pictures, finding 2D shapes within 3D shapes **Sharing and grouping** Exploring sharing, sharing, exploring grouping, grouping, even and odd sharing, playing with building doubles **Visualise, build and map** Identifying units of repeating patterns, creating and exploring own pattern rules, replicating and building scenes and constructions, visualising from different positions, describing positions, giving instructions to build, exploring mapping, representing maps with models, creating own maps and plans from stories and familiar places **Make connections** Deepening understanding, patterns and relationships

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Mathematics

Developing a strong grounding in number is essential so that all children develop the necessary building blocks to excel mathematically. Children should be able to count confidently, develop a deep understanding of the numbers to 10, the relationships between them and the patterns within those numbers. By providing frequent and varied opportunities to build and apply this understanding - such as using manipulatives, including small pebbles and tens frames for organising counting - children will develop a secure base of knowledge and vocabulary from which mastery of mathematics is built. In addition, it is important that the curriculum includes rich opportunities for children to develop their spatial reasoning skills across all areas of mathematics including shape, space and measures. It is important that children develop positive attitudes and interests in mathematics, look for patterns and relationships, spot connections, 'have a go', talk to adults and peers about what they notice and not be afraid to make mistakes.

Number and Numerical Patterns Nursery Reception	Children will start to recognise numbers 1- 5, and enjoy counting everyday objects such as toys and snacks Children will start to use a visual timetable and calendar. Children will begin to talk about days of the week, months and seasons. Children will begin to understand one-to-one correspondence when counting objects. Children start to compare quantities using words like more and less. Children will join in with number songs and rhymes. Children will begin to sort objects by colour and size. Children will recognise numbers 1 to 10 in objects, pictures, and numerals. Children will count up to 10 by touching one object at a time. Children start to compare two sets up to 10, saying which has more or fewer. Children start to understand numbers show 'how many' are in a set. Children begin to write numbers 1 to 10 with correct formation. Children use ordinal numbers (1st, 2nd, 3rd) in everyday contexts. Children order objects, sets,	Children will start to recognise and name common 2D shapes including circle, square, triangle, and rectangle. Children will start to explore and create simple repeating patterns such as AB and AAB . Children will start to identify shapes found in the classroom and outdoor environment. Children will start to use marks to represent numbers and shapes. Children will start to compare objects by size and capacity. Children will recognise numerals to 5. Children form numbers 10 to 20 with correct grip and direction. Children count beyond 10, up to 20. Children use objects or fingers to add two groups within 10. Children exp[lore the concept of 'whole' and 'part' and gain an understanding that numbers can be split into parts (part-whole). Children start to recall number bonds to 5. Children escribe and sort 2D shapes by properties. Children escribe position accurately. Children focus on counting skills and the 'five-ness' concept using one hand and	Children start to count objects up to 10. Children start to recognise and name numbers 6 to 10. Children begin to understand 'how many' in small groups. Children start to use ordinal numbers like 1st, 2nd, and 3rd in simple contexts. Children start to match and order numbers up to 10. Children take part in simple board games involving positions in a sequence. Children explore 2D / 3D shape using everyday language – sides, corners, straight, slat, round. Children start to explore problem solving- spotting errors. Children to start to learn number bonds to 10. Children being to subtract objects within 10 and count how many remain. Children start to recognise odd and even numbers up to 10 by grouping or counting. Children can sequence daily events, days, months, and seasons. Children can compare mass using vocabulary: heavier than, lighter than. Children can compare capacity using vocabulary: full, empty, half full. Children subitise quantities within 5, focusing on dice patterns. Children can match numerals to quantities within 5. Children develop counting skills focusing on ordinality and the 'staircase' pattern. Children start to understand each	Children use objects to combine small groups (adding) and take away objects (subtracting) within 5. Children being to explore subtraction. Children use words like more, less, add, and take away during activities- use objects and fingers. Children start to solve simple story problems involving adding and taking away. Children sing number songs focused on addition and subtraction. Children use mathematical names for shapes – circle, rectangle, triangle, cuboid. Children use shapes through choosing appropriate shapes to make a new shape e.g. to make an arch or a bigger triangle.. Children can sort 3D shapes into groups. Children combine and separate shapes to create new ones (spatial awareness). Children recognise and describe AAB patterns; discuss differences in patterns. Children use language to compare length and height: long/longer, short/shorter, tall/taller. Children explore time concepts: what can be done in	Children describe objects using size words such as big, small, tall, and short. Children understand and use positional language like under, on top, behind, and next to. Children can recognise daily routines and talk about simple time concepts such as morning, afternoon, and night. Children can confidently order objects by size. Children can talk about and sequence daily events. Children explore the use of clocks or timers to develop early awareness of time. Children start to compare objects by length and weight. Children start to explore money through coins and notes. Children start to recognise value of coins: 1p, 2p, 5p, 10p. Children resight numbers up to 10. Children count and share objects in equal groups; understand grouping in fives and tens and its link to sharing. Children can count, recognise, order, and explore numbers up to 15. Children start to explore doubling and halving and their relationship. Children can resight even and odd numbers. Children count larger sets and	Children confidently count to 10 and beyond where appropriate. Children measure length, weight, or capacity using everyday objects as tools. Children can compare quantities and sizes using appropriate vocabulary. Children measure using blocks, hands, or string. Children compare weights using balance scales or by holding objects. Children explore capacity through water play activities. Start to recite numbers beyond 10. Children can count, represent, order, and explore numbers up to 20. Children understand one more and one fewer within 20. Children recognise and create patterns, including ABBC patterns. Children compare measurements (e.g., how many green blocks equal two yellow blocks). Children develop positional language using simple maps; describe sequences like "first" and "next." Children create maps for familiar stories to build spatial awareness. Children subitise up to 5 and

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	and 2D shapes. Children begin to estimate quantities and check by counting. Children subitise (instantly recognise) quantities within 3. Children focus on counting skills and explore numbers as made of 1s. Children understand the composition of 3 and 4. Children can compare sets "just by looking." Children use comparison language like 'more than' and 'fewer than.'	dice patterns. Children compare sets by matching and use language: more than, fewer than, equal. Children focus on composition of 3, 4, and 5. Children practise counting objects and matching numerals to quantities within 10. .	number is one more than the previous. Children focus on numbers 5, 6, and 7 as '5 and a bit.' Children compare sets using language: more than, fewer than, equal to. Children make unequal sets equal by adding or removing items.	30 seconds or 1 minute. Children focus on the 'staircase' pattern and ordering numbers up to 8. Children use language of comparison: less than, more than, equal to. Children focus on number 7 and doubles as two equal parts. Children sort numbers by attributes like odd and even.	estimate unseen quantities. Children can subitise up to 6, including structured arrangements. Children understand number composition: '5 and a bit' and composition of 10. Children can compare numbers linked to ordinality. Children play track games to reinforce counting and number concepts.	use a rekenrek to support number sense. Children call number bonds to 5 automatically. Children understand composition of numbers up to 10. Children compare numbers and explore number patterns through counting activities.