

Maths Reception Long Term Plan

Characteristics of Effective Learning		
<p>Playing and Exploring – Engagement</p> <ul style="list-style-type: none"> • Finding out and exploring ✓ • Playing with what they know ✓ • Being willing to 'have a go' ✓ 	<p>Active Learning – Motivation</p> <ul style="list-style-type: none"> • Being involved and concentrating ✓ • Keeping on trying ✓ • Enjoying achieving what they set out to do ✓ 	<p>Creating and Thinking Critically – Thinking</p> <ul style="list-style-type: none"> • Having their own ideas (creative thinking) ✓ • Making links (building theories) ✓ • Choosing ways to do things (critical thinking) ✓

Area of Maths	Knowledge and skills
<p>To know and use numbers</p> <p>Working towards meeting ELGs: Number: Subitise (recognise quantities without counting) up to 5; Number Patterns: 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;</p>	<p>Recites numbers from 0-10 (and beyond) and back from 10-0. (Bto5) Puts numerals in order 0-10. Count objects, actions and sounds (DM) Estimates of numbers of things, showing understanding of relative size (Bto5) Count out a smaller number from a later group (DM) Recognise quantities to 5 without counting them. Link the number symbol with its cardinal number value. Count beyond ten. Compare numbers and groups of objects.</p>
<p>To add and subtract</p> <p>Working towards meeting ELGs: Number: Have a deep understanding of number to 10, including the composition of each number; 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.</p>	<p>Find one more and one less than a given number to 10. Explore the composition of numbers to 10 (DM) Automatically recall number bonds for numbers 0-10 (DM) Begins to explore and work out mathematical problems, using signs and strategies of their own choice, including (when appropriate) standard numerals, tallies and "+ or -".</p>
<p>To multiply and divide</p> <p>Working towards meeting ELGs: Number Patterns: Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</p>	<p>Explore the composition of numbers to 10 (DM)</p>

<p>To use fractions</p> <p>Working towards meeting ELGs: Number Patterns: Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.</p>	<p>Begin to share amounts and shapes equally with support.</p>
<p>To understand the properties of shapes</p> <p>Working towards meeting Development Matters: Number Patterns: Select, rotate and manipulate shapes in order to develop spatial reasoning skills. Compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. Continue, copy and create repeating patterns.</p>	<p>Uses informal language and analogies (e.g. heart-shaped and hand-shaped leaves) as well as mathematical terms to describe shapes. (Bto5) Enjoys composing and decomposing shapes, learning which shapes, learning which shapes combine to make other shapes. (Bto5) Uses own ideas and make models of increasing complexity, selecting blocks needed, solving problems and visualising what they will build. (Bto5) Spots patterns in the environment, beginning to identify the pattern "rule". (Bto5) Choose familiar objects to create and recreate repeating patterns. (Bto5)</p>
<p>To describe position, direction and movement</p>	<p>Uses spatial language, including following and giving directions, using relative terms and describing what they see from different viewpoints (Bto5). Investigates turning and flipping objects in order to make shapes fit and create models: predicting and visualising how they will look (spatial reasoning) (Bto5). May enjoy making simple maps of familiar and imaginative environments, with land marks (Bto5).</p>
<p>To use measures</p> <p>Working towards meeting Development Matters: Number Patterns: Compare length, weight and capacity.</p>	<p>Enjoys tackling problems involving prediction and discussion of comparison of length, weight or capacity, paying attention to fairness and accuracy. (Bto5) Becomes familiar with measuring tools in everyday experiences and play. (Bto5) Is increasingly able to order and sequence events using everyday language related to time. (Bto5) Beginning to experience measuring time with timers and calendars. (Bto5)</p>
<p>To use statistics</p>	<p>Begin to draw tally charts and pictogram with support</p>
<p>To use algebra</p>	<p>With support addition and subtraction problems are solved to find the missing number.</p>
<p>Vocabulary: See Maths vocabulary sheet for EYFS/Class 1</p>	
<p>Other areas of the EYFS that Maths will enable the children to work towards meeting ELGs: Listening, Attention & Understanding: Listen attentively and respond to what they hear with relevant questions, comments and actions when being read to and during whole class discussions and small group interactions; Make comments about what they have heard and ask questions to clarify their understanding; Hold conversation when engaged in back-and-forth exchanges with their teacher and peers. Speaking: Participate in small group, class and one-to-one discussions, offering their own ideas, using recently introduced vocabulary; Express their ideas and feelings about their experiences using full sentences, including use of past, present and future tenses and making use of conjunctions, with modelling and</p>	

support from their teacher.

Self-Regulation: Show an understanding of their own feelings and those of others, and begin to regulate their behaviour accordingly;

Set and work towards simple goals, being able to wait for what they want and control their immediate impulses when appropriate;

Give focused attention to what the teacher says, responding appropriately even when engaged in activity, and show an ability to follow instructions involving several ideas or actions.

Managing Self: Be confident to try new activities and show independence, resilience and perseverance in the face of challenge;

Explain the reasons for rules, know right from wrong and try to behave accordingly;

Manage their own basic hygiene and personal needs, including dressing, going to the toilet and understanding the importance of healthy food choices.

Building Relationships: Work and play cooperatively and take turns with others;

Form positive attachments to adults and friendships with peers;

Show sensitivity to their own and to others' needs.

DM = Development Matters

Bto5 = Birth to Five