



LITTLE BOWDEN PRIMARY SCHOOL EYFS CURRICULUM for MATHEMATICS

Educational Programme for 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.

ELG: Number

Children at the expected level of development will: - Have a deep understanding of number to 10, including the composition

of each number;

- Subitise (recognise quantities without counting) up to 5;

- 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.

Autumn

Pupils will build on previous experiences of number from their home and nursery environments, and further develop their subitising and counting skills. They will explore the composition of numbers within 5. They will begin to compare sets of objects and use the language of comparison.

Pupils will:

- identify when a set can be subitised and when counting is needed
- subitise different arrangements, both unstructured and structured, including using the Hungarian number frame
- make different arrangements of numbers within 5 and talk about what they can see, to develop their conceptual subitising skills
- spot smaller numbers 'hiding' inside larger numbers
- connect quantities and numbers to finger patterns and explore different ways of representing numbers on their fingers
- hear and join in with the counting sequence, and connect this to the 'staircase' pattern of the counting numbers, seeing that each number is made of one more than the previous number
- develop counting skills and knowledge, including: that the last number in the count tells us 'how many' (cardinality); to be accurate in counting, each thing must be counted once and once only and in any order; the need for 1:1 correspondence; understanding that anything can be counted, including actions and sounds
- compare sets of objects by matching
- begin to develop the language of 'whole' when talking about objects which have parts
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| <p><u>ASSESSMENT:</u></p> | <p><u>Learning to be secure by the end of Autumn Term:</u> <i>Children should be working at a level which sees them:</i></p> <ul style="list-style-type: none"> • Beginning to familiarise themselves with the tens structure of the number system; • Counting up to three or four objects by saying one number name for each item; • Counting objects to 10 and beginning to count beyond 10; • Counting out up to six objects from a larger group; • Selecting the correct numeral to represent 1 to 5, then 1 to 10 objects; • Recognising some numerals of personal significance; • Linking the number symbol (numeral) with its cardinal value. |
| <p>SPRING</p> | <p>Pupils will continue to develop their subitising and counting skills and explore the composition of numbers within and beyond 5. They will begin to identify when two sets are equal or unequal and connect two equal groups to doubles. They will begin to connect quantities to numerals.</p> <p>Pupils will:</p> <ul style="list-style-type: none"> • continue to develop their subitising skills for numbers within and beyond 5, and increasingly connect quantities to numerals • begin to identify missing parts for numbers within 5 • explore the structure of the numbers 6 and 7 as '5 and a bit' and connect this to finger patterns and the Hungarian number frame |

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| | <ul style="list-style-type: none"> • focus on equal and unequal groups when comparing numbers • understand that two equal groups can be called a 'double' and connect this to finger patterns • sort odd and even numbers according to their 'shape' • continue to develop their understanding of the counting sequence and link cardinality and ordinality through the 'staircase' pattern • order numbers and play track games • join in with verbal counts beyond 20, hearing the repeated pattern within the counting numbers • |
| <p><u>ASSESSMENT:</u></p> | <p><u>Learning to be secure by the end of Spring Term:</u> Children should be working at a level which sees them:</p> <ul style="list-style-type: none"> • Show a number of fingers together without counting; • Beginning to use 'teens' to count beyond 10; • Counting an irregular arrangement of up to ten objects; • Finding one more or one fewer from a group of up to five objects, then ten objects; • Estimating how many objects they can see and checking by counting them; • Using the language of 'more' and 'fewer' to compare two sets of objects; • Understanding 5, 6, 7 etc and all manipulations of the number; ^[SEP] Finding the total number of items in two groups by counting all of them; ^[SEP] Beginning to use the vocabulary involved in adding and subtracting including counting on and back; |

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| | <ul style="list-style-type: none"> • Understand addition up to 5 using all combinations. Then 6, 7, 8, 9, 10; • Automatically recall number bonds for numbers 0 to |
| SUMMER | <p>Pupils will consolidate their counting skills, counting to larger numbers and developing a wider range of counting strategies. They will secure knowledge of number facts through varied practice.</p> <p>Pupils will:</p> <ul style="list-style-type: none"> • continue to develop their counting skills, counting larger sets as well as counting actions and sounds • explore a range of representations of numbers, including the 10-frame, and see how doubles can be arranged in a 10-frame • compare quantities and numbers, including sets of objects which have different attributes • continue to develop a sense of magnitude, e.g. knowing that 8 is quite a lot more than 2, but 4 is only a little bit more than 2 • begin to generalise about 'one more than' and 'one less than' numbers within 10 • continue to identify when sets can be subitised and when counting is necessary • develop conceptual subitising skills including when using a rekenrek • |
| <u>ASSESSMENT:</u> | <p><u>Learning to be secure by the end of Summer Term:</u> Children achieve the ELG.</p> |

ELG: Numerical Patterns

Children at the expected level of development will:

- 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.

Autumn

ASSESSMENT:

Learning to be secure by the end of Autumn Term:

Children should be working at a level which sees them:

- Beginning to familiarise themselves with the tens structure of the number system;
- Counting up to three or four objects by saying one number name for each item;
- Counting objects to 10 and beginning to count beyond 10;
- Counting out up to six objects from a larger group;
- Selecting the correct numeral to represent 1 to 5, then 1 to 10 objects;
- Recognising some numerals of personal significance;
- Linking the number symbol (numeral) with its cardinal value.

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| Spring | |
| <p><u>ASSESSMENT:</u></p> | <p><u>Learning to be secure by the end of Spring Term:</u> Children should be working at a level which sees them:</p> <ul style="list-style-type: none"> • Show a number of fingers together without counting; • Beginning to use 'teens' to count beyond 10; • Counting an irregular arrangement of up to ten objects; • Finding one more or one fewer from a group of up to five objects, then ten objects; • Estimating how many objects they can see and checking by counting them; • Using the language of 'more' and 'fewer' to compare two sets of objects; • Understanding 5, 6, 7 etc and all manipulations of the number; <small>ISEP</small> Finding the total number of items in two groups by counting all of them; <small>ISEP</small> Beginning to use the vocabulary involved in adding and subtracting including counting on and back; • Understand addition up to 5 using all combinations. Then 6, 7, 8, 9, 10; • Automatically recall number bonds for numbers 0 to |
| Summer | |




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| ASSESSMENT: | <u>Learning to be secure by the end of Summer Term:</u> Children achieve the ELG. |
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. * Note there is no ELG for Shape, space and measure *

At Little Bowden children at the end of reception will:

- Use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities;
- Create and describe patterns;

Explore characteristics of everyday objects and shapes and use mathematical language to describe them

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| Autumn | |
| ASSESSMENT: | <u>Learning to be secure by the end of Autumn Term:</u> Children should be working at a level which sees them: <ul style="list-style-type: none"> • Talking about the routine of the day and using language like, before and after;  • Using comparative language such as, 'taller', 'shorter' and 'the same';  • Being more confident in identifying shapes in the environment;  |

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| | <ul style="list-style-type: none"> • Recognising particular shapes that may be useful for certain tasks; <small>[L] [SEP]</small> • Making more meaningful pictures, patterns and arrangements with shapes. <small>[L] [SEP]</small> |
| Spring | |
| ASSESSMENT: | <p><u>Learning to be secure by the end of Spring Term:</u> Children should be working at a level which sees them:</p> <ul style="list-style-type: none"> • Beginning to experiment with length, height and capacity; • Beginning to compare length, weight and capacity; • Identifying money and using money in play; • Recalling the names of some 2D and 3D shapes; • Ordering and sorting according to simple properties; • Using the language of direction when programming toys. |
| Summer | |
| ASSESSMENT: | <p><u>Learning to be secure by the end of Summer Term:</u> Children achieve the ELG.</p> |