



Barrowby CE Primary School

Maths Curriculum

The Maths Curriculum for Reception

| Autumn Term | | | | | | |
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| | LS1 | LS2 | LS3 | LS4 | LS5 | LS6 |
| Unit | Subitising (including equivalence, more and less) | Counting Skills (stable order and one to one correspondence) | Comparison – Measures | Pattern Recognition | Classification | Counting the Sort (including cardinality) |
| | By the end of this unit children will be able to: <ul style="list-style-type: none"> Recognise numbers to 5, linking their names to their value. Subitise (recognise quantities without counting) up to 5. | By the end of this unit children will be able to: <ul style="list-style-type: none"> Count reliably using number names in order and with one to one correspondence | By the end of this unit children will be able to: <ul style="list-style-type: none"> Compare objects by length, thickness and weight/mass, using appropriate language to describe and order them. | By the end of this unit children will be able to: <ul style="list-style-type: none"> Notice, describe and extend patterns. In repeating patterns, they think about what part is repeated. | By the end of this unit children will be able to: <ul style="list-style-type: none"> Compare and classify objects using given criteria and own ideas. Compare the amount within groups after classification. | By the end of this unit children will be able to: <ul style="list-style-type: none"> Accurately count a set of items, give the value of the set and be able to compare this to the amounts in other sets |
| ELG | Subitise (recognise quantities without counting) up to 5 | 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. | Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity | Verbally count beyond 20, recognising the pattern of the counting system |
| Suggested support for children with additional needs | <ul style="list-style-type: none"> Use concrete apparatus linked to pupil's interests to promote engagement and interest Repetition of quantity recognition and modelling. | <ul style="list-style-type: none"> Counting chants and songs to develop understanding through repetition Use of numbers visually in the outdoor classroom | <ul style="list-style-type: none"> Link to real-life examples and provide children opportunities to explore measures equipment. Children could make comparisons to everyday items such as fruit and adults should model vocabulary such as longer/taller etc. | <ul style="list-style-type: none"> Identify when children have made patterns during their child-initiated learning for example in the outdoor classroom with natural resources. Encourage children to talk about the patterns they have made. Children could make patterns related to current area of learning | <ul style="list-style-type: none"> Encourage children to begin to create groups within their play e.g. groups of teddies / books. Have a range of items related to interest available for the children to classify and ask how they plan to group them. E.g. vehicle types / animals. Adults to model how they would group them and why | <ul style="list-style-type: none"> Make learning as practical of possible e.g. Use play dough to make sets of shapes using different colours and ask the children to identify sets before touching shapes to count them Repeat similar activities in small world, construction, sand, water, outside with natural objects or arts and crafts materials. |
| 1 | Recognising familiar patterns to subitise, noticing when the patterns are the same and different | Touching a small set of similar objects (more than one) one at a time and rehearsing the number names in the correct order | What makes objects similar and different: Explaining what we notice | Comparing patterns – what's the same/different? | Identify objects that could be added to a set using given criteria | Touching a small set of similar objects (more than one) one at a time and using counting to establish the value of the set |
| 2 | Making the same values in different patterns to subitise | Touching a small set of mixed objects one at a time and rehearsing the number names in the correct order | Using the language of longer/taller and shorter to compare length or height | Continuing a pattern with a given unit of repeat | Identify an attribute that enables a collection to be classified and then sort into those that belong and those that don't | Comparing sets of mixed objects by their values through counting and matching values in grids to numerals |

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| 3 | Noticing when something has a different value when subitising | Using number names to count a set of objects accurately when they could be moving | Using the language of wider/fatter/thicker and thinner to compare thickness | Identifying the unit of repeat and describing in many contexts. | Identify an attribute that enables a collection to be classified into multiple groups | Using number names to count and compare sets of objects when their representations are not identical |
| 4 | Identifying more or less when subitising | Using number names to count a set of moving objects accurately when they cannot be touched and / or seen | Using the language of heavier and lighter to compare mass/weight. Exploring that bigger things might not be heavier | Creating varied patterns and independently deciding upon the unit of repeat | Create sets where some objects don't meet any criteria and some create an intersection by meeting both | Understanding that counting is a tool to identify a quantity (not just a sequence of number names) and using this skill purposefully |
| 5 | Subitising to identify same, more or less when objects can move | | Ordering a small set of objects by a given attribute | | Compare the groups after being classified | |

The Maths Curriculum for Reception

| Spring Term | | | | | |
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| | LS7 | LS8 | LS9 | LS10 | LS11 |
| Unit | Using Counting to Compare | Spatial Thinking | Magnitude – Ordering and Estimating | Regrouping the Whole | Regrouping parts to find the total (the whole) |
| | By the end of this unit children will be able to: <ul style="list-style-type: none"> Use counting to compare and find a precise numerical difference in wide and varied contexts | By the end of this unit children will be able to: <ul style="list-style-type: none"> Develop spatial thinking and spatial language linked to position and direction, both in movements and represented using symbols | By the end of this unit children will be able to: <ul style="list-style-type: none"> Know the position of numbers to 10 and their relationship to other numbers | By the end of this unit children will be able to: <ul style="list-style-type: none"> Have a deep understanding of the numbers to 10 Have automatic recall of numbers to five and know some bonds to ten | By the end of this unit children will be able to: <ul style="list-style-type: none"> Have a deep understanding of the numbers to 10 Have automatic recall of numbers to five and know some bonds to ten |
| ELG | Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity | Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity | Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity | Have a deep understanding of number to 10, including the composition of each number | Have a deep understanding of number to 10, including the composition of each number. Automatically recall number bonds up to 5 and some number bonds to 10, including double facts. |
| Suggested support for children with additional needs | <ul style="list-style-type: none"> Use tens frames to make comparisons between quantities Adult modelling of greater than/ less than / more vocabulary throughout and praise when children use it Use of cube towers for visual recognition of more / less | <ul style="list-style-type: none"> Make learning practical and active and therefore more memorable. Play games to reinforce positional language Verbalise instructions for children to follow, modelling directional language throughout. | <ul style="list-style-type: none"> Children could listen to an adult counting in sequence and identify the number missed. Support children to notice the mistake within a representation e.g. using numerals, dot patterns, towers of cubes or Numicon pieces and say how it should be corrected. | <ul style="list-style-type: none"> Make learning active and relevant e.g. challenge the children to collect a range of objects outside without having 2 items the same. They might bring a stick, leaf, stone, ball, cone and a chalk. Once there are a few items, explore how they might be grouped. | <ul style="list-style-type: none"> Provide the children with a familiar representation of a value, for example, a tens frame, Numicon piece, dice dot pattern or a playing card. Use the familiar patterns to make the same value in different ways and make links between the values being the same. |
| 1 | Use one to one correspondence to compare quantities | Knowledge and application of the language of position | Recognise that a count starts with nothing (zero) and increases equally by one each time | Identify parts within a given whole using subitising | Regrouping subitisable parts to make subitisable totals |
| 2 | Use counting to compare totals | Knowledge and application of directional language in the real world | Order values in a linear way, noticing and comparing their positions to each other and key benchmarks | Regroup a whole into two parts using subitising, recognising that when combined, they equal the whole | Regrouping subitisable parts and counting all to find the total |
| 3 | To count forward and backwards to identify a difference | Comparing routes | Practice the count – 1 more, 1 less | Identify that a whole can be broken into many parts | Recognise that regrouping different combinations of parts can make the same whole |

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| 4 | | Explaining routes and positions of objects in scaled versions of known environments | Estimate relative position using benchmark numbers | Use subitising to identify multiple parts within a given whole | Subitising one part and then counting on the number in the other part to find the whole |
| 5 | | Explaining routes and positions of objects in represented known environments where objects are replaced by abstract symbols | | Using a mixed set of objects to create a given whole, identify parts and provide reasoning for the groupings | Counting on from either part makes the same whole |

The Maths Curriculum for Reception

| Summer Term | | | | | |
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| | LS12 | LS13 | LS14 | LS15 | LS16 |
| Unit | Finding the Whole and Missing Parts | Ten and Some More | Doubling and Halving | Odd and Even | Counting Beyond 20 |
| | By the end of this unit children will be able to: <ul style="list-style-type: none"> Through a deep understanding of numbers to 10, have automatic recall of number bonds to 5 and some bonds to 10 and compare amounts. | By the end of this unit children will be able to: <ul style="list-style-type: none"> Have a deep understanding of numbers to 10 and begin to count confidently beyond ten, recognising patterns in the counting system. | By the end of this unit children will be able to: <ul style="list-style-type: none"> Explore and represent patterns within numbers up to 10, including doubling and halving | By the end of this unit children will be able to: <ul style="list-style-type: none"> To begin to understand the reasons why numbers and quantities can be described as odd or even. | By the end of this unit children will be able to: <ul style="list-style-type: none"> Have a deep understanding of number to 20 and beyond and to count confidently and continue to recognise patterns in the counting system |
| ELG | Have a deep understanding of number to 10, including the composition of each number. Automatically recall number bonds up to 5 and some number bonds to 10, including double facts. | Verbally count beyond 20, recognising the pattern of the counting system | Automatically recall number bonds up to 5 and some number bonds to 10, including double facts. Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. | Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally. | Verbally count beyond 20, recognising the pattern of the counting system |
| Suggested support for children with additional needs | <ul style="list-style-type: none"> Make problems relevant to children's interests and familiarity. Encourage children to use their fingers to represent numbers to develop fine motor skills Begin to introduce part-whole models to support understanding of making a total | <ul style="list-style-type: none"> Counting chants and songs to develop understanding through repetition Use of numbers visually in the outdoor classroom Support children to read numbers as words in line with ELS phonics scheme. Use tens frames to find more/less than a given number practically | <ul style="list-style-type: none"> Use a mirror to identify double the amount of a set of objects and have mirrors available for children to explore this during their child-initiated play Encourage children to build towers / walls that are twice as long or half as tall etc. | <ul style="list-style-type: none"> Ask the children to sort through practical items such as Numicon/number shapes, Lego or cubes which have been arranged into towers two blocks wide. Sort them into groups by how they look, leading children to notice the 'odd' one on top of the odd numbered arrangements. Reinforce vocabulary for odd/even | <ul style="list-style-type: none"> Counting chants and songs to develop understanding through repetition Encourage counting of equipment during play Use apparatus such as bead strings to encourage counting Questioning to promote counting beyond 20 e.g. how many insects can we find? |
| 1 | Finding the missing whole | Relating the numbers zero – ten to benchmarks of 0, 5 and 10 | Learning to identify equal and unequal groups | Identify and recognise odd and even quantities by sharing into two groups | Using counting to identify amounts |
| 2 | Missing part – what could it and what couldn't it be? | Finding ten – creating the unit of ten | Identify doubles and halves (including the context of pattern) | Recognise odd and even attributes in mathematical models | Using counting to compare quantities and find a precise difference |
| 3 | Subitising the missing part | Making ten and some more | Explore the relationship between doubles and halves | Explore the numerical pattern further in consecutive sequences of number | Maintaining an understanding of number magnitude with numbers beyond 20 |

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| 4 | Missing part – how many more? | Making ten and some more and writing them in digits | Establish part, whole understanding where the parts are equal | | Understanding that the pattern in consecutive numbers continues, using one more and one less |
| 5 | Missing part – how many left? | Naming ten and some more | | | Regrouping to find the parts and the whole in numbers beyond 20 |
| 6 | Missing part – finding the difference | Matching ten and some more, the number names and the number in digits | | | Understanding the special grouping that organises collections into groups of ten |
| 7 | | Finding one more / one less than a given number | | | |