Maths in the Foundation Stage

What early maths might look like…

Foundation Stage Curriculum

Maths is one of the specific areas of learning

- Number and Numerical patterns.
- Shape, space and measure.

At Lowe's Wong Infant School we teach Maths in Foundation in the following ways:

- A daily whole class maths input following the White Rose Maths Scheme
- A daily whole class short number session called 'Mastery Maths' focusing on fluency, reasoning and problem solving
- Independent activities during Explore & Investigate time both inside and outside
- Guided group activities to consolidate learning and assess understanding of taught concepts.

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White Rose Maths

Representing Numbers

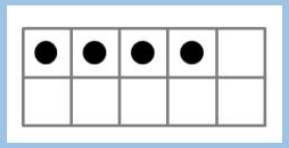
- We want to develop children's number sense so that they understand the number rather than just recognising the numeral.

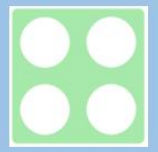
- Children need to understand that numbers can be represented in many ways, not just as a written numeral.

- We use many different objects and pictures to show that numbers can be represented in lots of ways.







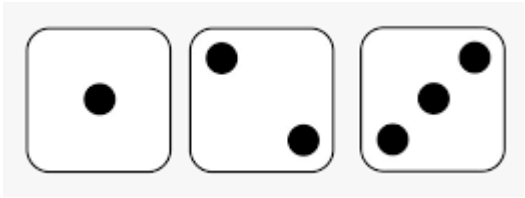
Counting

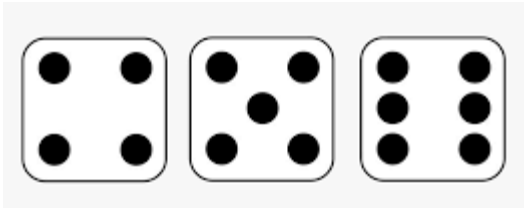
When counting, children need to understand…

- That we need to say one number for each object counted - touch counting and one-to-one correspondence – match one number name to each item to be counted
- Stable order- say the number names in the correct order
- Cardinality – the last number in the count is the total size of the group. The final number we say is how many altogether.
- That we can count objects in any order and the total stays the same.

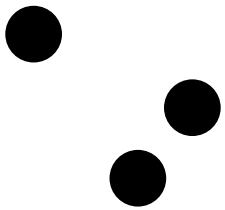
Recognising amounts – subitising

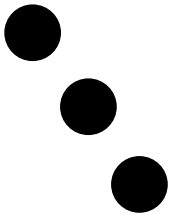
Subitising is the ability to recognise a *small quantity* of objects *without the need to count*.

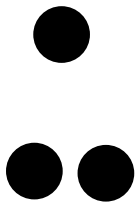


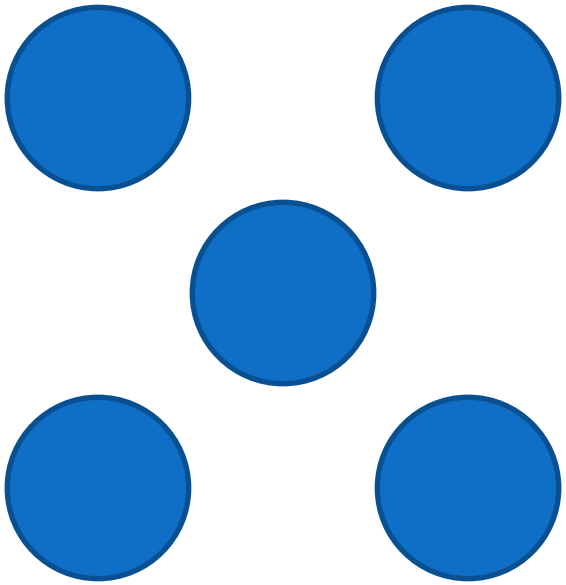


Sometimes when we subitise we can see two groups at once; if we know that 3 can be 'made' of 2 and 1, then we know how many there are altogether without counting.







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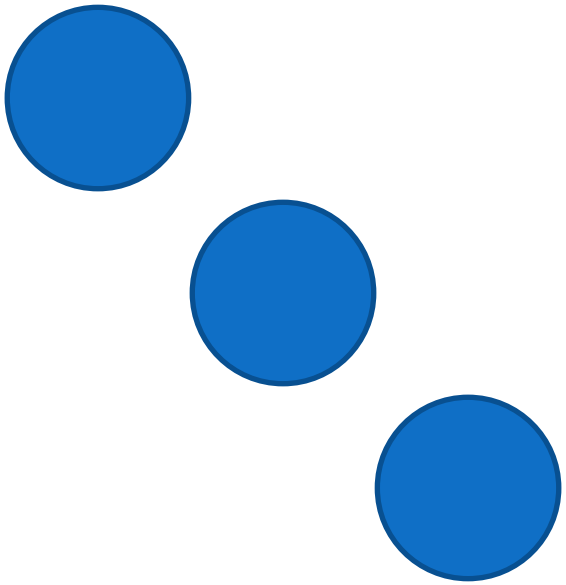


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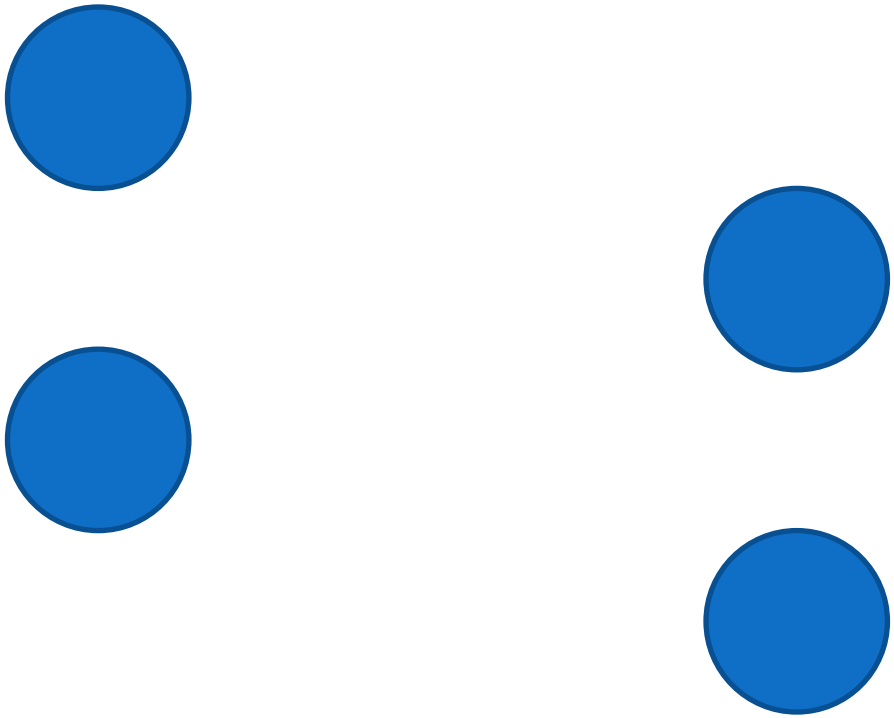
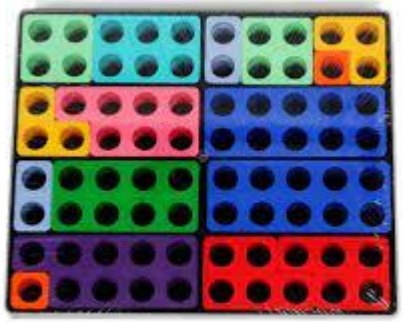
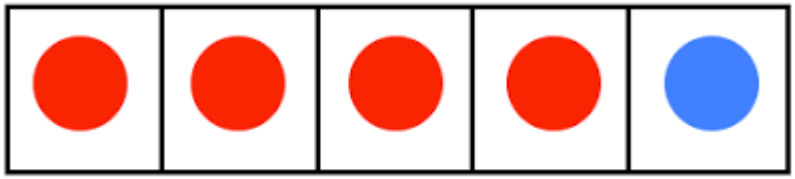


Manipulatives





Reasoning

Children being able to explain their thinking, making it easier for them to understand what is happening in the maths they are doing.

Some examples of reasoning are:

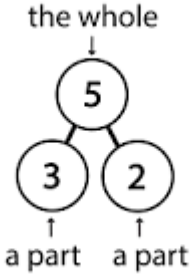
- True and false statements e.g. adding one to a number always makes it smaller
- Spotting incorrect maths e.g. 1, 2, 3, 4, 6, 5, 7, 8, 9, 10
- Explaining how we know something or how we worked it out

Problem Solving

Allows children to use their maths skills in lots of contexts and in situations that are new to them. It allows them to seek solutions, spot patterns and think about the best way to do things.

In Reception, problem solving might include:

- Spotting, following and creating patterns
- Estimating amounts of objects
- Predicting
- Sharing objects between different groups
- Finding different ways to split numbers e.g. 5 could be 5+0, 4+1, 3+2 etc.



Children using this model will see the relationship between the whole number and the component parts, this helps learners make the connections between addition and subtraction.

What you can do at home…

- Singing number songs e.g. 5 little ducks, 10 green bottles etc – YouTube have lots of videos to watch and sing along to!
- Practical maths – counting items into a shopping basket, adding small quantities of coins together, sharing toy food at a teddy bear's picnic etc.
- Play should include opportunities for size, shape, capacity, number and simple addition and subtraction vocabulary.
- Board games
- Playing I spy whilst on walks out and about – which shapes or numbers can you see? Number plates, numbers on buses etc are great for this.
- Baking – support your child in reading numbers for ingredients, counting spoon fulls into a bowl, timing the baking of cakes etc.
- Online games exploring number

Topmarks

Early Learning Goals

Early Learning Goal – Number

- *Children have a deep understanding of numbers 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.*

Early Learning Goal – Numerical 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 then, 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.*

Any questions?


THANK YOU