



EYFS Maths Workshop



Welcome!

- Aim to give an insight into how our youngest children here at Banks Road embark on their life long mathematical journey.
- Participation please! The best way to learn Maths is to do Maths.
- Numicon and a multi-sensory approach in nursery and beyond.
- Maths Mastery approach from Reception with a consistent framework into Key Stage One and Two.

The Numicon Approach

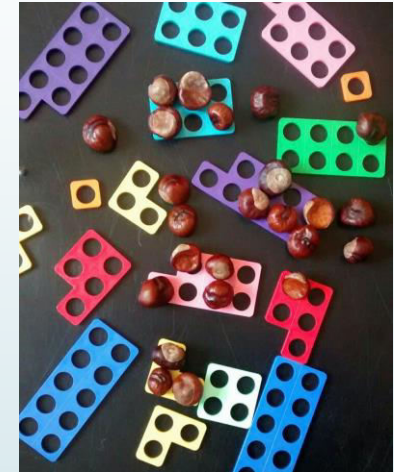


- Numicon shapes encourage children to explore maths using structured imagery and apparatus in order to understand and explain mathematical concepts.
- Based on the concrete – pictorial – abstract approach, Numicon is an important part of children's wider experience with Mathematics and number ideas.
- For EYFS professionals, Numicon allows us to do what we excel at, learning through experiences.
- Numicon approach is multi sensory and so children learn about number ideas through seeing and feeling how the shapes connect with each other.
- Connections between the shapes are key to understanding number ideas. It is important to give children time to make their own discoveries and to avoid jumping in and telling them number names from the shapes.

The Numicon Journey.

How do we do it?

- As children meet Numicon shapes in their everyday environment, in play and in different areas of provision, they get to know the colours, sizes, and patterns of the shapes.
- EYFS practitioners play alongside children and talk with them using appropriate mathematical vocabulary. Children learn the meaning of these words through hearing them and in time will start to use these words themselves.





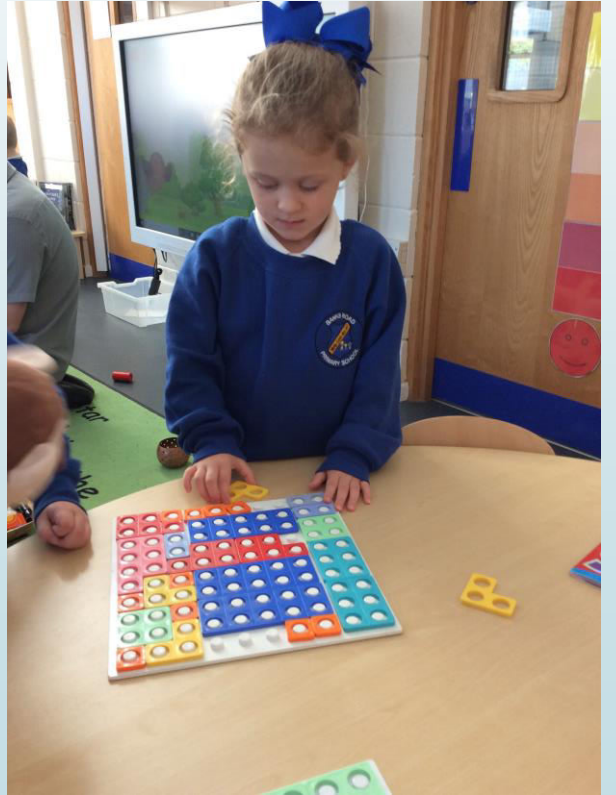
Patterns

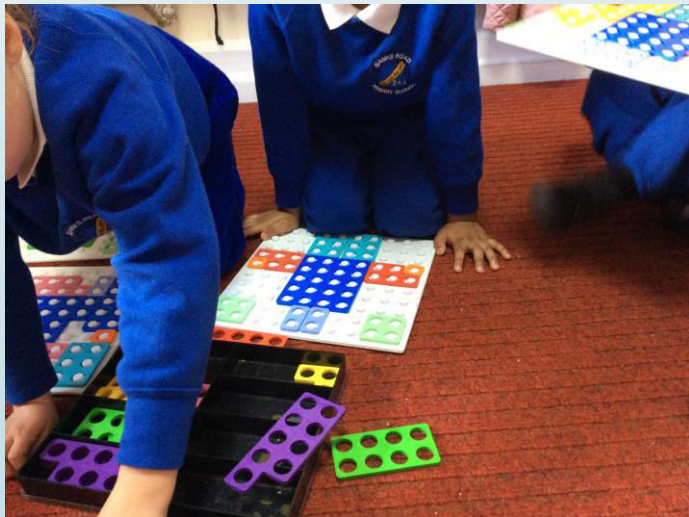


- Recognising patterns helps children to predict, and it is pattern that underlies mathematics.
 - Numicon is designed to appeal to this sense of pattern, and so lots of opportunities are given to our children nursery and reception.
 - In time children will confidently copy, continue and create their own simple repeating patterns.
- Over to you! Using the equipment on your tables we will explore pattern as our children first do in EYFS.
 - Cover the baseboard game.
 - Overlays.
 - Symmetry
 - Building towers.

Banks Road Nursery Children exploring pattern with Numicon.







Songs, Rhymes and the links with Patterns.

- ▶ Children have a strong sense of pattern. They enjoy familiar stories and rhymes and feel secure when they understand the routines of their day.
- ▶ Predicting what happens next is Mathematics. It is through recognising patterns in language for example that children learn to talk.
- ▶ Never underestimate the importance of singing songs and rhymes with your children to help them build essential patterns.



Representation

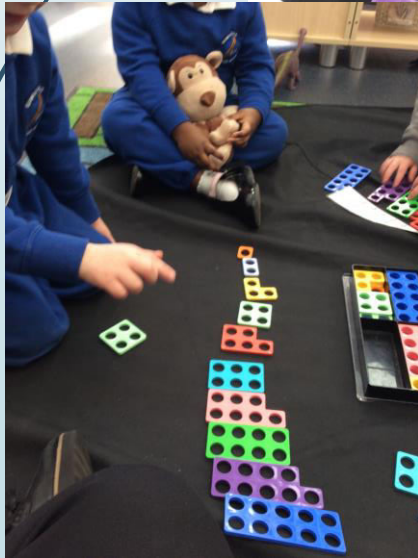
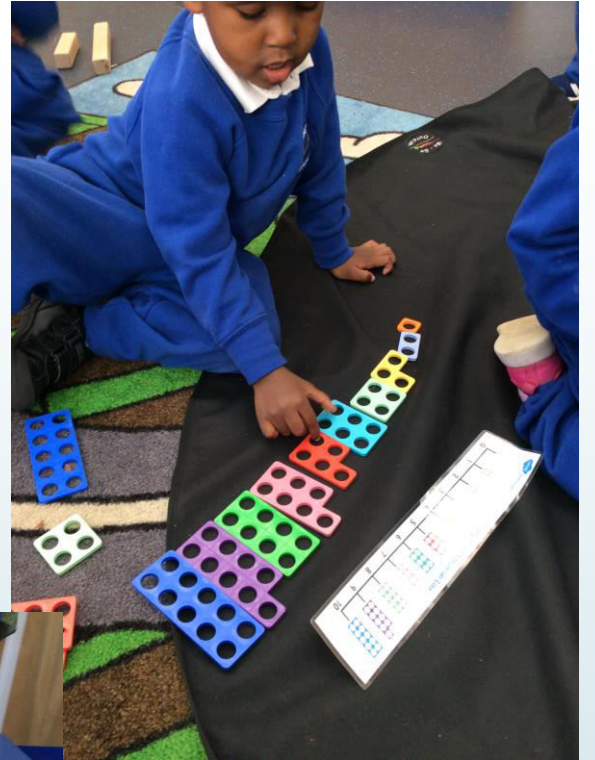
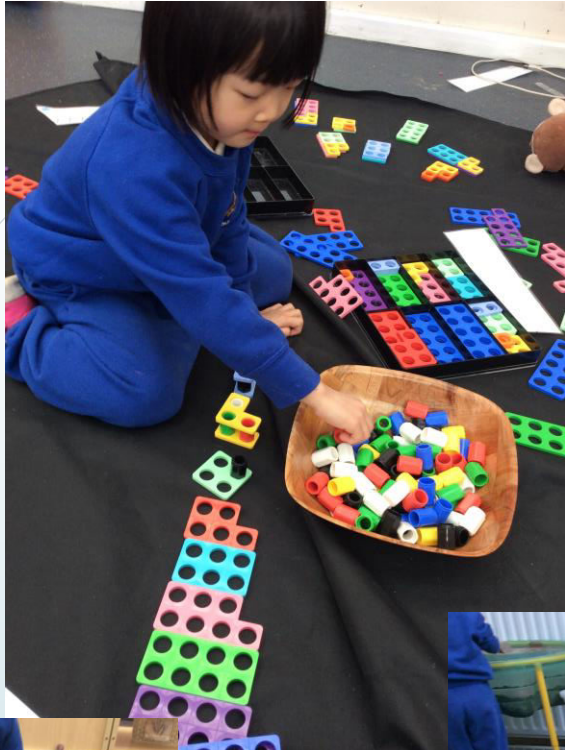
- Once children are familiar with shapes and arranging patterns, we may start to talk about what the shapes represent.
- Finding 'how many' by using Numicon pegs or counting the holes.
- Arranging other objects into Numicon patterns enables some children to recognise how many without counting.
- Knowing the shapes well is an important step towards calculating.



Putting things in order.

- ▶ As children put objects in size order, they are comparing to find the smallest, and what comes next.
- ▶ This is an important part of their mathematical development and is the basis for learning about measurement later on in school.
- ▶ Putting Numicon shapes in order helps children to see how numbers are connected with one another. For example that each shape is 'one more' than the previous one.
- ▶ Over to you!
- ▶ Have a go on your tables of putting the Numicon shapes in order from 1 – 10.
- ▶ Does it look like this? Staircase? Adjust.

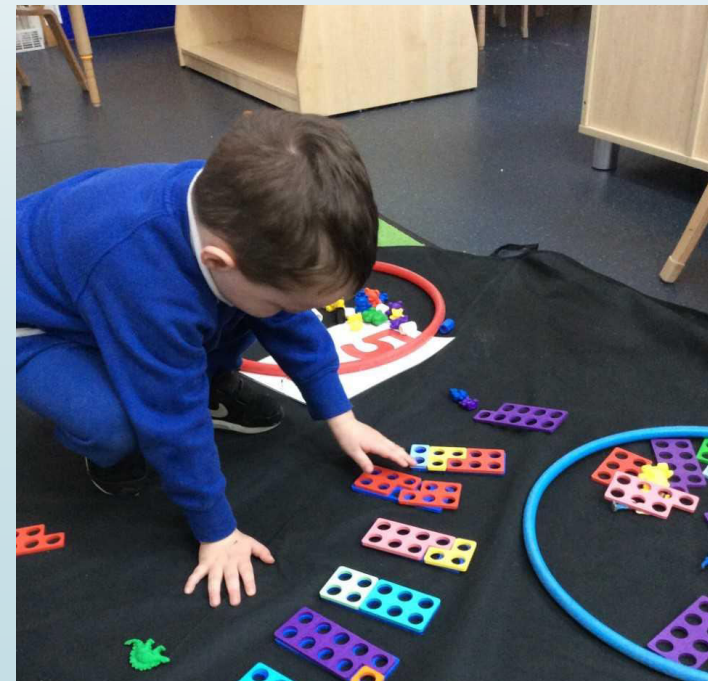
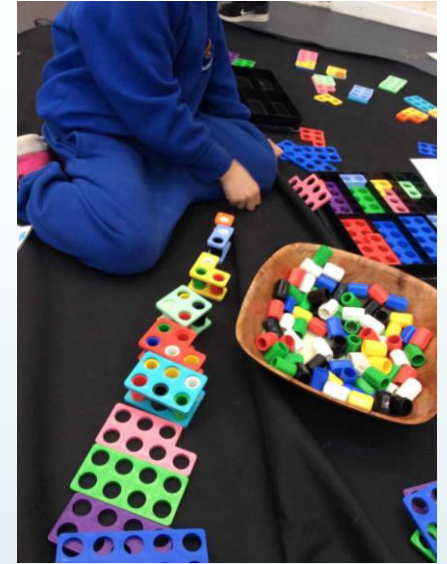




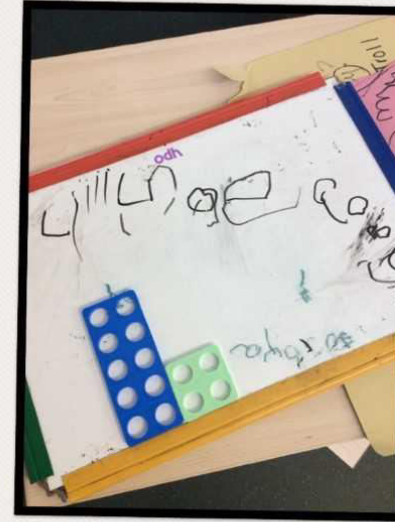
What comes next?

Number bonds in EYFS!

- ▶ When children are given daily opportunities to explore with Numicon, they begin to build with their shapes in other ways.
- ▶ Using 2 shapes to make 10. Have a go. What shapes did you use? So you know that these 2 numbers make 10. What other shapes can you use to build 10?
- ▶ Children are verbalising additions when using the shapes and are getting concrete experience of all important number bonds to 10.



Application of Numicon knowledge.



Maths Mastery.

The journey from Reception and beyond.

- "A concept is considered mastered when learners can represent it in multiple ways, can communicate solutions using mathematical language, and can independently apply the concept to new problems" Nursery World 2019.
- The teaching for Mastery programme delivered here at Banks Road aims to secure the skills above and give children a secure base of knowledge to build upon.



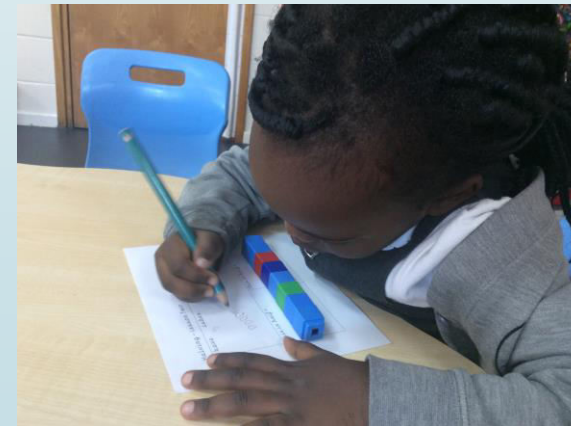
- Children in reception are learning to master their understanding and use of numbers.
- It is key that children have daily opportunities to explain, reason and justify their answer.
- "How do you know?"
- "Tell me about?"

Talk Partners, Sticky Hands and Good Role Models!



What do Mastery lessons look like in Reception?

- ▶ Daily Maths meetings within the classroom.
- ▶ 4 part lesson to include the following;
 1. The Big Picture – brains working and focussing on the concept of the lesson.
 2. Teacher input, focussing on new learning.
 3. Talk task – in pairs children will discuss, reason and justify new learning. Have a go! Classify 2d and 3d shapes with a partner.
 4. Follow up activities for all children in the classroom.



Continuous provision continued.

- As previously mentioned, children in EYFS (and in fact all children) learn best through experiences, and so the Maths Mastery programme in Reception is complimented by daily mathematical opportunities in provision.
- Reception classes provide mathematical concepts and activities within child led provision. This allows them to consolidate what they have learned through adult-led interactions or through their own explorations.



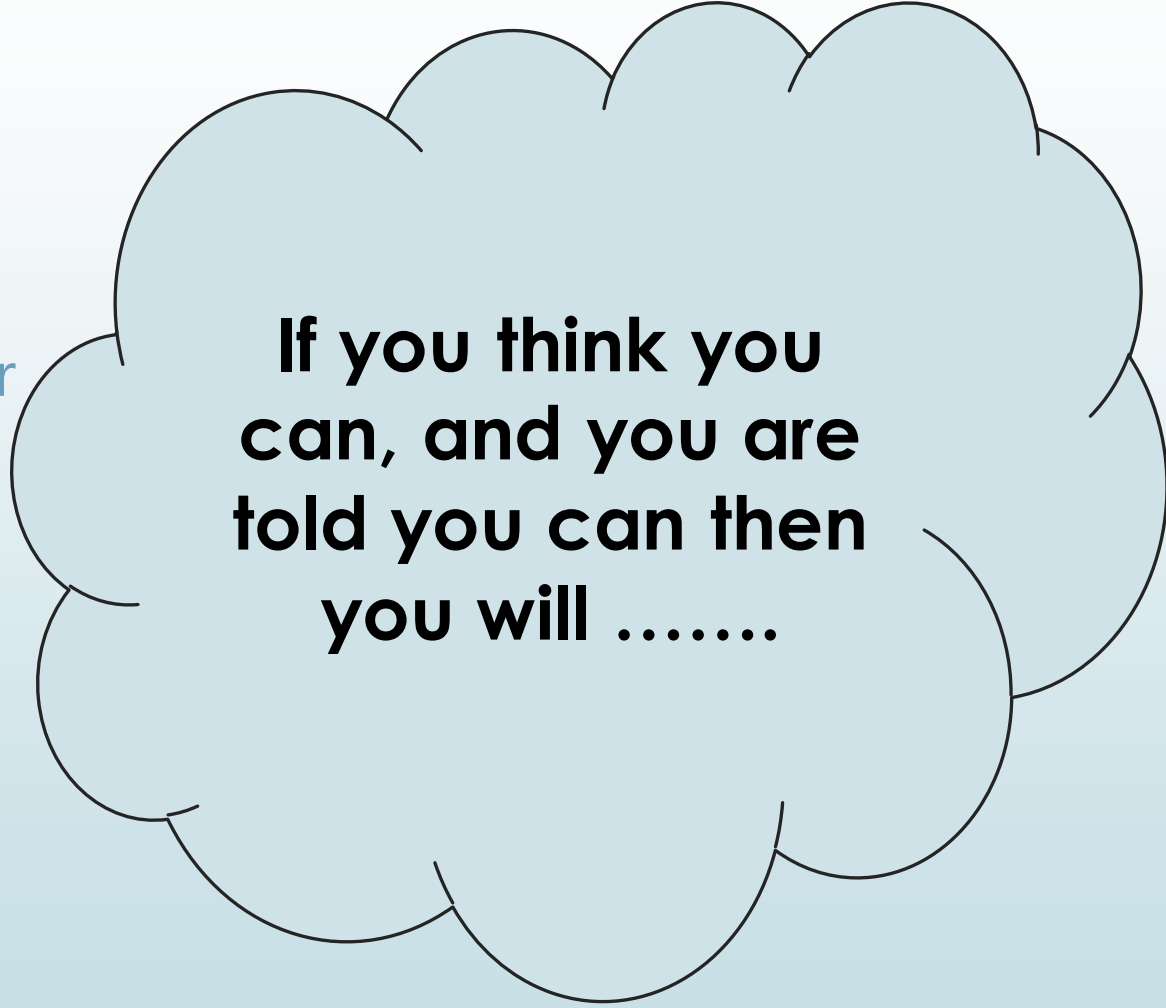


Thankyou for your time.

- Packs to take home.

Including:

- Numicon shapes, number lines, matching quantity and numeral, 2d and 3d shapes and much more.
- Any questions?



**If you think you
can, and you are
told you can then
you will**