



Castle Hill School

Maths Update May 2020

Maths Leads:

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Our Intent

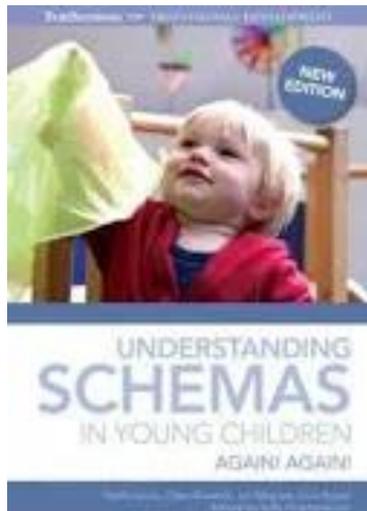
Our intent in Maths teaching and learning, is to enable all pupils to make sense of the world around them, initially through the exploration of schema, and later through the application of functional number and problem solving skills



Schema and Developing Schema

For our pupils at earlier levels of development, the teaching focus is on encouraging and extending early developmental **schema**. Pupils are given opportunities to explore a wide range of schemas, such as trajectory, orientation, connecting, rotation, enclosing, enveloping, positioning and transporting. Particular emphasis will be placed on developing and extending the preferred schemas of individual pupils. Support will be given to ensure that pupils with complex and profound learning difficulties, including multi-sensory impairment, will have access to the teaching and exploration of schema - **Enabling Schema**.

Further Information on Schema



What are Schemas?

Schemas are described as patterns of repeated behaviour which allow children to explore and express developing ideas and thoughts through their play and exploration.

Two excellent websites for more information are below:

<http://www.flyingstart.uk.com/wp-content/uploads/2014/08/Schema.pdf>

<https://www.eureka.org.uk/blog/schemas-parents-need-know-childrens-behaviour-patterns/>



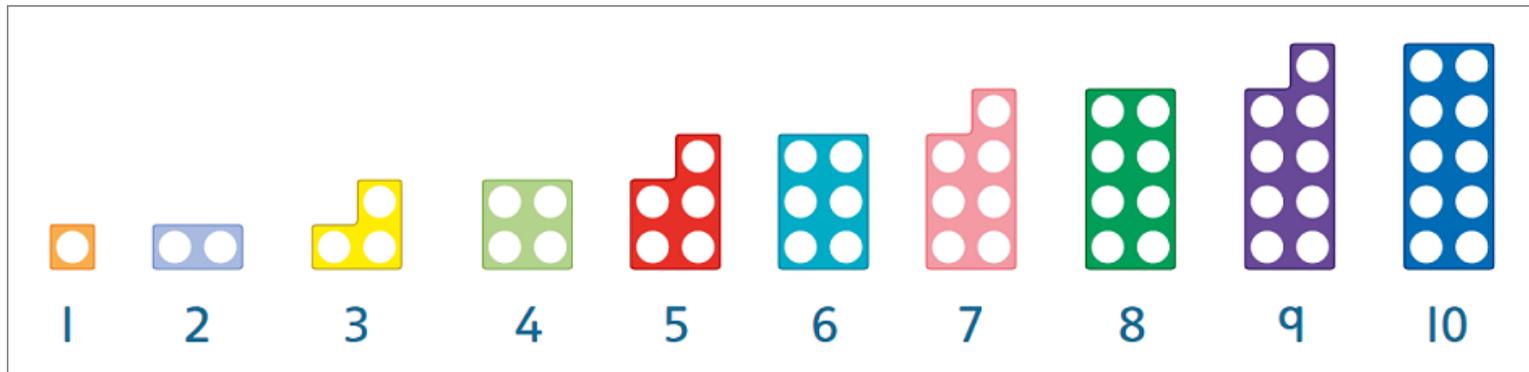
Symbols and Representational Images

Our pupils at more advanced developmental levels continue to explore their environment using concrete objects. They have a clear understanding of cause and effect. They are encouraged and given opportunities to use symbolic thought and to consider the relationships and patterns within their environment. Gradually, more emphasis is placed on symbolic number work and representational images, using these to find and describe relationships and connections.

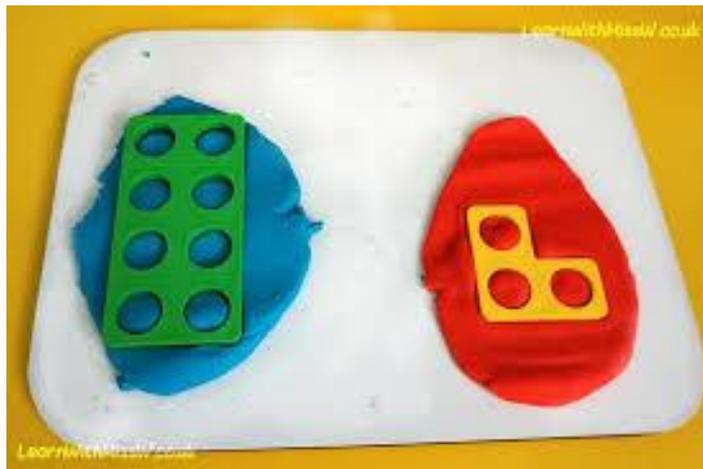
Numicon

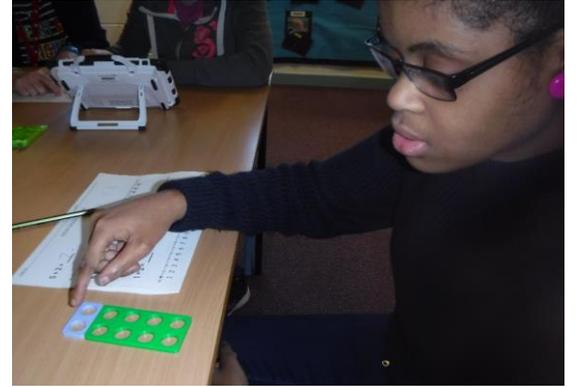
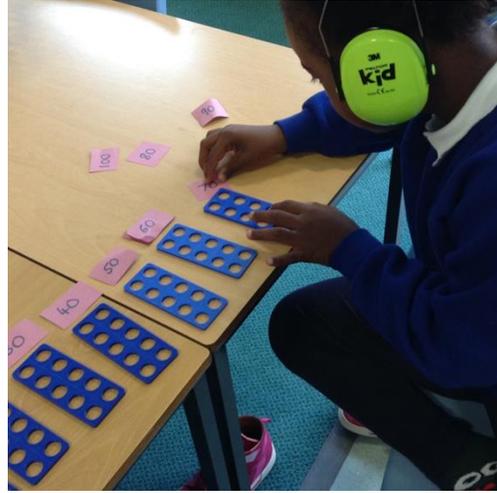


Numicon resources support learning by providing a multi-sensory means of understanding connections between numbers. Numicon shapes use patterns to represent each numeral; these patterns are structured so that number relationships can be presented in a way not provided by written numerals.

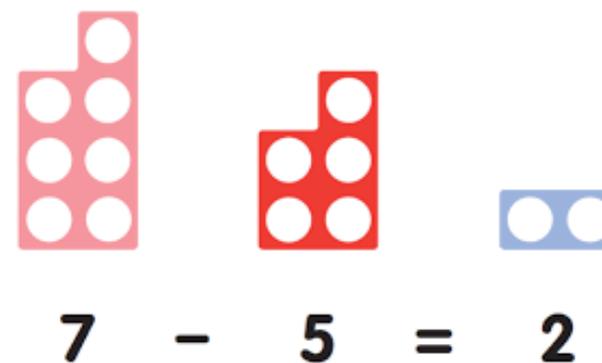
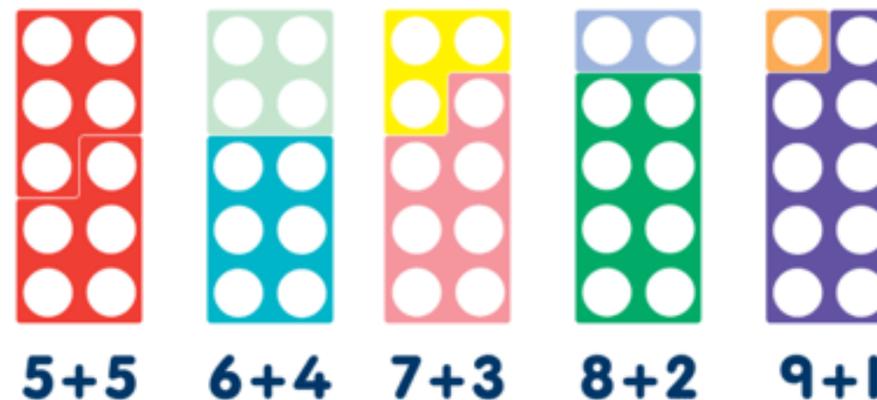
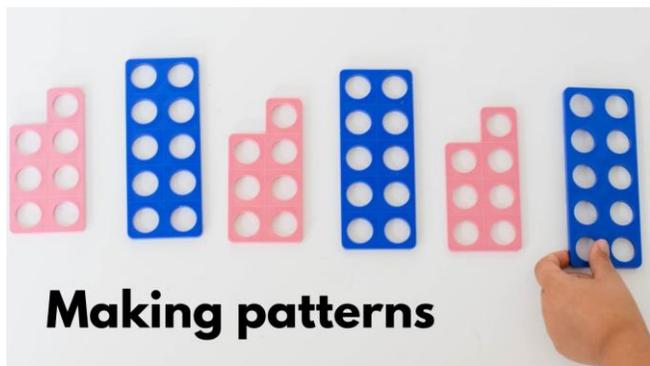


Ideas for Exploring Numicon Shapes



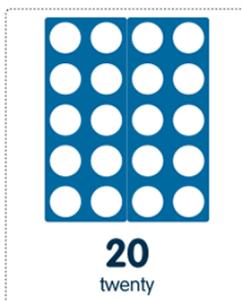
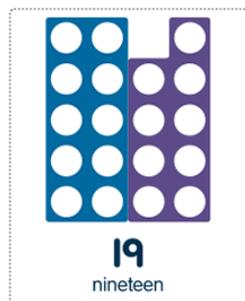
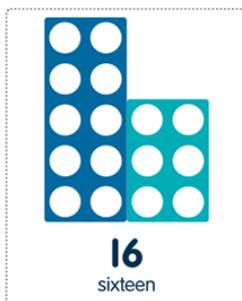
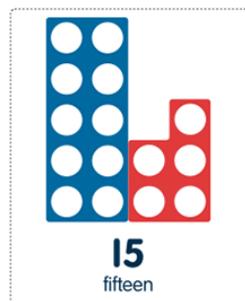
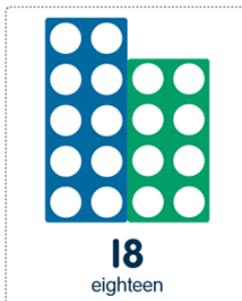
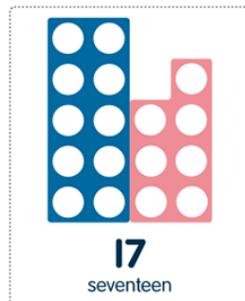
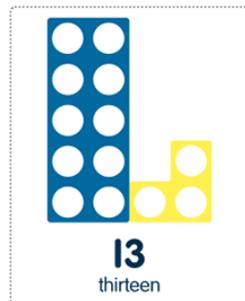


Number and Calculations



Numicon Free Resources
Numeral, number name and Numicon Shape cards 1-31 – sheet 4 of 11

numicon



Numicon Free Resources
Numeral, number name and Numicon Shape cards 1-31 – sheet 5 of 11

numicon

Pathways and Updates

- The Castle Hill Number Pathway supports teachers with planning and assessment in Maths. The Shape, Space and Measures Pathway is currently being written.
- Evidence of learning for all pupils is presented through individual Learning Journals and yellow Evidence of Achievement files. This details the progress made by each pupil towards meeting their MAPP and PIP targets.
- Moderation sessions are carried out regularly to ensure consistency of levelling within, and between, classes.
- Learning Walks are held to observe evidence of teaching and learning in Maths around school.

Finally...

We hope that this has given you more information about teaching and learning in Maths at Castle Hill School.

If you would like more information about Schema or Numicon, please ask Kiersti or Harriet.

If you would like to take part in Maths moderation sessions or learning walks, we would love you to join us!

