

## Numicon

Numicon shapes offer a tactile and visual illustration of number ideas. These can be used to reinforce basic number bonds, patterns and calculating. This can be used to support a range of topics, for example, children are able to actively visualise and simplify fractions and percentages.



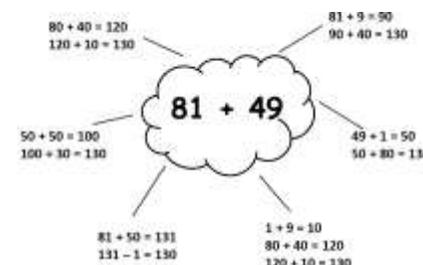
Numicon rods are 10 coloured rods, the shortest 1cm and the longest 10cm. These can be used for teaching place value, partitioning, multiplying and dividing, for example, children can show their understanding of whole numbers or decimals by positioning rods on a place value grid.



## Mental Maths

Number maps and flashcards offer visual techniques to improve children's mental fluency. These can be used for all numeracy topics, and provide a platform for discussion of mental strategies.

Number maps can be used to reinforce the four operations, and introduce new concepts such as dividing with remainders. For example, children would circle the multiples of tables to visually identify remainders.



Flashcard techniques are proven to promote both working memory and processing speed which are essential ingredients of effective learning. As well as developing quick recall of number facts, children are also given the opportunity to discuss their mental strategies.

### Problem Solving

Problem solving provides children with opportunities to investigate, take risks, make mistakes and enjoy the challenge, while realising that maths is not just about right or wrong answers. Multi-step problems require children to use different strategies to solve them such as working backwards, making a visual diagram or making organised lists.

These can be individual or collaborative challenges and often allow the children to apply their learning to real life situations.



For example, children could be given a budget and asked to plan a party with a resource list.

### How to help your child

It is really important to give your child ample opportunities to apply their learning to real life situations. For example, when shopping comparing deals to determine what is the best buy and calculating the best special offers, e.g. 10% off clothing.

Apps and online games can also be useful for consolidating learning. Here are some suggestions:

- [www.mathsontrack.com](http://www.mathsontrack.com)
- [www.topmarks.co.uk](http://www.topmarks.co.uk)
- [www.mathszone.co.uk](http://www.mathszone.co.uk)
- [www.mathematicshed.com](http://www.mathematicshed.com)
- [www.sheppardsoftware.com/math.htm](http://www.sheppardsoftware.com/math.htm)

Encourage the use of maths dictionaries for revision and consolidation.

Ask your child what they have learned during Maths and get them to teach you. By explaining what they have learned, they are using their own mathematical language and reinforcing the concept.