



Numeracy Workshop

May 2019

Numeracy through play and practical experiences

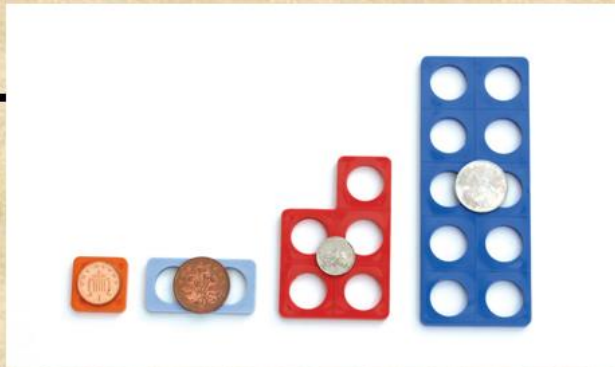
- Before we can embark on any kind of formal calculating there are vital practical processes the children need to experience.
- Role play- shops, maths market
- Outdoor play- sand, water, games, coins
- Number rhymes and Stories and games
- We encourage the use of cubes, compare bears, fingers, number fans, numicon and number lines up to 10 and 20.



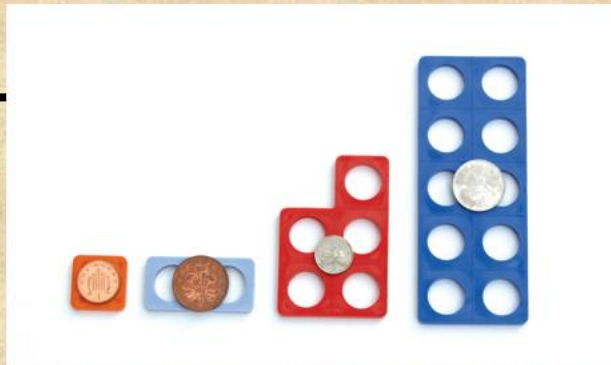
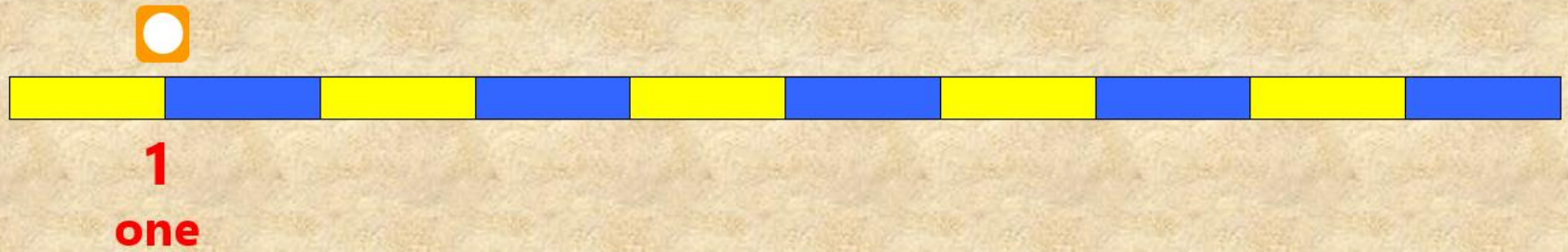
Numeracy through play



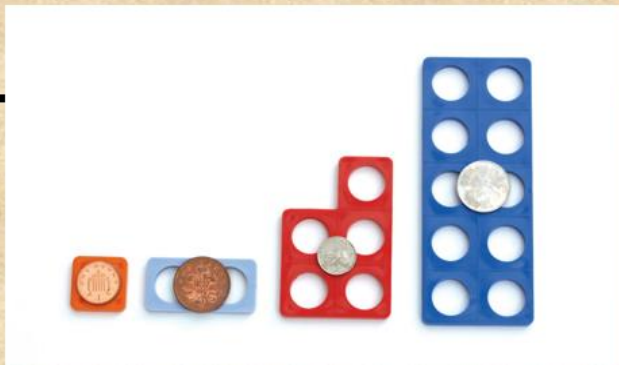
Numicon



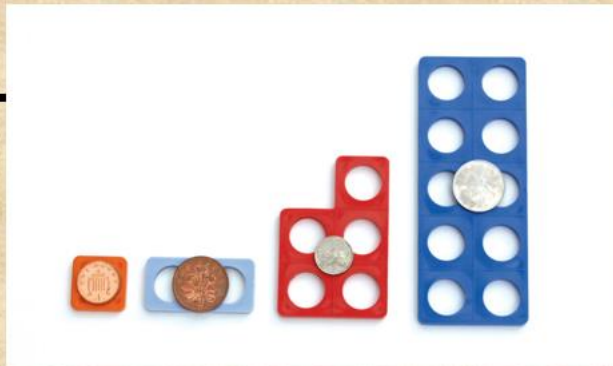
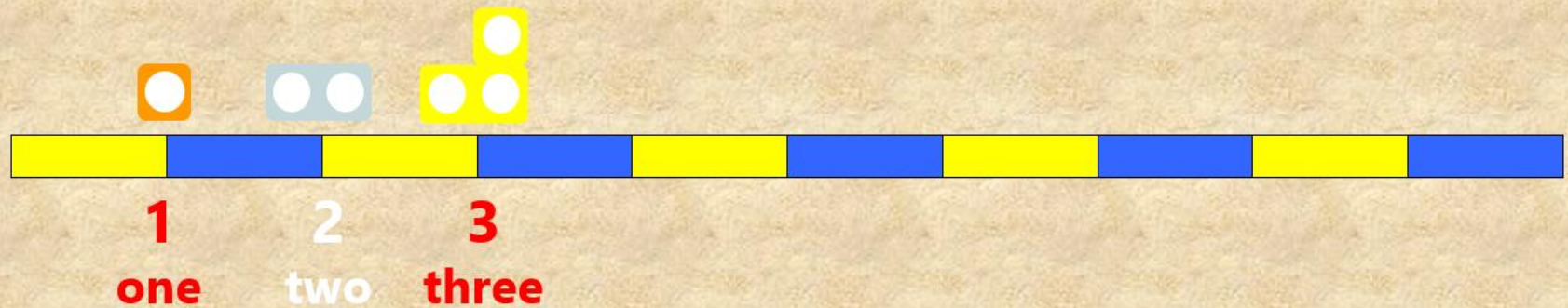
Numicon



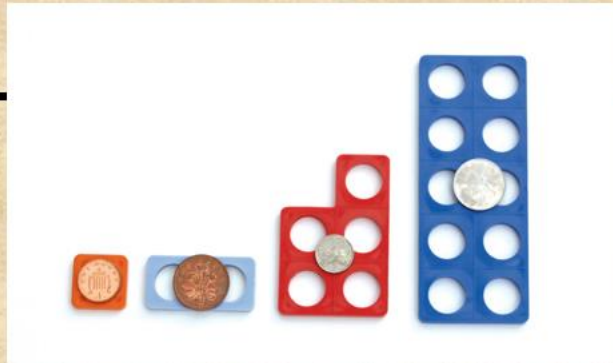
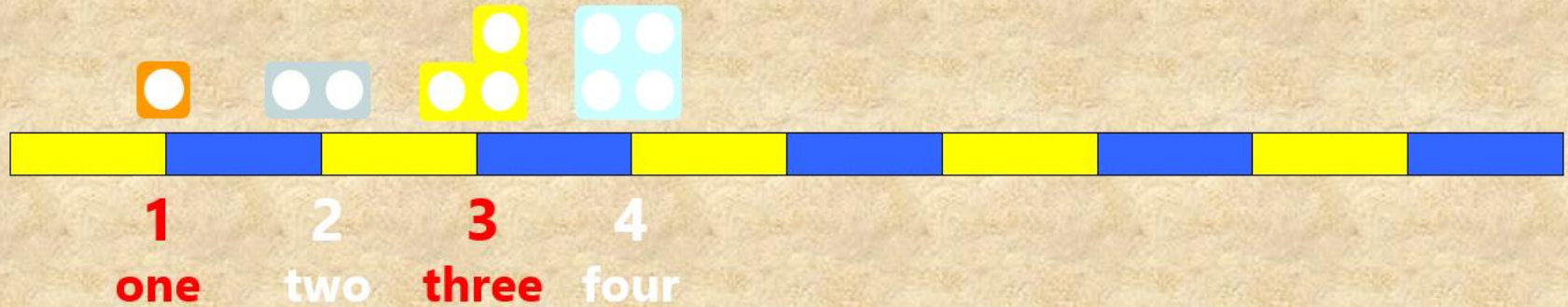
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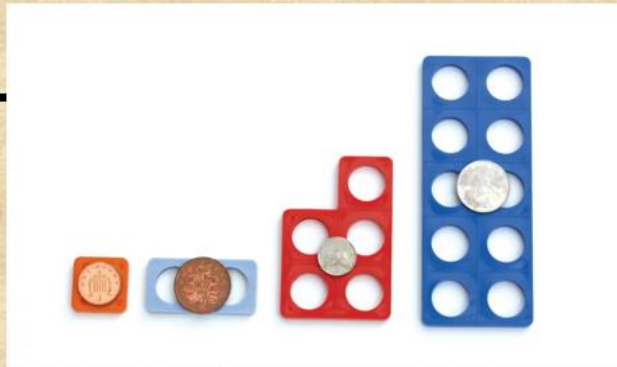
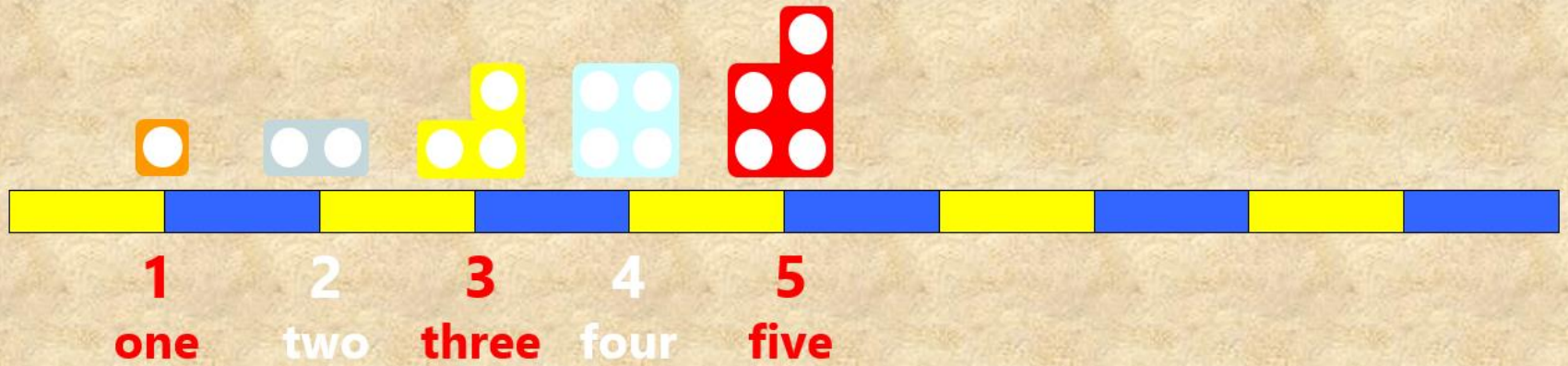
Numicon



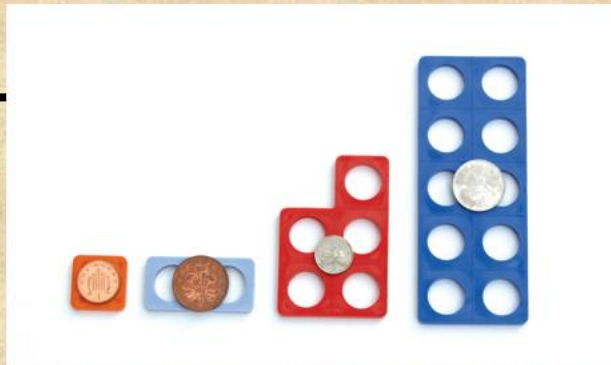
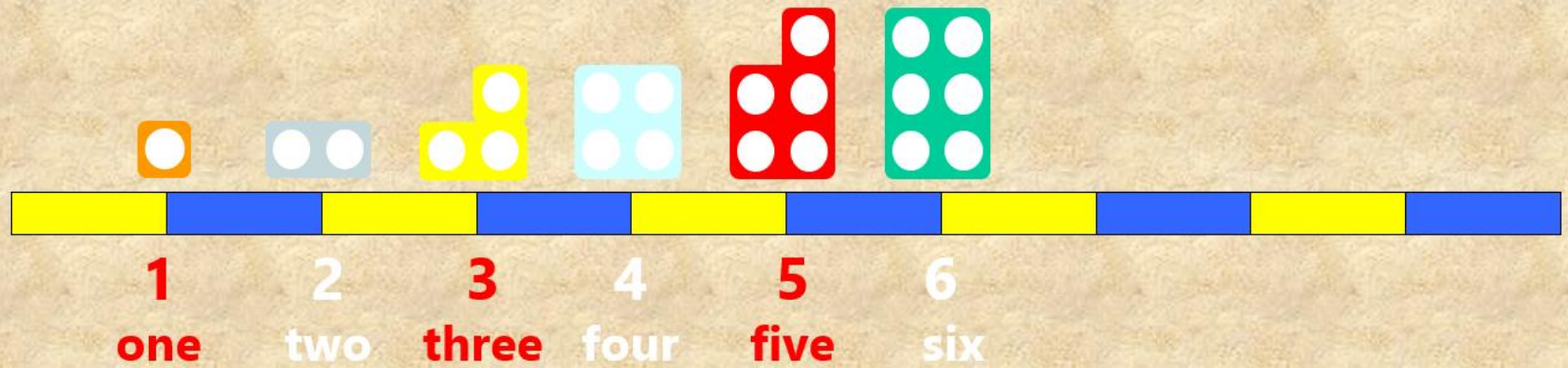
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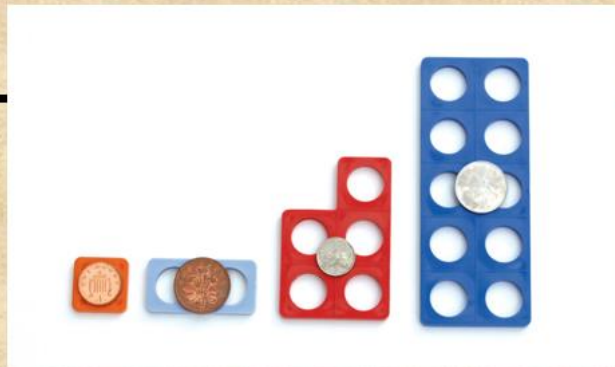
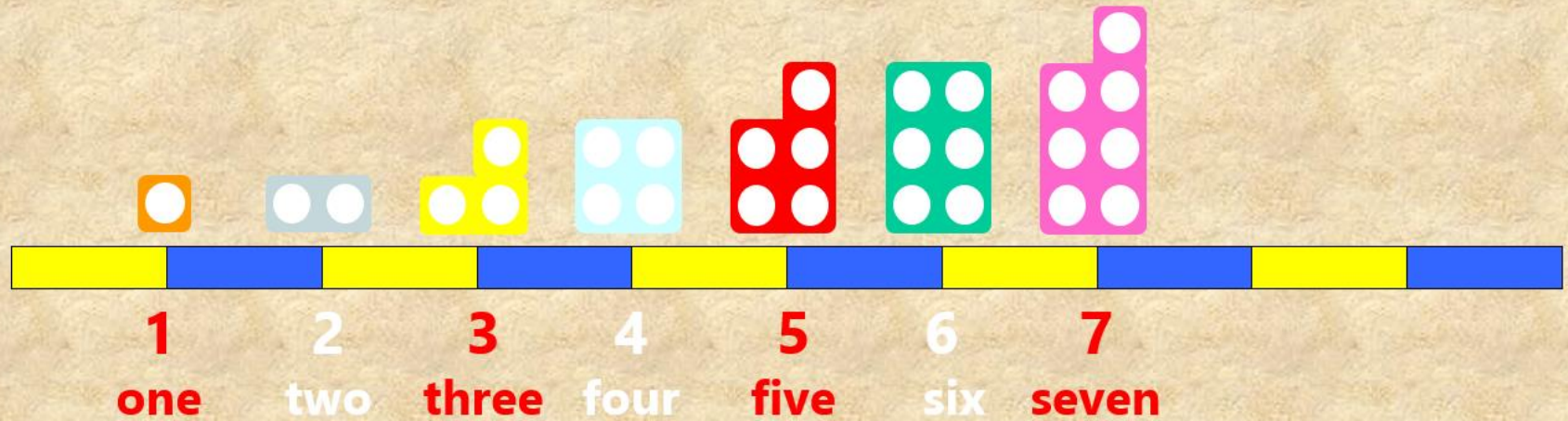
Numicon



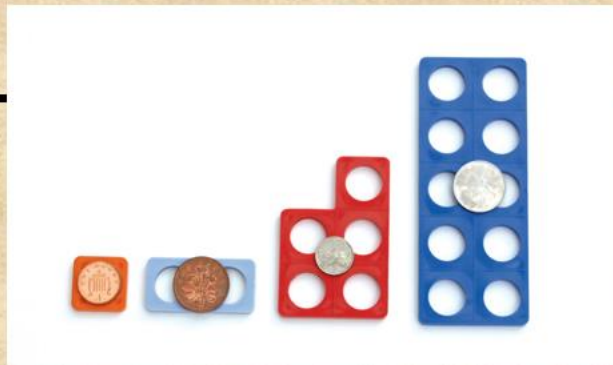
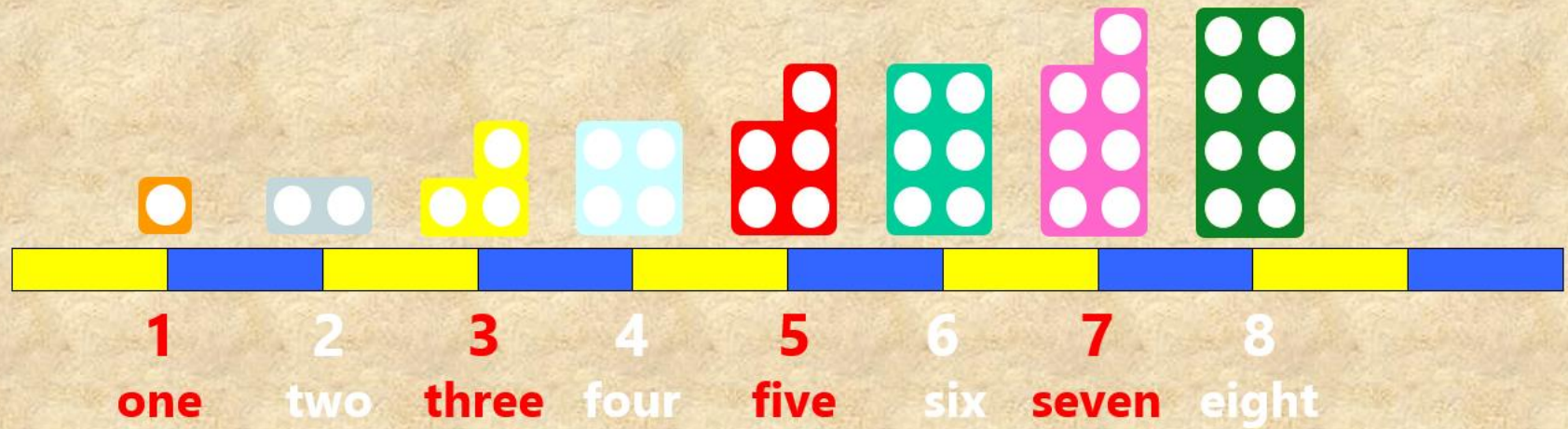
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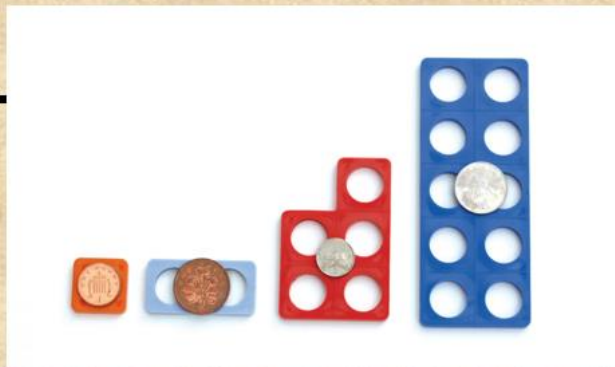
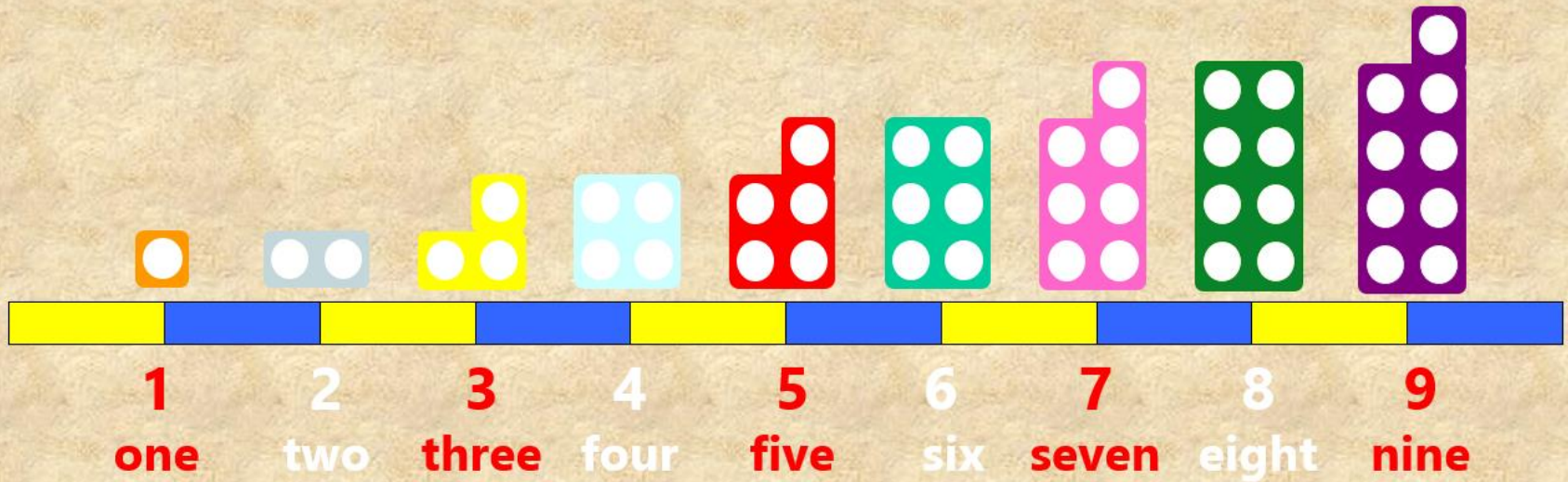
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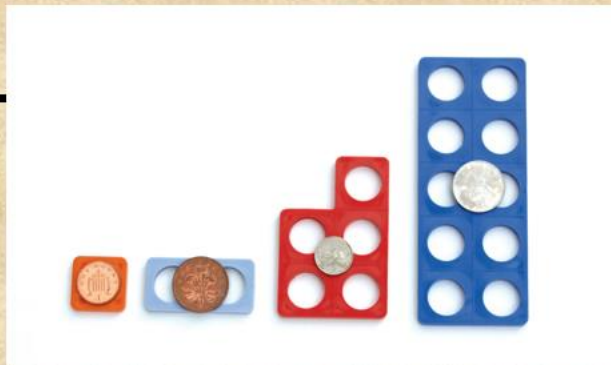
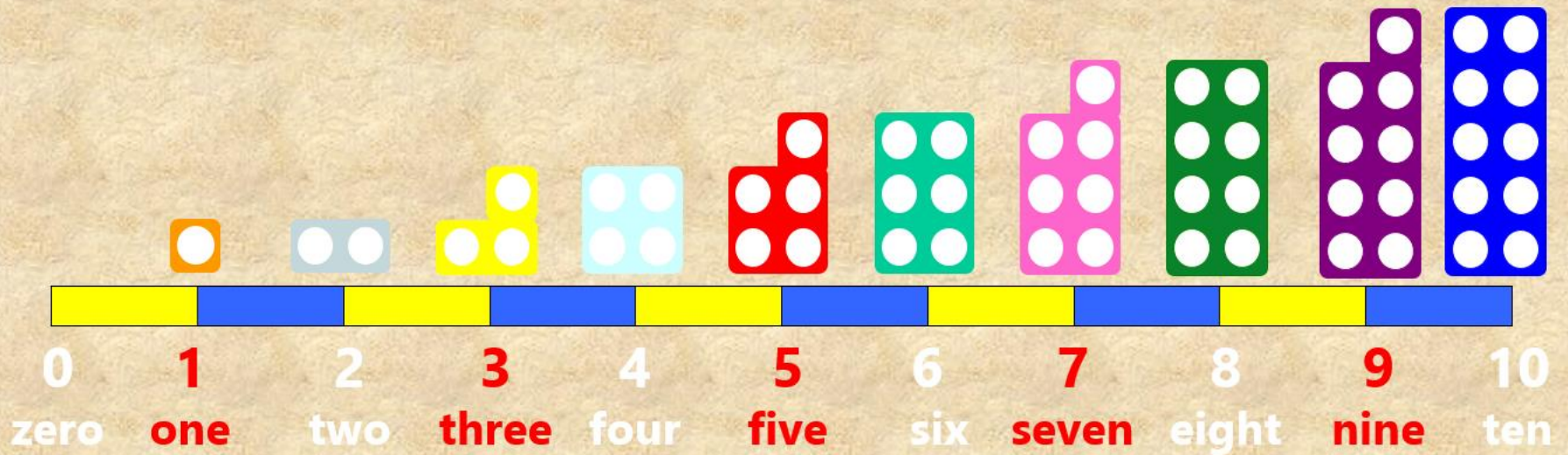
Numicon



Numicon



Numicon



Numicon

We use numicon to aid and assist our children's learning.

- Early on children play with the numicon:
 - Printing the shapes in paint
 - Digging for shapes in the sand
 - Match the shapes
 - Counting the holes in the shapes
 - Recognising the colours of shapes
- Combining shapes – addition
 - Odd and even numbers
 - Assist in money problems
 - Doubling and halving
 - Multiplication/division
 - **Really is an extremely valuable resource!**



Calculating

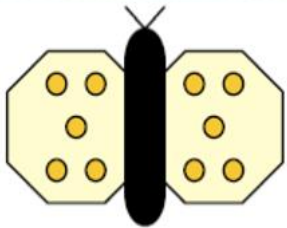
- Say numbers in order
- Recognise numerals
- Develop problem solving skills
- Identify more and less
- Begin to relate addition to combining two groups of objects and subtraction to 'taking away'



Calculation Strategies

Begin to use the + and = signs to record mental calculations in a number sentence

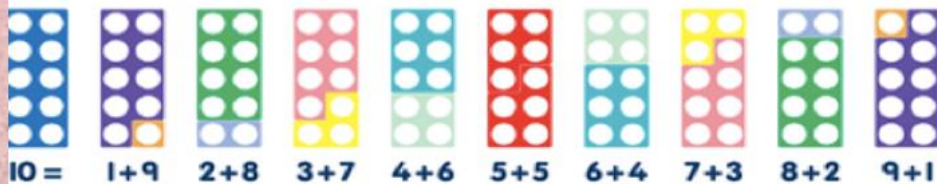
$$6 + 4 = 10$$



$$5 + 5 = 10$$

Know doubles of numbers

Find pairs of numbers that total 10.



Number bonds to 10

- 0 to 10 are big strong men



- 1 and 9 are feeling fine



- 2 and 8 are never late



- 3 and 7 come from Devon



- 4 and 6 like to play tricks



- 5 and 5 come alive



- 6 and 4 hold open the door



- 7 and 3 visit for tea



- 8 and 2 are feeling blue



- 9 and 1 have just gone



- 10 and 0 are super heroes!!!!!!!



Problem Solving, Reasoning and Numeracy

- Use mathematical language – greater, heavier, longer, smaller, under, beside
- Identify patterns
- Identify and describe shape
- Recognise and name coins and learn to use them in practical experiences

How YOU Can Help...

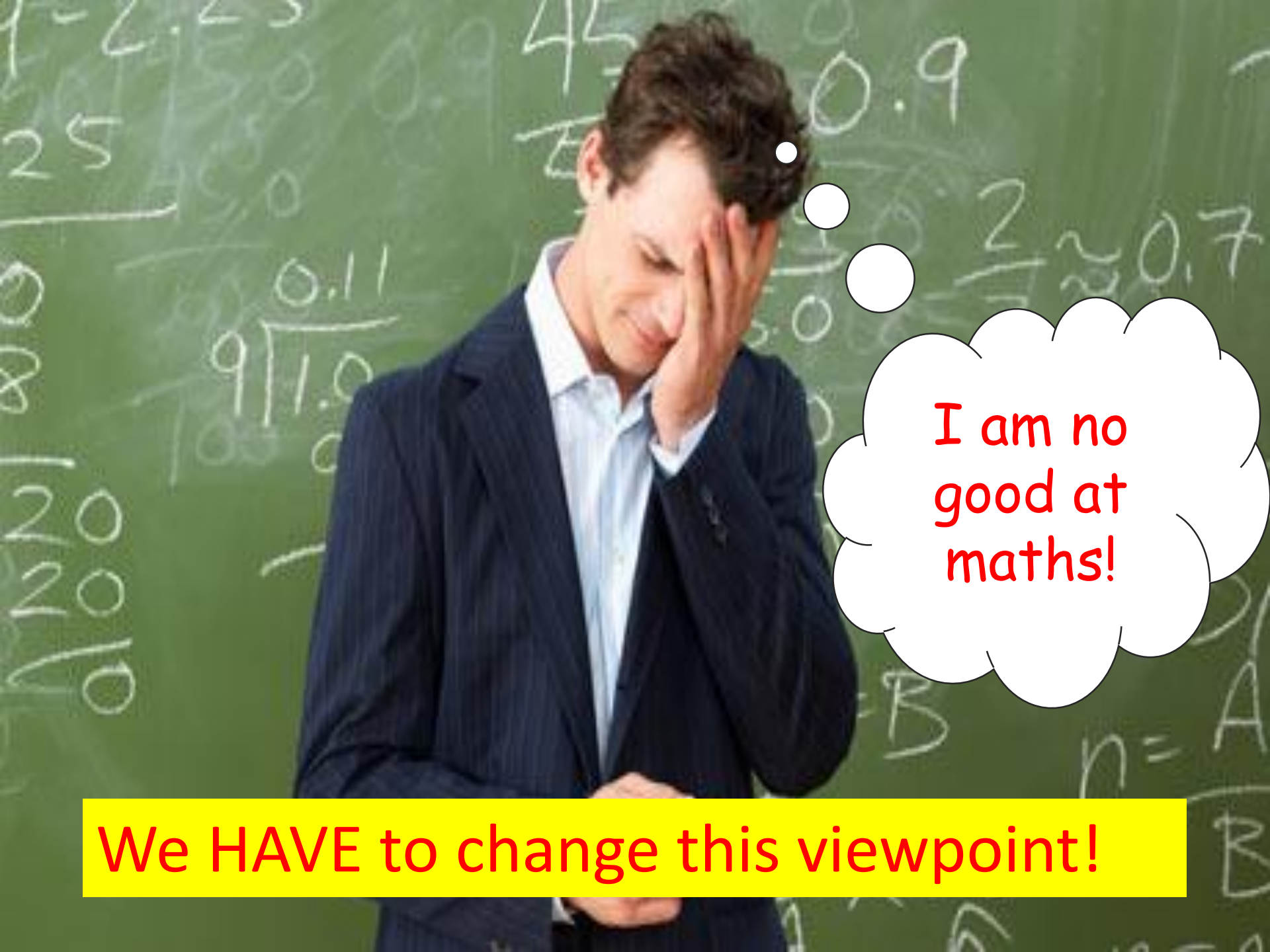
- Play lots of games, counting, identifying numbers!



Remember that maths should be FUN!

- Websites:
- www.topmarks.co.uk/maths-games
- www.ictgames.com





I am no
good at
maths!

We HAVE to change this viewpoint!



$$D = \frac{1}{c} \frac{1}{l} \frac{dl}{dt} = \frac{1}{c} \frac{1}{P} \frac{dP}{dt}$$

$$D^2 = \frac{1}{P^2} \frac{P_0 - P}{P} \sim \frac{1}{P^2} \quad (1a)$$

$$D^2 = \frac{K_B}{3} \frac{P_0 - P}{P} \sim \frac{1}{3} K_B \quad (2a)$$

$$D^2 \sim 10^{-53}$$

$$c \sim 10^{-26}$$

$$P \sim 10^8 \text{ g./cm}^3$$

$$t \sim 10^{10} (10^{11}) \text{ y}$$

Calculation Policy

