

Subtraction

We teach the children a sequence of skills when learning subtraction, starting with very practical activities and moving to more formal pencil and paper recordings. It is important that the children understand that, in subtraction, the numbers will be getting **lower** when we take an amount away.

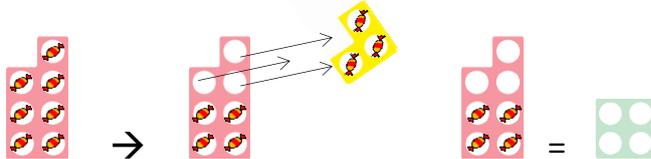
Key Vocabulary

We need to teach the children to understand the different ways that we refer to subtraction. Try to vary your language as you talk about your Numicon activities, using some of the words suggested below:

subtract, take away, minus, difference

What is 5 **take away** 4? If I **subtract** 6 from 7, how many are left? What is the **difference** between 10 and 4?

- 1 Give your child 7 small objects (sweets, marbles, maltesers etc) and challenge them to find the Numicon tile that matches, putting one object into each hole. Tell them to **take away** 3 objects by putting them onto a number 3 Numicon tile, and see how many are left by counting them. They can check their answer by seeing whether a number 4 Numicon tile will cover all of the sweets that are left!



Show your child the number sentence ($7-3=4$) and talk about what you have done. *How many sweets did you **take away**? How do you know that there are 4 **left**?*

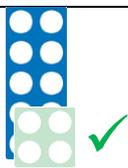
- 2 Give your child a **subtraction** number sentence and talk about what it says and means, e.g. $8-6=$
Select a number 8 tile and then put a number 6 tile on top to cover over, '**take away**', that many holes. Ask your child to count how many are left – this will be the answer! Ask them to check by laying a number 2 tile over the gap – 2 and 6 should cover all of the 8. If there is anything left over, they've made a mistake!



Challenge them with $8-2=$

See if they can spot the pattern! $8-2=6$, and $8-6=2$.

- 3 **Can you do subtraction in any order?**
Give your child two different Numicon tiles, e.g. 10 and 4. Challenge them to make a subtraction sentence using these numbers and then to find the answer. There are two possibilities: $10-4$ and $4-10$. As they are working it should quickly become clear that you can't take 10 away from 4!

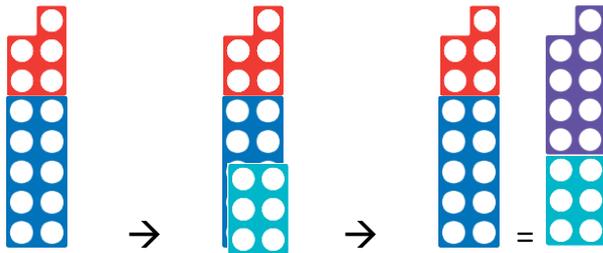
$10 - 4 =$  ✓

 $4 - 10 =$  ✗

If they find this difficult to see with the tiles add small objects, as above, and ask them to give you 10 sweets from the 4 pile...

Talk about where the largest tile, the highest number, always needs to come in the subtraction sentence – it only works at the beginning! The answer will always be smaller, a lower number – you're taking some away!

4 Practise solving subtraction problems with higher numbers. Challenge your child to show 15 with the Numicon, and then take 6 away. How could they prove what the answer was?



I know that $15 - 6 = 9$. Can you tell me what $15 - 9 =$ without using the Numicon to work it out?

5 Give your child subtraction number sentences to solve independently, using the Numicon tiles. They could try recording their work with numbers, or they could draw around or print with the Numicon tiles to show what they have done. Encourage them to always *check* their work by matching the tiles, as above.

Try to make the problem meaningful for your child by putting it into context. For example they could work out how many sweets they will have left after eating some, find out how much change they will expect to get after buying a toy... any real-world example that is relevant to your family would do!