

## Miss Lawton's Pasta Maths: Place Value Year 2

A secure understanding of place value is essential for further progress in understanding mathematical concepts. Place value is the knowledge of the value of each digit in a number. For example, 23 is a 2-digit number. The value of '2' in this number is 20 and the value of '3' is '3'. The position (place) of the digit in a number determines the value.

In Year 2 we learn about the place value of numbers up to 99.

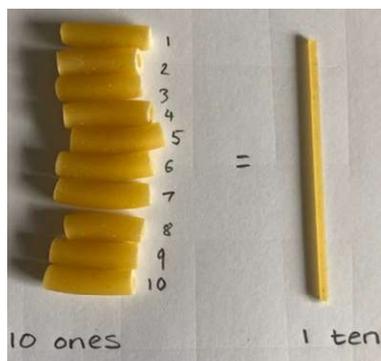
In early mathematics, it is really important for children to experience 'concrete' representations of numbers to support their understanding.

At school, Year 2 children will be familiar with using dienes.

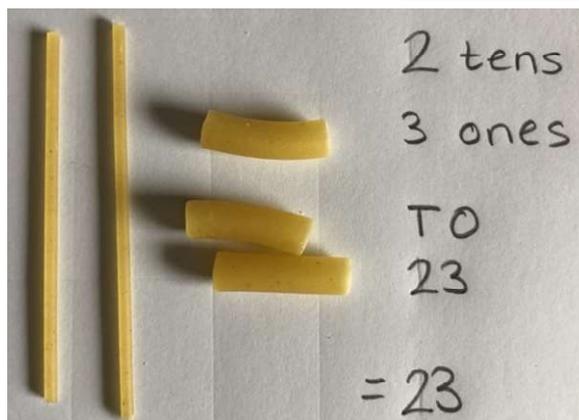
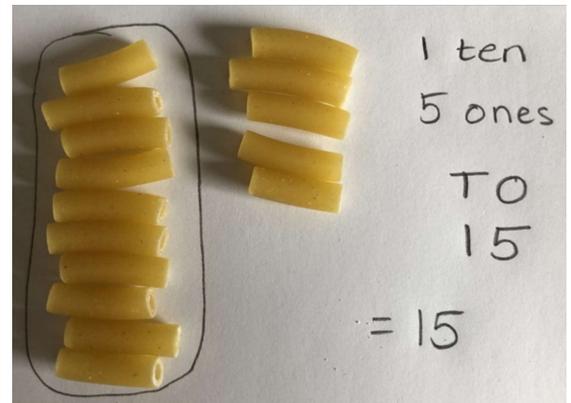
This is something you can replicate at home using a variety of items. I have used pasta (a precious commodity at the moment I know!) but there are plenty of other options.

I have used macaroni to represent the **ones** in my number but anything of a similar size would do e.g. buttons, rice grains, lego or even bits of coloured paper.

I have used broken spaghetti to represent the **tens** in my number but you could use string, a longer piece of lego, pencils etc. As long as it is bigger than your ones this will work.

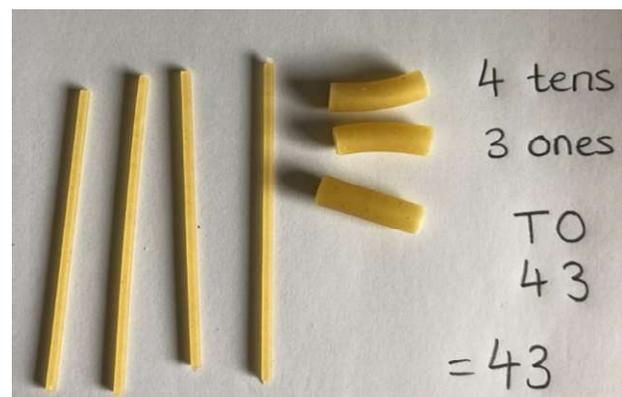


If we wanted to represent the number 84 it would take a long time to count out 84 ones (macaroni) so instead we **exchange** 10 ones for 1 ten so each spaghetti stick represents 1 ten. i.e. 3 sticks = 30, 5 sticks = 50



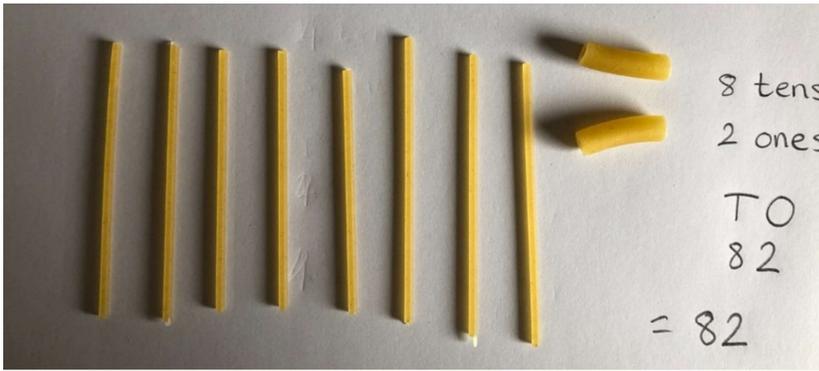
We have 2 tens and 3 ones **so this represents 23.**

Tens	Ones	T	O
2	3	2	3



We have 4 tens and 3 ones **so this represents 43.**

Tens	Ones	T	O
4	3	4	3



We have 8 tens and 2 ones so this represents 82.

Tens	Ones	T	O
8	2	8	2

It is important to encourage your child to say the number they have represented to check their understanding.

Once children have a secure understanding using concrete objects we can move on to pictorial representations (pictures or drawings). They follow the same rules but instead of pasta we draw lines and dots!

