## Place Value to 199 - The Abacus and Notation Board HomelSchool Links Sheet 14

Your child will be dealing with place value to 199 over the next few days. S/he has already done a lot of work on place value to date. Your child needs to know the language of place value - hundred, tens, units, group of 10 , set of 10 , bundle of 10 , cubes, lollipop sticks, loose, place-holder, count, match, rows, columns, equals, teens, plus, add one more, take away, count forwards, count backwards, hundreds' house, tens' house, units' house, swap, regroup, exchange, add, show most, show least, odd, even, digits, estimate, represents, decuples (10, 20, 30, 40... 90).

## Shoulders, knees!

Ask your child to count in tens from 10 to 190 . As s/he says each decuple, s/he must alternate from touching his/her shoulders to touching his/her knees, for example, 10 (touch shoulders), 20 (touch knees), 30 (touch shoulders), 40 (touch knees).
Variation: Your child can start at different starting decuple numbers for this activity. S/he can also count backwards from different starting decuple numbers.

## Calculator fun!

Ask your child to press $10++$ on a calculator. If $s /$ he keeps pressing the equals sign, the display on the calculator will count up in tens.
Variation: Ask your child to press 190--10, then to keep pressing $===$ and the calculator will count back in tens from 190. Ask your child to say each of these decuples ( $180,170,160$, etc.) as they appear on the calculator.

## Making ten using money

Give your child $161 c$ coins. Ask him/her to count out the 1c coins until s/he has a set of ten coins. Encourage your child to say: Imust swap my 101 c coins for one 10c coin. You can act as the shopkeeper and make the swap or exchange. Then reverse the roles so that your child is the shopkeeper and $s /$ he gives out the 10 c coin for the ten 1c coins.
Ask your child: How much money is there altogether? How much money is there in this coin (10c)? How many loose cent coins are there?
So, 16 c is made up of a 10 c coin and six 1 c coins or $16 c=10 c+6 c$.
Do this with other amounts of 1 c coins from 10 to 19, ensuring that your child swaps ten 1 c coins for a 10c coin each time.

## The abacus

Make a simple abacus, as on page 87 of Busy at Maths 2.


You can take on the role of shopkeeper. You should have at least 10 green counters to act as units, 10 red counters to act as tens and one blue counter to act as a hundred. (You can also use coins/cubes or anything that is to hand that can be made into sets of ten). Your child is only expected to write/draw/name numbers to 199 at this stage. Ask your child to roll a die and collect the corresponding number of counters/units from the shopkeeper. For example, if your child rolls a 5 on the die, you will give him/her five units. $S /$ he then places the five units in the units' house on the abacus. If your child then rolls a 6 , you must give him/her six counters. S/he places the counters on the abacus. It should become obvious that there isn't enough room for all the counters on the abacus. Your child might now say: I must go to the shopkeeper and swap my 11 units for one 10 and one unit. I now have one 10 and one unit altogether. This number is 11. Play continues until your child makes $24,36,49$, etc.
Variation: Call out a number between 1-199, for example, 126. Ask your child to represent this number on the abacus using counters. The colour of the counters is not important but in the textbook we use green counters to represent units, red to represent tens and blue to represent a hundred. If your child wants to show 126 on the abacus, s/he must place six counters on the units line, two counters on the tens line and one counter on the hundreds line. This activity can be done with a variety of numbers.

## The notation board

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The activities outlined above for the abacus can be replicated on the notation board, as shown on page 88 of Busy at Maths 2. Ask your child to make the numbers 1-9 on the notation board, next ask him/her to make 99 and finally $s /$ he can make the numbers up to 199.

