## Mind your p's and v's

The key to understanding place value is to hear, understand and use the correct vocabulary. Challenge children to pick out the value of the digits when positioned within different numbers. Ask children what each digit is worth in each case. A digit in any given position represents a value. Just to note that that talking about place value the new curriculum has moved from using the terminology 'tens and units' to tens and ones.

## How many buttons make a banana?

Set up different exchange tables around the classroom. For example, on one table 10 buttons could be equivalent to a banana and 10 bananas equivalent to a ball. In the centre of the table have a 'bank' of buttons, bananas and balls. Provide the table with a pile of buttons to 'exchange' using the bank and come up with a figure for the amount in the pile e.g. 2 balls, 5 bananas and 4 buttons or 254 . Use a variety of items for each exchange system and ask children to record their amounts.


## Zero is the hero

Use 3 hats each with a laminated piece of card attached - one for each place. Write a digit on two of them with a dry wipe marker and leave the other blank. Choose 3 volunteers to wear the hats. Then arrange the children so the digits make numbers and say the numbers as you make them e.g. Eight hundred and four, eight hundred and forty. Write the numbers down in turn as 84 and 84 . Explain that although the blank card means there are none of that place value 'unit' in the number we still need something to keep the digits in the correct columns - our hero the zero! Draw a zero on the blank card on the hat. Arrange the children to make the numbers again and record correctly. Give children hats to try their own numbers using 0 .


## Building bundles

Rather than always using dienes or making up unifix or multilink 10s ask children make bundles of ten straws or pens held together with elastic bands and also bigger bundles of 100. Alternative items could be sticks, stones and bags of 10 stones, newspapers and bundles, sweets loose and in packets (e.g. 'Fruitella' which come in tens) or supermarket bags of apples.

## Breakin' it down

Roll three different coloured dice - one for hundreds, one for tens and one for ones! Roll three dice. Ask children to write these out as a three digit number e.g. three dice with 7, 5 and 2 would mean children write down 752. Encourage children to say the number as a rap with a definite beat to emphasise how to decompose the number. Say 'seven hundred' and write 700 'which is seven hundreds'. Then say 'fifty' and write 50 'which is 5 tens'. Finally say 'two' and write 2 'which is 2 ones'. Explain that we can recompose the number by writing the correct digit in the hundreds, tens and ones positions. Ask the children to create, decompose and recompose their own numbers using dice.

