

**LEARNING and TEACHING POINTS**  
for  
**Chapter 9**  
**Written Methods for Addition and Subtraction**

Introduce children to column addition using some of the methods shown in Figure 9.1 that build upon the idea of partitioning the numbers into hundreds, tens and ones, and which do not obscure the meaning of the digits.

When children need a formal algorithm for subtraction, teach the method of decomposition. But explain the method in a way that encourages understanding of the process, not just as a recipe without meaning.

To promote understanding of the formal written method of addition teachers should help their children to make strong links between the manipulation of the materials and the written record.

Introduce children to column subtraction using some of the methods shown in Figure 9.6 that build upon the idea of partitioning the numbers into hundreds, tens and ones, and which do not obscure the meaning of the digits.

The important language to use when explaining the addition algorithm includes: *hundreds, tens, ones (units), 'ten of these can be exchanged for one of those', carrying.*

To help them understand subtraction by decomposition, provide children with plenty of opportunity to connect the manipulation of coins (1p, 10p and £1) and base-ten blocks with the manipulation of the symbols, supported by the appropriate language.

When explaining the carrying procedure in an addition calculation, using base-ten blocks or coins, make a clear link with the physical act of 'carrying' a ten or a hundred from the bank when exchanging 'ten of these for one of those'.

Encourage children to set out subtraction calculations in vertical format generously, to give themselves plenty of room for their working.

Be alert to the possibility of parents and grandparents confusing children by trying to teach them the formal method of equal additions.

Do not talk about 'borrowing' when teaching subtraction by decomposition. This is meaningless and unhelpful. The language to use is 'exchanging'.

Discuss with children how the principle of adding the same thing to both numbers (or subtracting the same thing from both) can convert a subtraction question into an easier calculation. This constant difference method is a genuine alternative for children who get confused by decomposition and is often easier for subtractions with a zero in the first number.