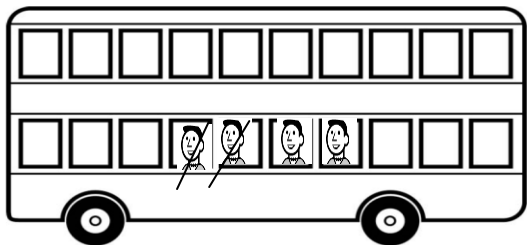
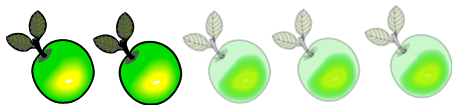


The Journey through Subtraction in the Dawlish Learning Partnership – Exminster Primary School

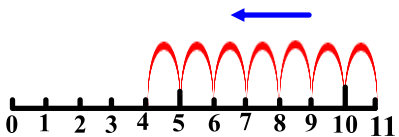
In the initial stages children begin to relate subtraction to 'taking away', and counting how many are left



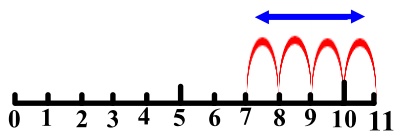
Work out by counting how many more are needed to make a larger number.



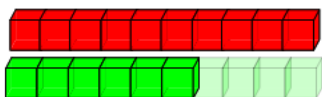
Later, equal prominence is given to the image of subtraction as 'take away' and as 'difference'.



The 'take away' model.



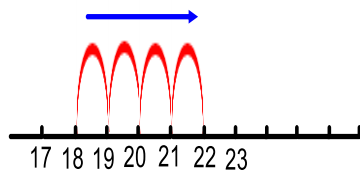
The find the difference (counting on) model.



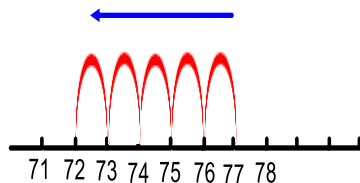
Children need lots of opportunities to consider which strategy best suits the numbers in the subtraction problem.

If the numbers are close together encourage counting up.

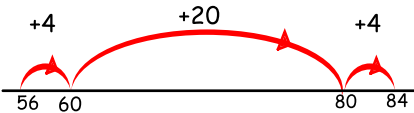
If the numbers are 'far apart' encourage taking away.
 $22 - 18 = 4$



$77 - 5 = 72$



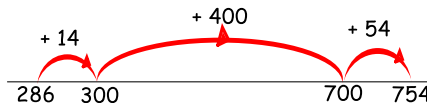
Counting up from the smaller to the larger number.
 $84 - 56 = 28$



$783 - 356 = 427$

Counting up from the smaller to the larger number.

$754 - 286 = 468$

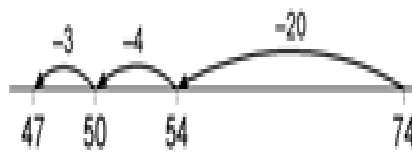


Leading to more formal recording.

$$\begin{array}{r} 754 \\ - 286 \\ \hline 14 \text{ to make } 300 \\ 400 \text{ to make } 700 \\ 54 \text{ to make } 754 \\ \hline 468 \end{array}$$

Partitioning for Subtraction

$74 - 27 = 47$ (27 is partitioned into $20 + 4 + 3$)



Partitioned numbers are then written under one another:
 Example: $74 - 27$

$$\begin{array}{r} 70 + 4 \\ - 20 + 7 \\ \hline 50 + 11 \\ 40 + 7 \end{array}$$

$$\begin{array}{r} 5 \ 11 \\ - 2 \ 7 \\ \hline 4 \ 7 \end{array}$$

Partitioning for Subtraction

Example: $563 - 278$, adjustment from the hundreds to the tens and the tens to the ones

$$\begin{array}{r} 500 + 60 + 3 \\ - 200 + 70 + 8 \\ \hline \end{array}$$

$$\begin{array}{r} 400 + 150 + 13 \\ - 200 + 70 + 8 \\ \hline 200 + 80 + 5 \\ \hline \begin{array}{r} 400 \ 150 \ 13 \\ 500 \ 60 \ 3 \\ - 200 \ 70 \ 8 \\ \hline 200 \ 80 \ 5 \end{array} \end{array}$$

$$\begin{array}{r} 5 \ 6 \ 3 \\ - 2 \ 7 \ 8 \\ \hline 2 \ 8 \ 5 \end{array}$$

Here both the tens and the ones digits to be subtracted are bigger than both the tens and the ones digits you are subtracting from. $60 + 3$ is partitioned into $50 + 13$, and then how $500 + 50$ can be partitioned into $400 + 150$, and how this helps when subtracting.

It is vital that children go through this process before leaping straight into that final step. Jumping too early to this stage can result in children having no sense of Place Value nor reasonableness of an answer.