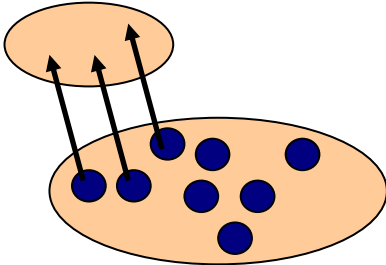


PROGRESSION THROUGH CALCULATION FOR SUBTRACTION

Stage 1

Children will begin to develop their understanding of subtraction as 'taking away'. Children will remove a number of objects from a set and will count how many are left.



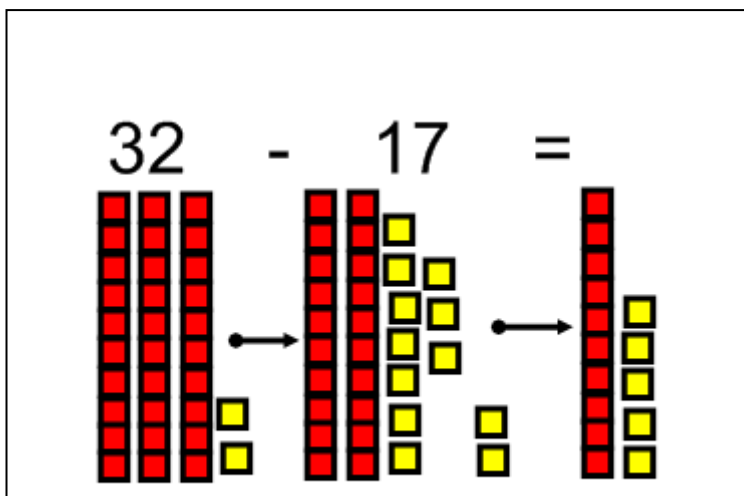
Stage 2

Children will use number sentences to support their practical activities. The relationship between addition and subtraction needs to be made explicit and linked to a clear understanding of =.

$$12 - 4 = 8$$

Stage 3

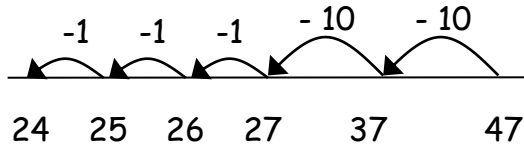
Children will use their knowledge of the principal of exchange to subtract and find the difference.



Stage 4

Children will begin to use number lines to count back. They will count back along the number line.

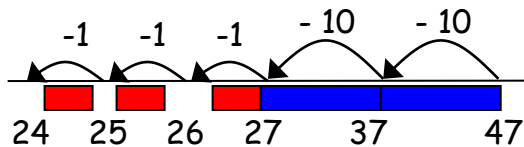
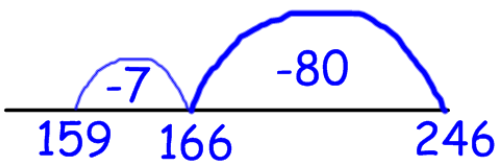
$$47 - 23 = 24$$



Stage 5

Children will begin to use empty number lines to support their own calculations. Children will count back along the number lines in ones and then in steps. Dienes can be used to show the value of each jump to reinforce place value.

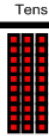

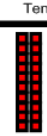

$$246 - 87$$



Stage 6

Children will begin to use columns to subtract.

They will use Dienes to support this. Numbers can be written alongside, but practical resources must be used.

| | | | |
|---|---|---|--|
| $32 - 17 =$ | | $32 - 17 =$ | |
| Tens | Ones | Tens | Ones |
|  3 |  2 |  2 |  12 |
| 1 | 7 | 1 | 7 |
| | | 1 | 5 |

Stage 7

Children will continue to use columns. They will use counters to represent digits. They will make links between this and formal column subtraction.

| Tens | Ones |
|------------------|-------------|
| 3 ● ● ● | 2 ● ● |
| 1 | 7 |
| | |

| Tens | Ones |
|-------------------|-------------------------------|
| 2 ● | ¹ 2 ●●●●● ●● |
| 1 | 7 |
| 1 | 5 |

$$\begin{array}{r} \overset{2}{\cancel{2}}\overset{1}{2} \\ - 17 \\ \hline 15 \end{array}$$

Stage 8

Children will use the formal column method to subtract.

| |
|--|
| $2362 - 548 = 1814$ $\begin{array}{r} 23\overset{5}{\cancel{6}}\overset{12}{2} \\ - 548 \\ \hline 1814 \end{array}$ |
|--|

Subtraction vocabulary

All vocabulary can be used throughout all year groups and a range must be used. Posters to display vocabulary need be accessible for children in all classrooms.

Subtract, Subtraction, Take away, Minus, Decrease, Leave, How many left over?, Difference between, How many fewer?