

When subtracting:

They will have been taught:

That subtraction is the inverse of

addition. e.g. $6 + 14 = 20$

so $20 - 6 = 14$

and $20 - 14 = 6$

That subtracting one number from another is the same as finding the difference between the numbers.

e.g. $20 - 6 = 14$

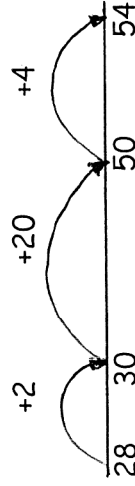
so the difference between 20 and 6 is 4.

As with addition, children are

encouraged to use jottings to record their thinking:

- A number line to find the difference by **counting on**;

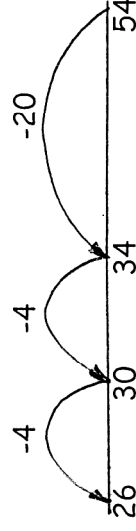
e.g. $54 - 28$



The difference between 28 and 54 is $26 (2 + 20 + 4)$

- A number line to find the difference by **counting back**;

e.g. $54 - 28$



$54 - 28 = 26$

Written Methods

Extended written methods

$$754 - 286 =$$

$$754 - 200 = 554$$

$$554 - 80 = 474$$

$$474 - 6 = 468$$

Once children have a secure understanding of place value they may be taught **decomposition** (only in Year 5 & 6):

$$\begin{array}{r} 6 \ 14 \ 1 \\ 754 \\ 286 - \\ \hline 468 \end{array}$$



A Parent's Guide to Addition and Subtraction

At Harrison Primary School, children are encouraged to:

- use and develop a range of strategies.
- show their understanding by explaining what they are doing.
- use facts they know by heart to figure out new facts.

THE SUCCESS TO THESE METHODS WORKING IS CONFIDENCE IN KNOWLEDGE OF NUMBER FACTS.

The first question your child should ask themselves, when adding or subtracting is:



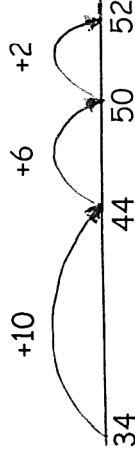
When adding:

Your child will have been taught the following mental skills:

- Pairs of numbers that total 10 (number bonds to 10).
e.g. $4 + 6 = 10$
 $3 + 7 = 10$
- To carry the largest number in their head and add on the smaller number.
- To partition numbers in their head so they can add to the next multiple of 10 e.g.
 $26 + 8 = (26 + 4) + 4$
 $= (30) + 4$
 $= 34$

Children are taught and encouraged to use mental jottings to record their thinking:

A number line e.g. $34 + 18$



To look for numbers totalling 10;

$$\begin{aligned} 5+4+2+6+8 &= (2+8) + (6+4) + 5 \\ &= 10 + 10 + 5 \\ &= 25 \end{aligned}$$

To partition numbers:

$$\begin{aligned} 45 + 36 &= (40+30) + (5+6) \\ &= 70 + 11 \\ &= 81 \end{aligned}$$

Add to the nearest 10 and compensate:

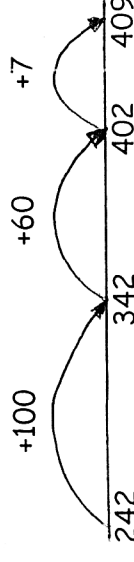
$$\begin{aligned} 34 + 9 &= (34 + 10) - 1 \\ &= 44 - 1 \\ &= 43 \end{aligned}$$

These methods can be used for any number no matter how big or how small.

Written Methods

These are built on the children's understanding of mental methods.

Number line e.g. $242 + 167$



Expanded methods:

$$\begin{array}{r} 242 \\ + 167 \\ \hline 300 \quad (200 + 100) \\ 100 \quad (40 + 60) \\ \quad 9 \quad (2 + 7) \\ \hline 409 \end{array}$$

Leading to;

Standard Written Method (only in Year 5 & 6)

$$\begin{array}{r} 242 \\ + 167 \\ \hline 409 \\ \quad 1 \end{array}$$