

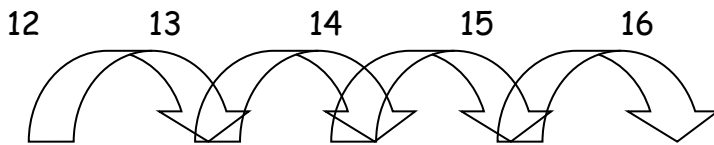
Redhill Primary School

Written Calculation Strategies—Year 2

Addition

In year 2 the children are taught to add combinations of single digit and two digit numbers. They should put the bigger number in their heads and count on by the smaller number. Initially this will be done using their fingers or in their heads, but can also be modelled on a number line for a visual representation.

$12 + 4$

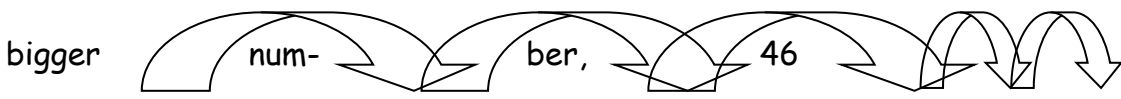


As the numbers get bigger, the children are encouraged to use partitioning (splitting numbers in to tens and units), starting on the number line and then moving to a written method.

$32 + 46$



$32 + 46$



Start with the
Partition the

smaller number, $32 = 30 + 2$

$46 + 30 = 76 \quad (\text{counting on } 30 \text{ in tens})$

$76 + 2 = 78 \quad (\text{counting on } 2 \text{ in units})$

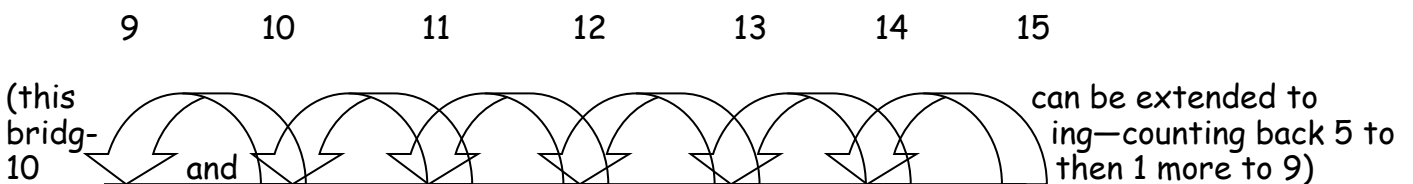
So, $32 + 46 = 78$

Subtraction

In year 2 the children are taught to subtract combinations of single digit and two digit numbers. This is done so that children understand subtraction as taking away (starting from the larger number and counting back) and finding the difference (starting from the larger number and counting on)

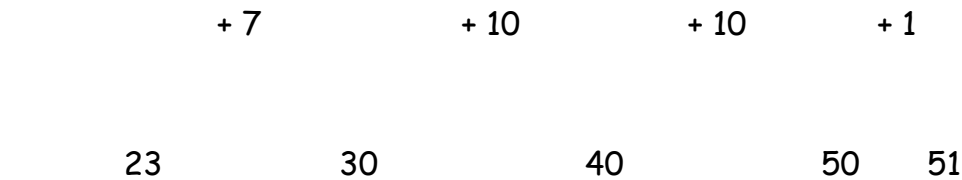
For taking away, children should put the bigger number in their heads and count back by the smaller number. Initially this will be done using their fingers or in their heads, but can also be modelled on a number line for a visual representation.

$$15 - 6$$



For finding the difference, children should start from the smaller number and count on to find the larger number. This should be done by counting on to the nearest multiple of 10 (using knowledge of number bonds) then in 10s, and finally in units to the larger number.

$$51 - 23$$



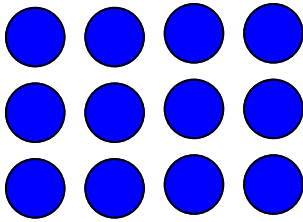
$$10 + 10 + 7 + 1 = 28$$

So, $51 - 23 = 28$

Multiplication

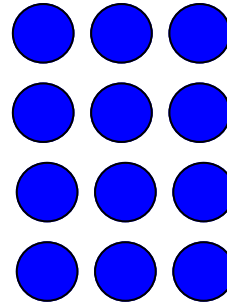
In year 2 multiplication is shown visually through the use of arrays. This supports their understanding of the concept of repeated addition, met in earlier years.

(3 lots of 4)



$$3 \times 4$$

(4 lots of 3)



Presenting this image in both ways helps children understand multiplication can be done in either order, an important concept when they are learning times-tables.

to understand
important concept

Multiplication can also be shown on a number line, by counting in "lots of" or "groups of". This links to work on division later on.

0 3 6 9 12



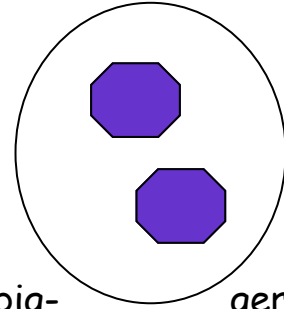
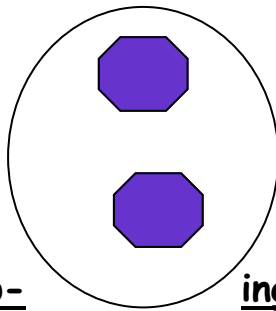
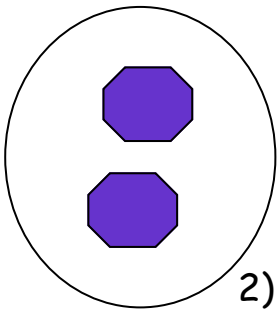
Division

In year 2 the children are taught division in two ways:

1) Sharing

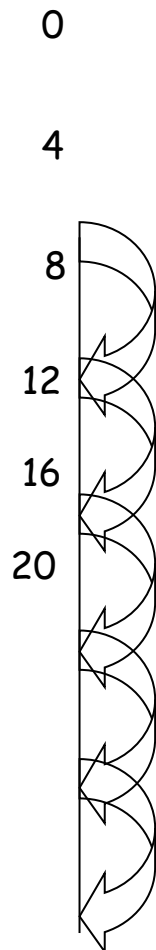
'one for you, one for you, one for you...'

$$6 \div 3$$



bers) 2) Group- ing (with big- ger num-

$$20 \div 4$$



$$20 \div 4 = 5$$