

Year 2 ADDITION

Mental recall of number bonds

$6 + 4 = 10$

$\square + 3 = 10$

$19 + \square = 20$

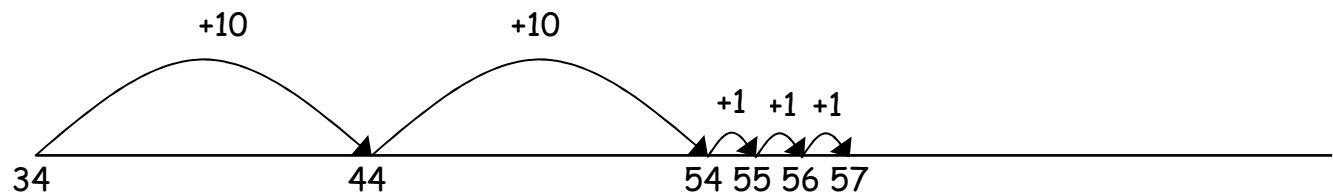
Use near doubles

$6 + 7 = \text{double } 6 + 1 = 13$

Children will begin to use 'empty number lines' themselves starting with the larger number and counting on.

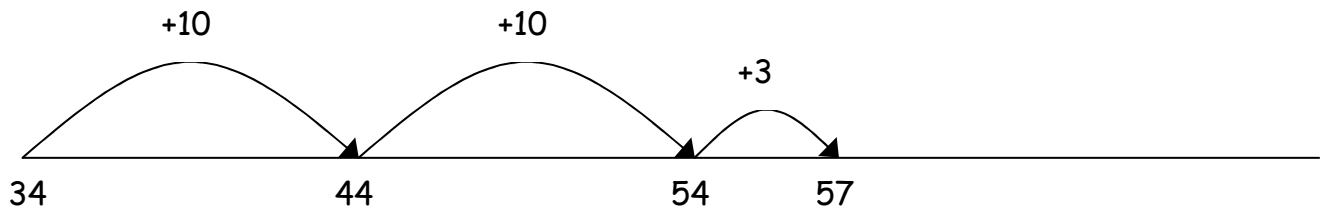
- ✓ First counting on in tens and ones.

$34 + 23 = 57$



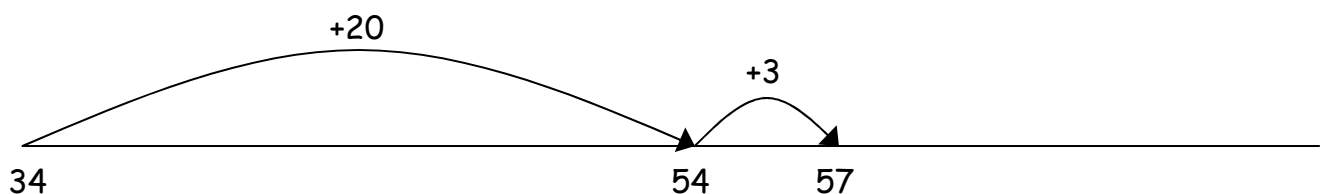
- ✓ Then helping children to become more efficient by adding the units in one jump (by using the known fact $4 + 3 = 7$).

$34 + 23 = 57$



- ✓ Followed by adding the tens in one jump and the units in one jump.

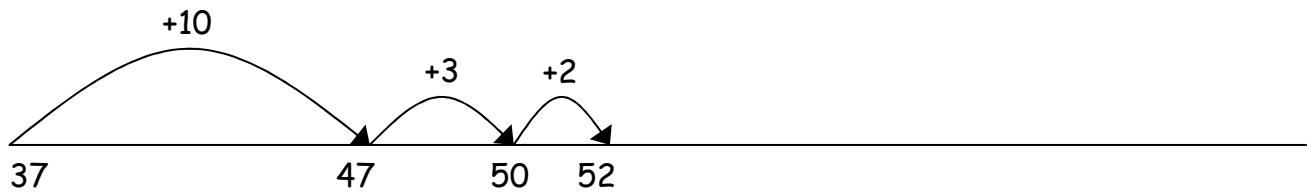
$34 + 23 = 57$



Year 2 Addition (cont.)

✓ Bridging through ten can help children become more efficient.

$$37 + 15 = 52$$



Year 2 SUBTRACTION

Mental recall of addition and subtraction facts

$10 - 6 = 4$

$17 - \square = 11$

$20 - 17 = 3$

$10 - \square = 2$

Find a small difference by counting up

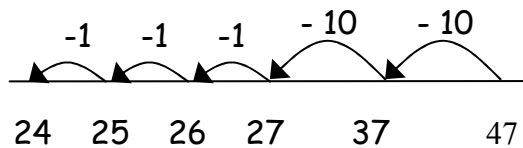
$23 - 18 = 5$

Children will begin to use empty number lines to support calculations.

Counting back

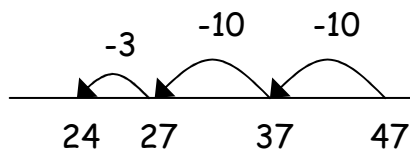
- ✓ First counting back in tens and ones.

$47 - 23 = 24$



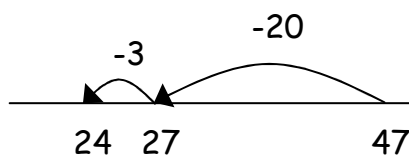
- ✓ Then helping children to become more efficient by subtracting the units in one jump (by using the known fact $7 - 3 = 4$).

$47 - 23 = 24$



- ✓ Subtracting the tens in one jump and the units in one jump.

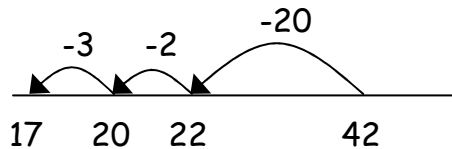
$47 - 23 = 24$



Year 2 SUBTRACTION (cont.)

Bridging through ten can help children become more efficient.

$$42 - 25 = 17$$



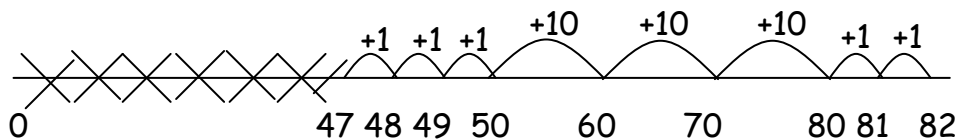
Counting on

If the numbers involved in the calculation are close together or near to multiples of 10, 100 etc, it can be more efficient to count on.

Count up from 47 to 82 in jumps of 10 and jumps of 1.

The number line should still show 0 so children can cross out the section from 0 to the smallest number. They then associate this method with 'taking away'.

$$82 - 47$$



Help children to become more efficient with counting on by:

- ✓ Subtracting the units in one jump;
- ✓ Subtracting the tens in one jump and the units in one jump;
- ✓ Bridging through ten.

Year 2 MULTIPLICATION

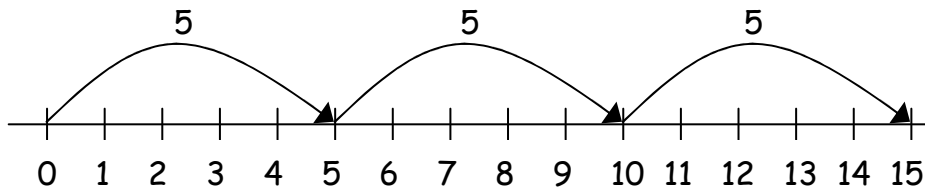
Tables: x2 x5 x10

Children will develop their understanding of multiplication and use jottings to support calculation:

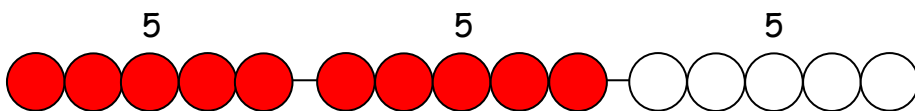
✓ Repeated addition

3 times 5 is $5 + 5 + 5 = 15$ or 3 lots of 5 or 5×3

Repeated addition can be shown easily on a number line: $5 \times 3 = 5 + 5 + 5$

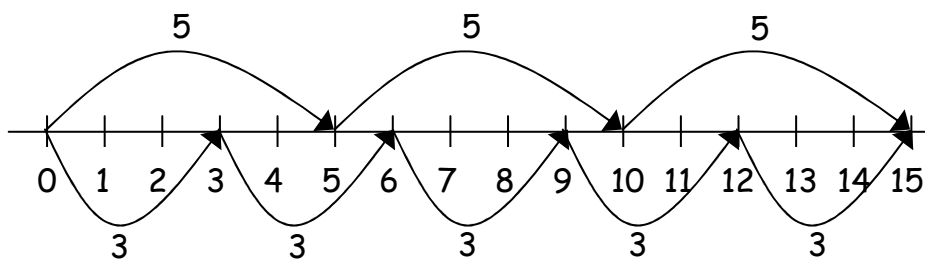


and on a bead bar: $5 \times 3 = 5 + 5 + 5$



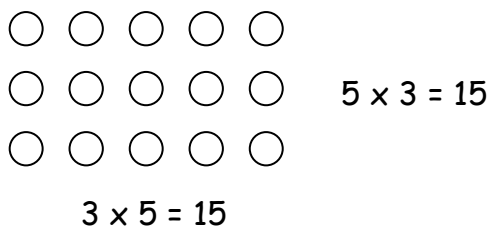
✓ Commutativity

Children should know that 3×5 has the same answer as 5×3 . This can also be shown on the number line.



✓ Arrays

Children should be able to model a multiplication calculation using an array. This knowledge will support with the development of the grid method.



Year 2 DIVISION

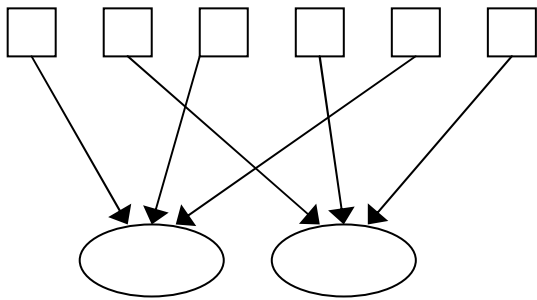
Knowing that halving is dividing by 2

Deriving and recalling division facts from tables: $\times 2$ $\times 5$ $\times 10$

Children will develop their understanding of division and use jottings to support calculation

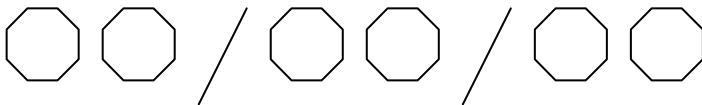
✓ **Sharing equally**

6 sweets shared between 2 people, how many do they each get?

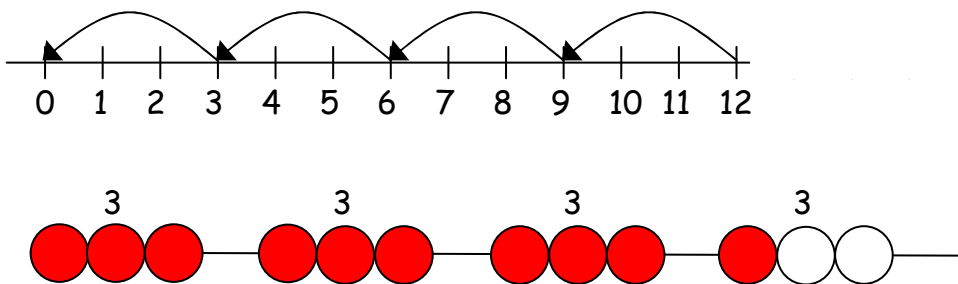


✓ **Grouping or repeated subtraction**

There are 6 sweets, how many people can have 2 sweets each?



✓ **Repeated subtraction using a number line or bead bar** $12 \div 3 = 4$



The bead bar will help children with interpreting division calculations such as $10 \div 5$ as 'how many 5s make 10?'

✓ **Using symbols to stand for unknown numbers to complete equations using inverse operations**

$\square \div 2 = 4$ $20 \div \triangle = 4$ $\square \div \triangle = 4$