

Addition

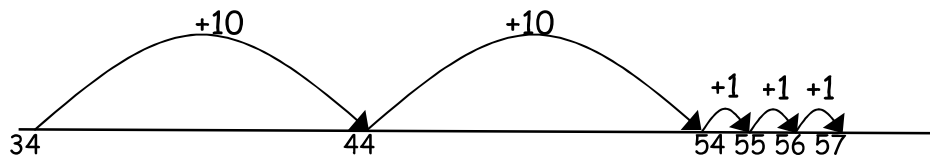
Y2

Add 3 one digit numbers

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

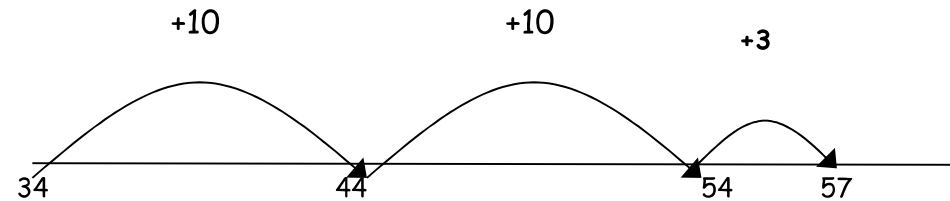
✓ First counting on in tens and ones.

$$34 + 23 = 57$$



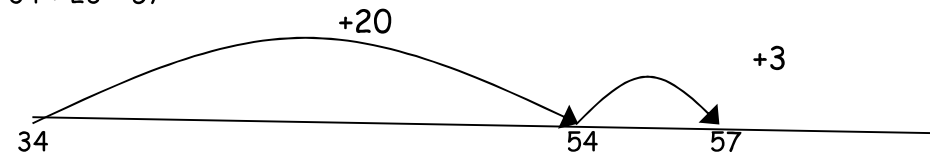
✓ Then helping children to become more efficient by adding the ones in one jump.

$$34 + 23 = 57$$



✓ Followed by adding the tens in one jump and the ones in one jump.

$$34 + 23 = 57$$

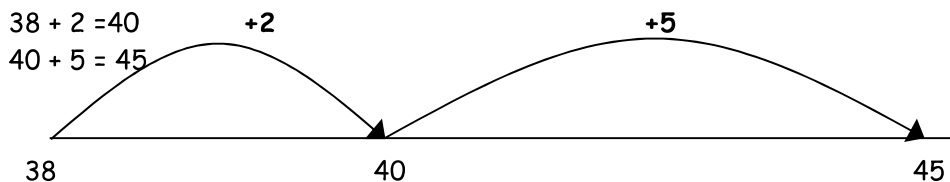


✓ Bridging through ten can help children become more efficient.

$$38 + 7$$

$$38 + 2 = 40$$

$$40 + 5 = 45$$



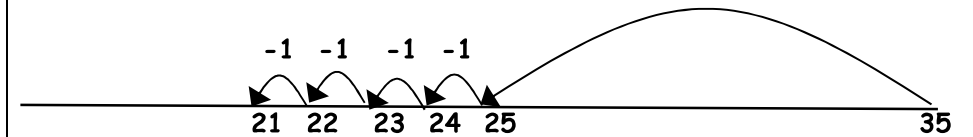
Subtraction

Y2

Children will begin to use 'empty horizontal number lines' themselves, counting back in tens and ones.

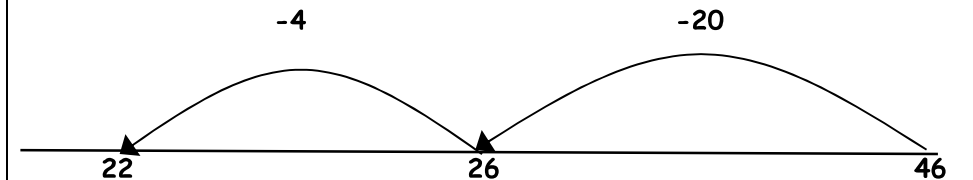
✓ First counting back in tens and ones.

$$35 - 14 = 21$$



✓ Then helping children to become more efficient by counting back the ones in a single jump.

$$46 - 24 = 22$$

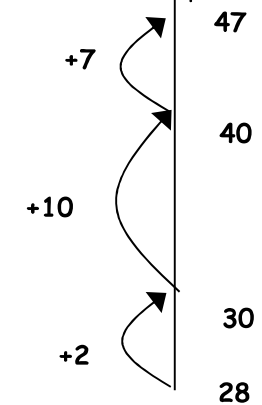


Children will begin to use empty vertical number lines to support calculations.

Counting on (finding the difference)

✓ Counting on in tens and ones from the next multiple of ten.

$$47 - 28 = 19$$



Multiplication

Y2

Children will count in 2s, 5s and 10s and begin to count in 3s.

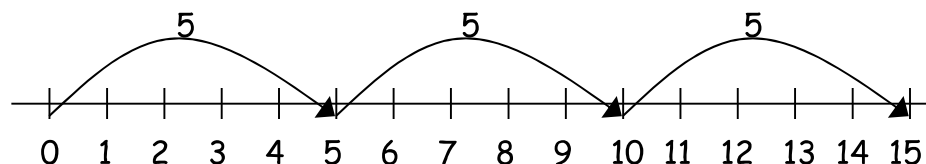
Children will develop their understanding of multiplication and use jottings to support calculation:

✓ 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:

$$5 \times 3 = 5 + 5 + 5$$

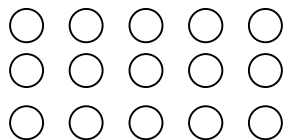


and on a bead bar:

$$5 \times 3 = 5 + 5 + 5$$

✓ Arrays

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



$$5 \times 3 = 15$$

$$3 \times 5 = 15$$

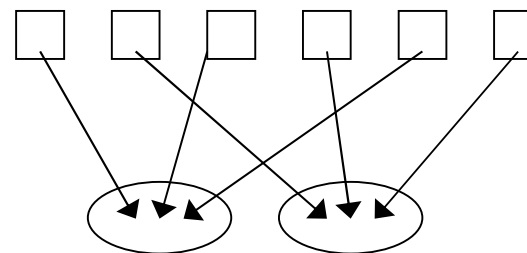
Division

Y2

Children will count in 2s, 5s and 10s and begin to count in 3s.

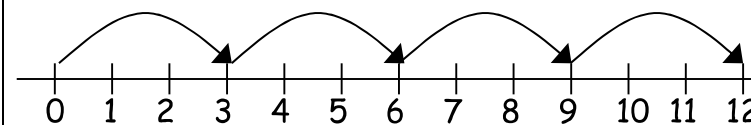
Children will develop their understanding of division and use jottings to support calculation:

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



✓ Repeated grouping using a number line

$$12 \div 3 = 4$$



1 group

2 groups

3 groups

4 groups