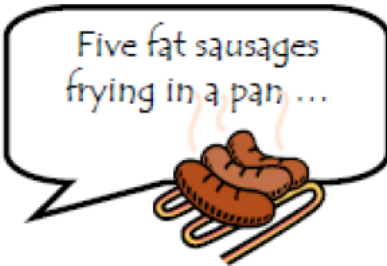A school's subtraction policy

Begin to count backwards in familiar contexts such as number rhymes or stories

Five fat sausages frying in a pan ...

Ten green bottles hanging on the wall ...

10, 9, 8, 7 ...

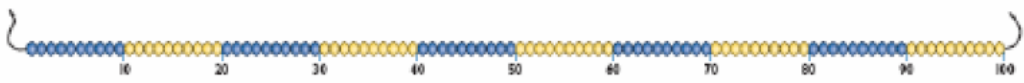Continue the count back in ones from any given number

Begin to relate subtraction to 'taking away'

Three teddies take away two teddies leaves one teddy

1 less than 8 is? 7
2 less than 8 is? 7, 6
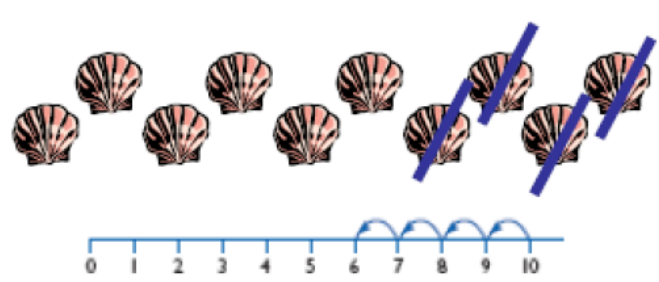3 less than 8 is? 7, 6, 5

7, 6, 5

Find one less than a number

0 1 2 3 4 5 6 7 8 9 10
count back one, two or three

Count back in tens

Using a structured number line for subtraction

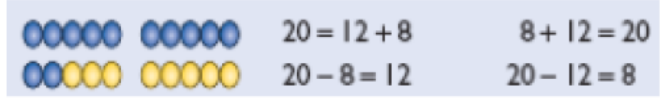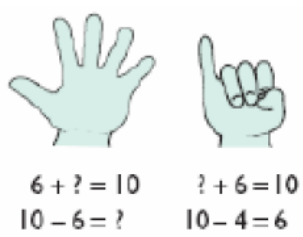If I take away four shells there are six left

Count backwards along a number line to 'take away'

Begin to use the – and = signs to record mental calculations in a number sentence

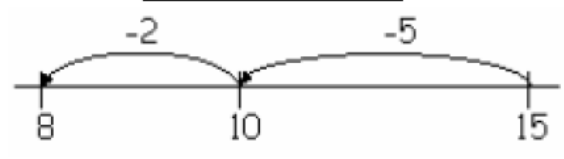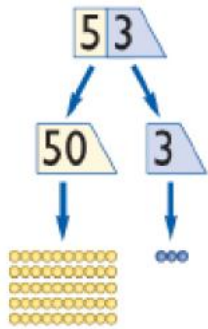Maria had six sweets and she ate four. How many did she have left?

$6 - 4 = 2$

$6 + ? = 10$ $? + 6 = 10$
$10 - 6 = ?$ $10 - 4 = 6$

$20 = 12 + 8$ $8 + 12 = 20$
$20 - 8 = 12$ $20 - 12 = 8$

Know by heart subtraction facts for numbers up to 10 and 20

Subtract single digit numbers often bridging through 10

$15 - 7 = 8$
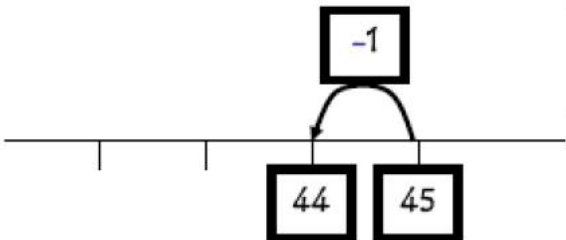
-2   -5

8   10   15

Begin to partition numbers in order to take away

5 | 3

50 | 3

Subtract 1 from a two-digit number

−1

44 45

45 − 1

Subtract 10 from a two-digit number

45 − 10

−10
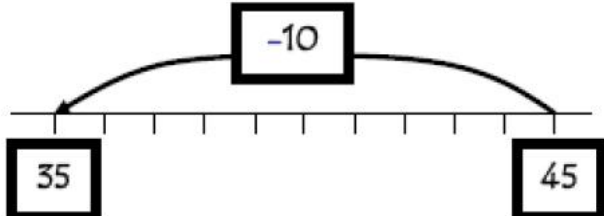
35   45

Subtract multiples of 10 from any number

−10   −10

25   35   45

45 − 20

Partitioning number
to be subtracted –
with exchanging
(links to counting
back on number line)

4 3   20 7

43 – 20 7

43 – 20 = 2 3

23 – 7 = 1 6

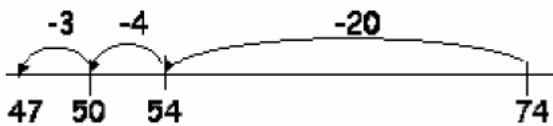43 – 27 = 16

Using an 'empty' number line to subtract

-3   -4   -20

47 50   54   74

74 – 27 = 47

The difference
between 11
and 14 is 3.
$14 - 11 = 3$
$11 + \square = 14$

0   14
0   11
0   11   14

What is the same?
What is different?

Begin to find the difference by counting
up from the smallest number.
This strategy is useful to use if the
difference between 2 numbers is quite
small.

+3   +40   +4
27   30   70   74

74 – 27 = 47

+3   +44
27   30   74
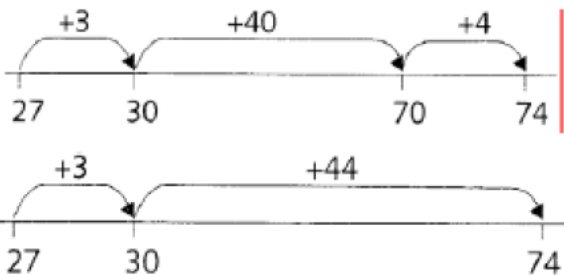
Now what's the
answer?

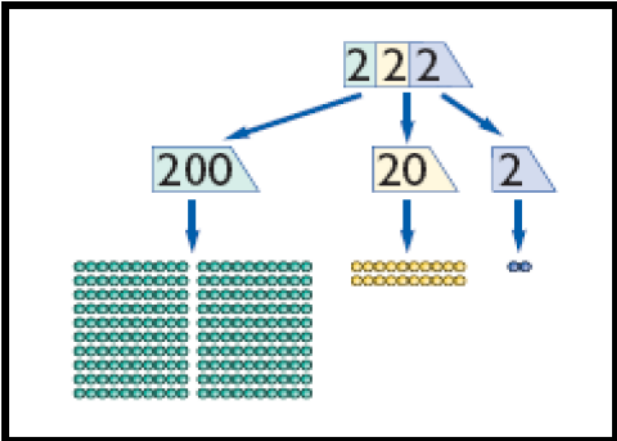It is important that the children have a good understanding of partitioning using concrete resources and visual images to support calculations. The expanded method enables children to see what happens to numbers in the standard written method. Subtraction starts with the most significant number.

Use expanded written method, starting with most significant number

```
    3 5 4
 -  2 6 7
    1 5 4    (- 200)
      9 4    (- 60)
      8 7    (- 7)
```



```
    ³4̶ ¹3
  –  2 7
  ─────
    1 6
```

Standard written method with exchange

The previous stages reinforce what happens to numbers when they are subtracted using more formal written methods. It is important that children have a good understanding of place value.

43 – 27 = 16

to subtract 7 units we need to exchange a ten for ten units