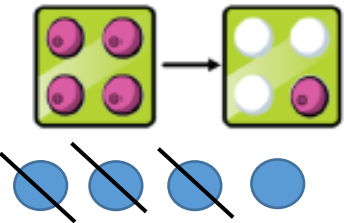
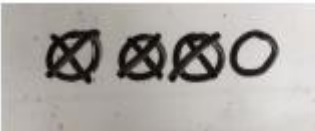
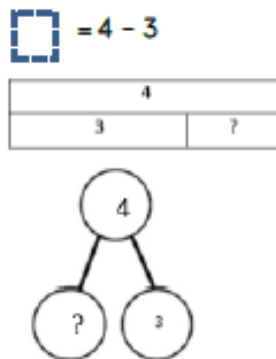
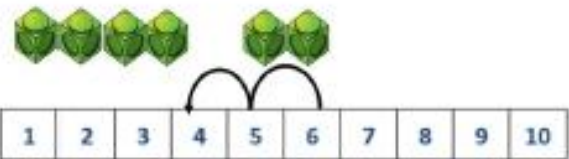
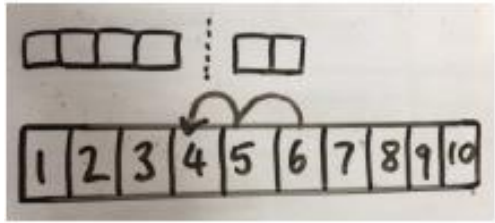
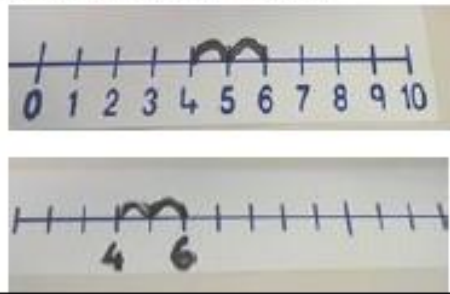


# Calculations Policy: Subtraction

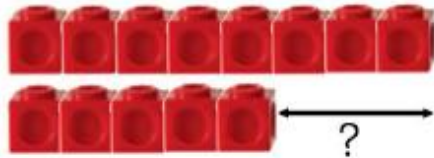
Key Language: take away, less than, the difference, subtract, minus, fewer, decrease

Concrete	Pictorial	Abstract
<p>Physically taking away and removing objects from a whole (ten frames, Numicon, cubes and other items such as beanbags could be used).</p> <p><math>4 - 3 = 1</math></p>  <p>The diagram shows two ten frames. The first contains four purple circles. An arrow points to the second ten frame, which contains one purple circle and three white circles. Below the ten frames are four blue circles; the first three are crossed out with diagonal lines, and the fourth is not.</p>	<p>Children to draw the concrete resources they are using and cross out the correct amount. The bar model can also be used.</p>  <p>The image shows a hand-drawn representation of four circles. The first three are crossed out with an 'X', and the fourth is not.</p>	<p><math>4 - 3 =</math></p>  <p>The abstract representation includes a bar model for <math>4 - 3 =</math> and a number bond. The bar model shows a bar divided into two sections: the left section is labeled '4' and the right section is labeled '3' and '?'. The number bond shows a top circle labeled '4' connected to two bottom circles labeled '?' and '3'.</p>
<p>Counting back (using number lines or number tracks) children start with 6 and count back 2.</p> <p><math>6 - 2 = 4</math></p>  <p>The diagram shows six green cubes and a number track from 1 to 10. Two arcs are drawn above the number track, starting at 6 and ending at 4, representing counting back 2 units.</p>	<p>Children to represent what they see pictorially e.g.</p>  <p>The image shows a hand-drawn number track from 1 to 10. Above the track, there are two groups of boxes: a group of three boxes and a group of two boxes. An arrow points from the 6th box to the 4th box, representing counting back 2 units.</p>	<p>Children to represent the calculation on a number line or number track and show their jumps. Encourage children to use an empty number line</p>  <p>The abstract representation shows two number lines. The top one is a number line from 0 to 10 with a jump from 6 to 4. The bottom one is a number line with a jump from 6 to 4.</p>

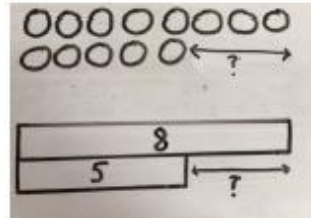
# Calculations Policy: Subtraction

Finding the difference (using cubes, Numicon or Cuisenaire rods, other objects can also be used).

Calculate the difference between 8 and 5.



Children to draw the cubes/other concrete objects which they have used or use the bar model to illustrate what they need to calculate.



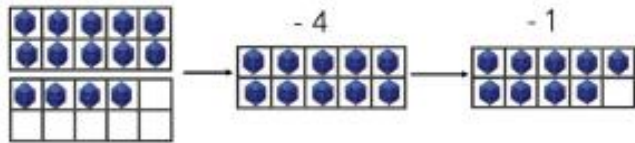
Find the difference between 8 and 5.

8 - 5, the difference is

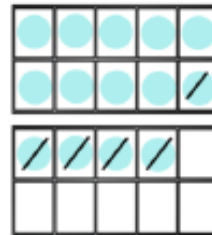
Children to explore why  
 $9 - 6 = 8 - 5 = 7 - 4$  have the same difference.

Making 10 using ten frames.

$14 - 5$

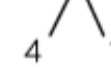


Children to present the ten frame pictorially and discuss what they did to make 10.



Children to show how they can make 10 by partitioning the subtrahend.

$$14 - 5 = 9$$



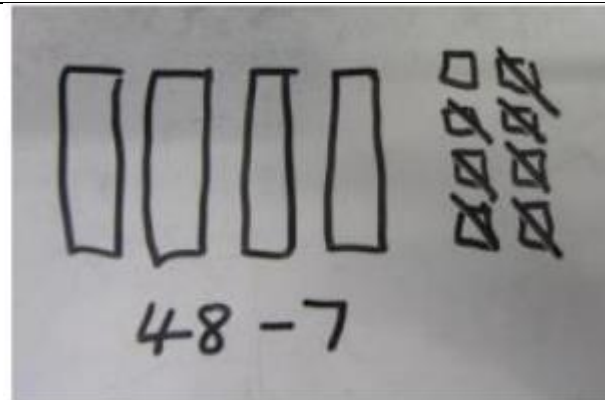
$$14 - 4 = 10$$

$$10 - 1 = 9$$

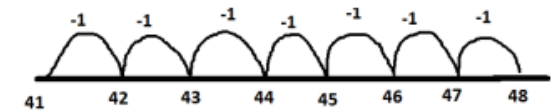
Subtracting a single digit from a two-digit number and a two-digit number from a two-digit number (when there is no regrouping)

(using base 10)

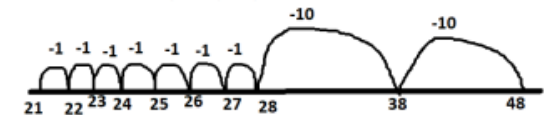
$48 - 7$



$48 - 7 =$



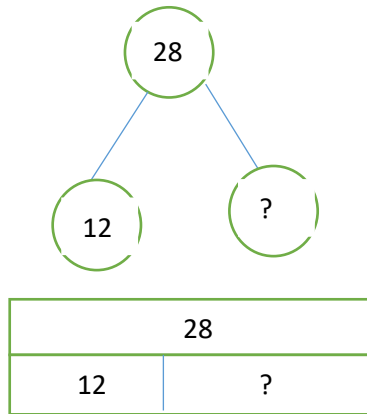
$48 - 27 =$  (No regrouping)



# Calculations Policy: Subtraction

## Conceptual Variation; different ways to ask children to solve $28 - 12$

As teachers we understand that there is a range of different ways to ask a question to make sure that children understand the key concepts fully. Below is a table of different ways we might ask an addition question.



Worded Problems:

Raj spends £28, Tim spends £12. How much more did Raj spend?

Find the difference between 28 and 12.

$$28 - 12 = \square$$

$$\square = 28 - 12$$