

Diving into Mastery - Diving

Adult Guidance with Question Prompts

Children count back to subtract, using fingers or a number line. Check that children are not counting the starting number when counting back. Model putting the starting number in their head (touching their head may be helpful) when counting back on fingers.

Encourage children to circle the starting number and count back in jumps of one. Keep track of how many they have counted back by saying the numbers to themselves.

Can you circle the number you are starting from?

How many do you need to count back?

How do you know?

Did you do the right amount of jumps?

How can you check?

Can you write calculations to match the bottom two number lines?

Subtraction - Counting Back



Use the number lines to count back and find the answers.

$10 - 3 = \square$



$7 - 4 = \square$



Start from 8 and count back 5. \square



Start from 5 and count back 5. \square



Which two calculations have the same answer?
How do you know?

Diving into Mastery – Deeper

Adult Guidance with Question Prompts

Children count back to subtract, using fingers or a number line. Children reason to explain where Freddie has gone wrong when he was counting back to find the answer and how he should have done it correctly.

What did Freddie do wrong?

How should he have started counting back?

What number should he have 'put in his head'?

Can you show me how to count back six from ten?

What number did you finish on?

How many marbles did Freddie have left?

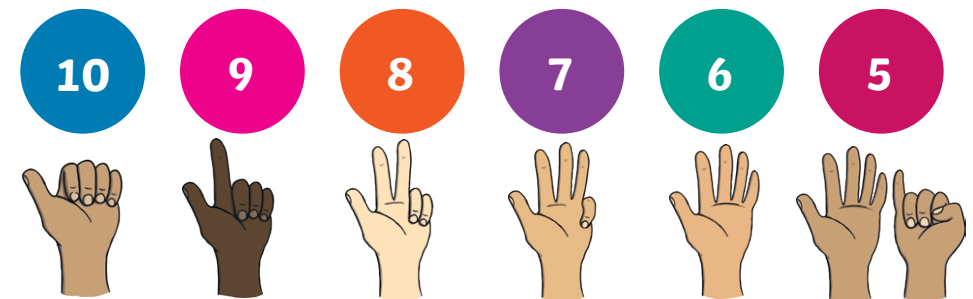
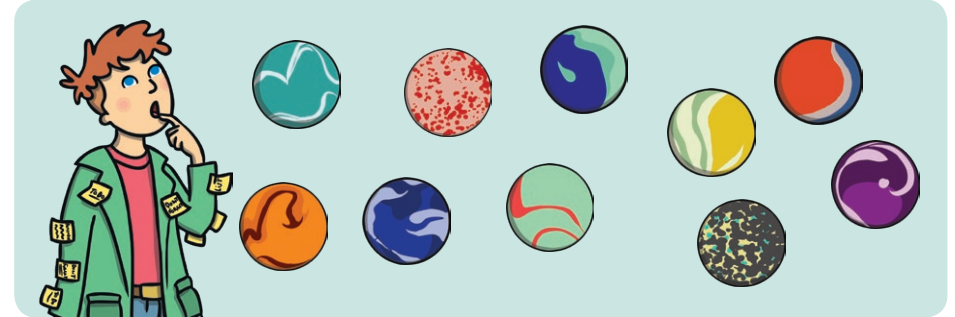
How could we write this as a calculation?

Can you represent the calculation on a number line?

Subtraction – Counting Back



Forgetful Freddie had 10 marbles. He lost 6.



He counted back on his fingers and got to 5.

What mistake did he make?

How many marbles did he really have left?

Write a calculation.
Represent the calculation on a number line.



Diving into Mastery – Deepest

Adult Guidance with Question Prompts

Children solve a problem with multiple possible solutions. They begin to work systematically to find all the possibilities.

Children will need number lines to ten for this activity. You could also act out the problem with socks and a washing line.

Which number do we need to start on each time?

How many shall we count back first?

Can you write a number sentence to describe what you have done on the number line?

How could we work sensibly to find all the possible answers?

Subtraction – Counting Back



How many different subtractions could you do on this number line?

$$8 - \square = \square$$



Can you work sensibly to find all the different possibilities?

Write a calculation for each one.

How many different subtraction calculations have you written?