

# Diving into Mastery - Diving

## Adult Guidance with Question Prompts

Children will require base ten blocks for this activity. They will need to have an understanding of exchanging one ten for ten ones.

Have you got enough ones blocks to subtract eight ones?

What could you do?

How many ones will you get if you exchange one ten?

Can you partition 85 into 70 and another part?

Can you partition 28 to see how many tens you need to subtract?

How many tens and how many ones are left over?

What do you get if you recombine the tens and ones?

When we have written the numbers in columns, what happens if we haven't got enough ones to subtract from?

Can you show me how to exchange a ten?

How will you show what you have done?

How many tens will you have left?

Can you subtract using a number line?

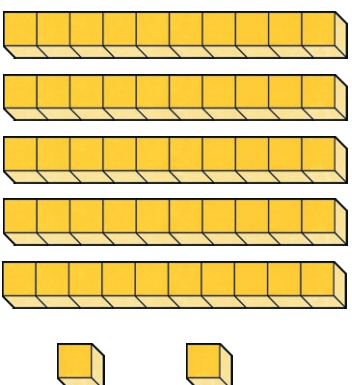
Which direction will you jump?

Can you use partitioning to make it more efficient?

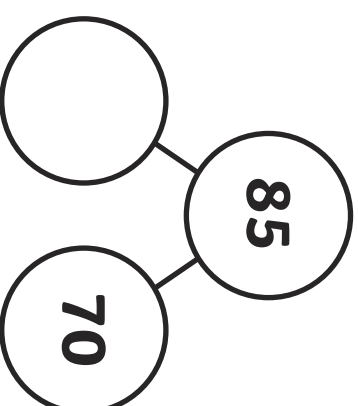
## Subtract 2-Digit Numbers – Crossing Tens



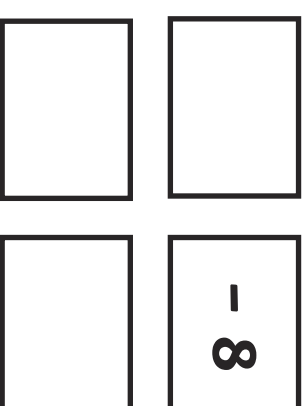
Use base ten blocks to subtract 18 from 52.



$$85 - 28$$



	8	4
-	3	7



Use a number line to calculate 63 minus 26.



# Diving into Mastery - Deeper

## Adult Guidance with Question Prompts

Children will need to calculate the answers to all the calculations before they can spot the odd one out. They will need to look carefully at the answers to do so. They may want to use base ten blocks (drawing them or using them practically) - or any other method they are confident with - to solve the calculations.

What do you think you need to do first?

Can you spot the odd one out from just looking at the calculations?

Which method will you choose to solve the calculations?

Why?

Now you have found the answers, can you spot an odd one out?

Can you explain why you think that?

## Subtract 2-Digit Numbers – Crossing Tens



Ring the odd one out.

$$41 - 15 =$$

$$95 - 68 =$$

$$52 - 24 =$$

$$64 - 36 =$$

$$36 - 17 =$$

$$78 - 49 =$$

$$83 - 59 =$$



Explain your choice.

# Diving into Mastery - Deepest

## Adult Guidance with Question Prompts

Children could experiment with base ten blocks to find all the possible solutions. Encourage systematic working.

What is the first thing you should do?

How can you approach the problem systematically?

Could we put zero in the first box?

Why not?

Are there any other numbers we can't use?

Can you list all the possible solutions?

How many are there?

How do you know you have found them all?

Compare them to your friend's solutions Are they the same?

## Subtract 2-Digit Numbers – Crossing Tens



Find all the possible missing numbers to make this correct.

$$41 - 2 \square = 1 \square$$

Represent the numbers with base ten blocks to find the solutions.

How many different calculations can you make?

