# Diving into Mastery – Diving

## Adult Guidance with Question Prompts

Children use the strategies they have learnt (partitioning and use of equipment) to add two 2-digit numbers crossing ten. They will need to be able to exchange ten ones for one ten.

How many tens are there in total?

What is the sum of the ones?

Can you exchange ten ones for one ten? Show me with your equipment.

How can partitioning help you?

How will you lay out the addition in a column?

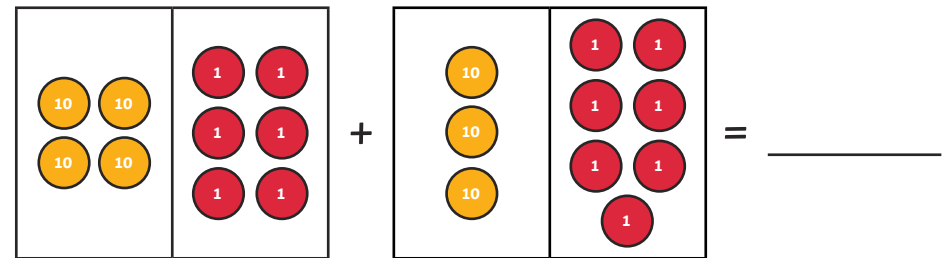What do you notice about these two bar models?

How are they the same?

How are they different?

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## Add Two 2-Digit Numbers (2)

Solve these additions, exchanging ten ones for one ten.



= _____

6 tens and 7 ones + 2 tens and 8 ones = _____

| | 3 | 7 |
|---|---|---|
| + | 2 | 5 |
| | | |
| + | | |
| | | |



| 29 | 28 |
|---|---|

| 19 | 38 |
|---|---|

Compare the two bar models. What do you notice?

Harris has 36 football cards. Anaya has 18. How many do they have altogether?

# Diving into Mastery – Deeper

## Adult Guidance with Question Prompts

Children reason about the most efficient method for adding two 2-digit numbers. They explain their ideas and methods to a friend.

What do you think of Fatima's method?

Do you think you could reach the correct answer that way?

How long would it take?

What do you think about Ben's method?

Which method do you think is best? Why?

Which would be quickest?

Which method are you least likely to make a mistake on?

Can you solve the calculation using your preferred method?

Can you explain all the steps you took to a friend?
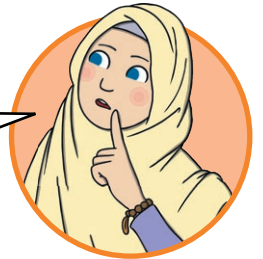
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## Add Two 2-Digit Numbers (2)

Fatima and Ben are solving this calculation:

# 56 + 39

Work out the answer and explain your method to a friend.

> I counted on from 56, counting on first in tens and then in ones.

> I added all the tens together and all the ones together. Then, I put the tens and ones back together.

Which do you think is the best method? Why?

Do you think you could have improved the method that you used to work out the question? How?