Maths

Addition and Subtraction

Need a coherently planned sequence of lessons to complement this resource?

Add Two 2-Digit Numbers, Crossing Ten

Aim

- To add two 2-digit numbers by adding the ones (crossing 10) and the tens.

Success Criteria

- I can use place value grids to add two 2-digit numbers, crossing ten.
- I can use part-whole models to add two 2-digit numbers, crossing ten.

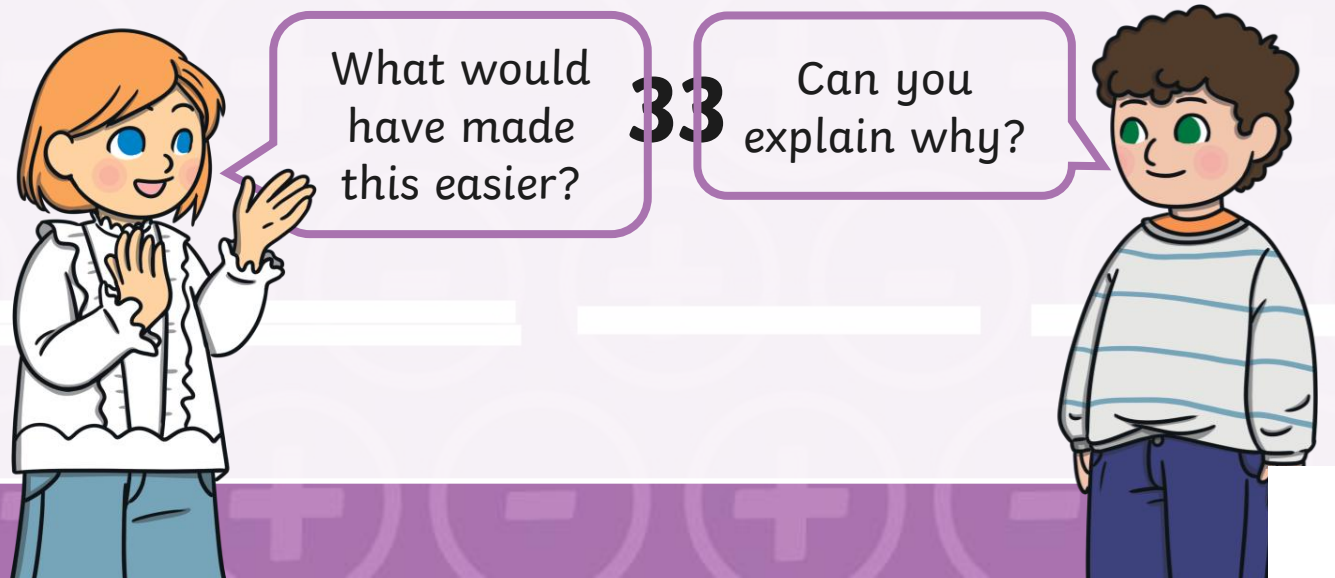
Remember It

Can you match the numbers with the groups of place value counters?

10	1	10
1	10	1

1	10	1
10	1	1

1	1	1
1	10	1



Remember It

Now the tens and ones have their own columns.
Is it easier to match them with the numbers?

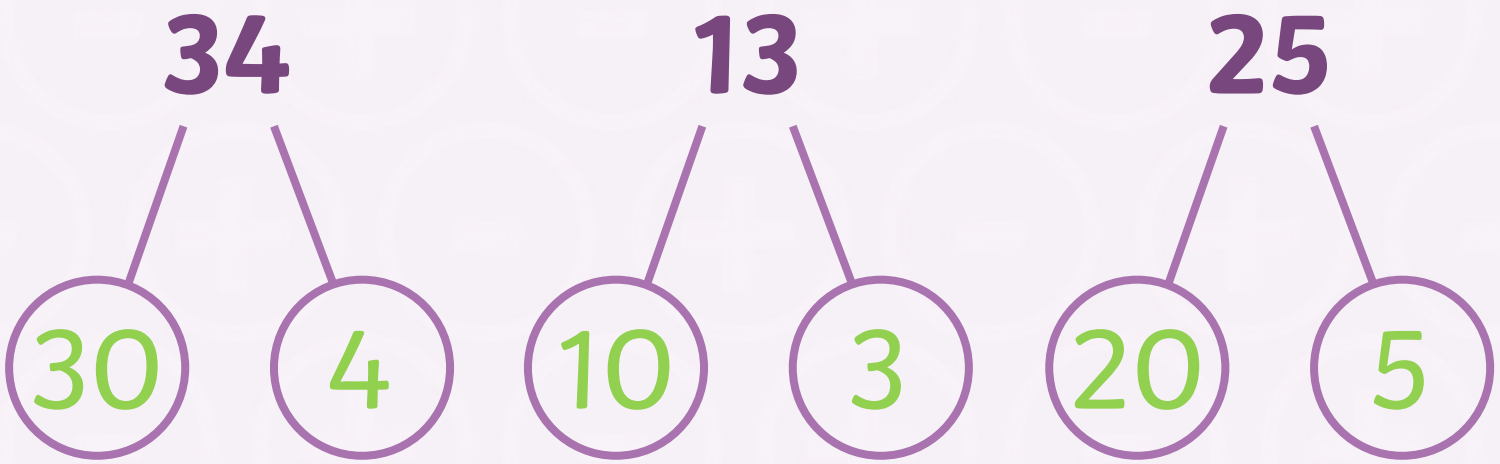
Tens	Ones
10 10	1 1 1 1 1

Tens	Ones
10 10 10	1 1 1 1

Tens	Ones
10	1 1 1

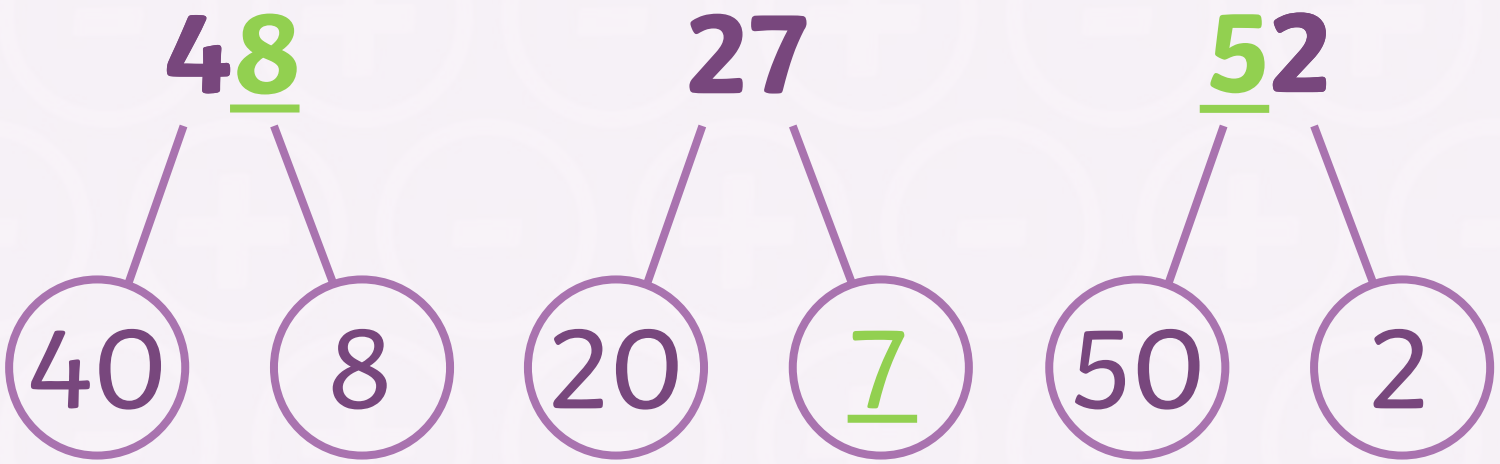
Remember It

Can you use tens and ones to complete the part-whole models?



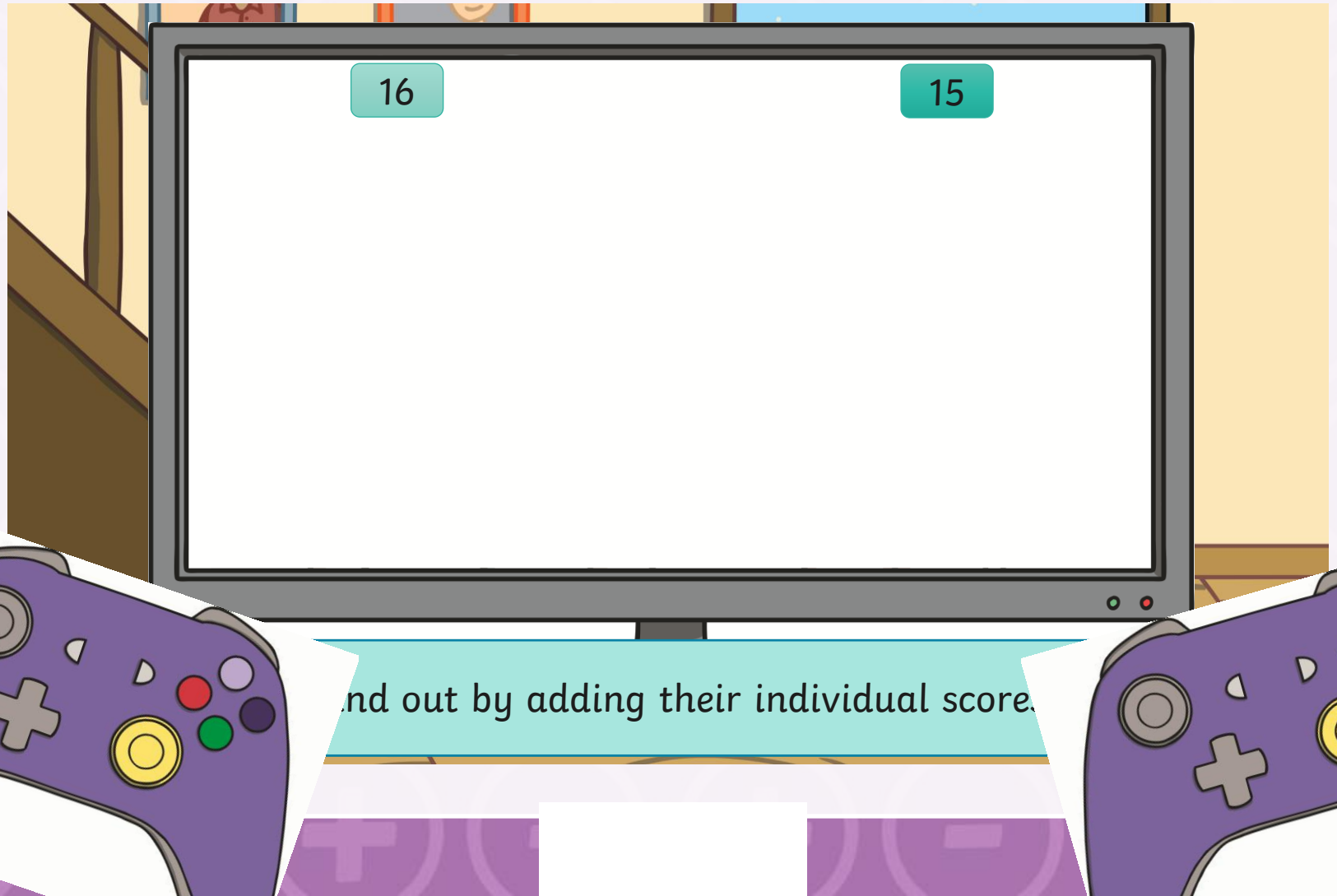
Remember It

Can you complete the part-whole models?



Partitioning numbers into tens and ones will help us with today's challenges.

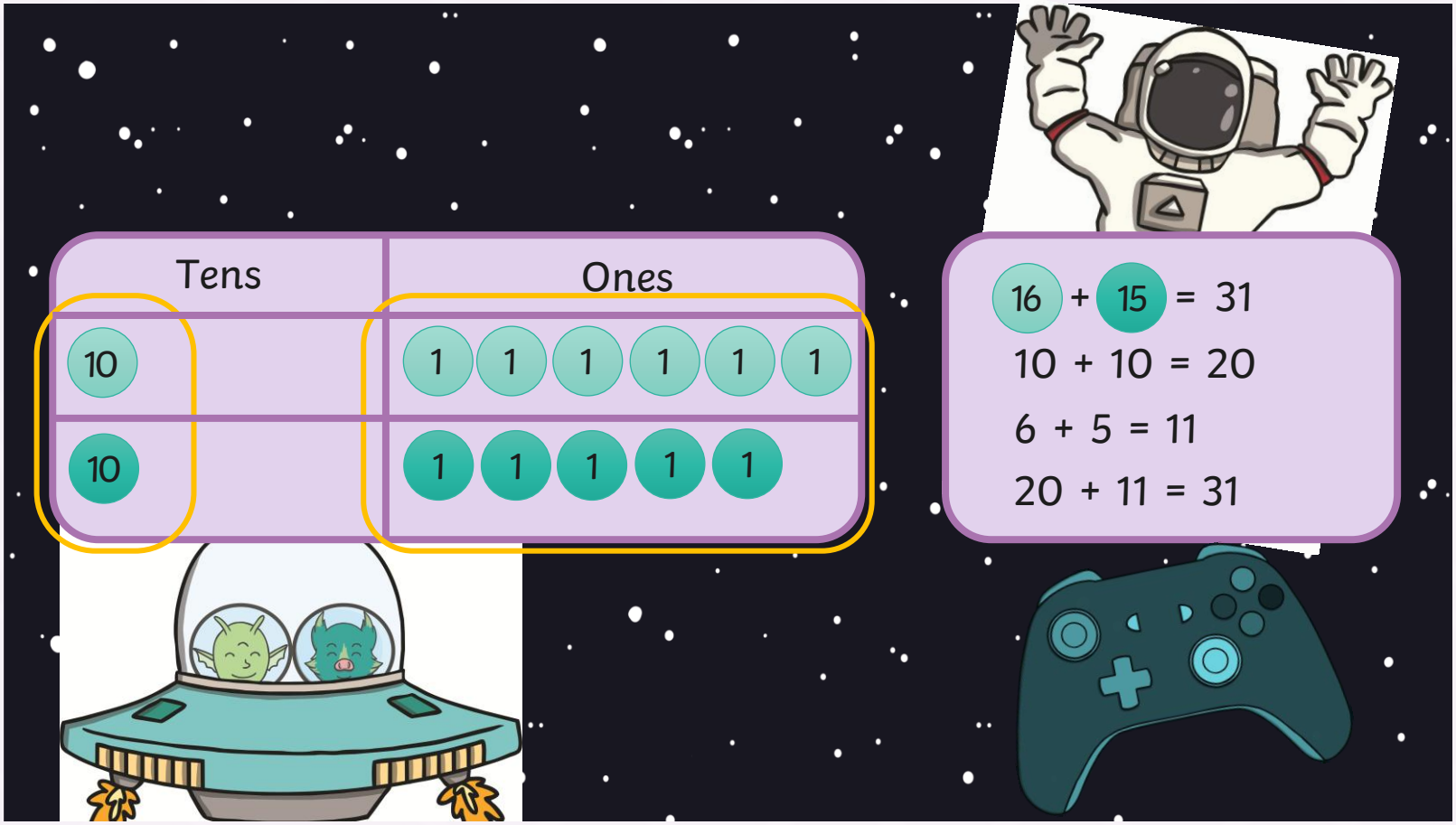
High Score



High Score

Whole Class

Anna used a place value grid to find the total.



Tens	Ones
10	1 1 1 1 1 1
10	1 1 1 1 1

16 + 15 = 31

10 + 10 = 20

6 + 5 = 11

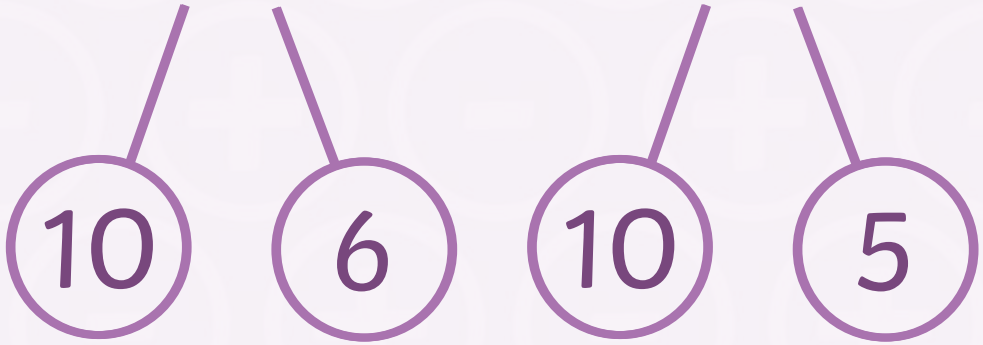
20 + 11 = 31

High Score

Whole Class

Felix used part-whole models to find the total.

16 + 15 = 31



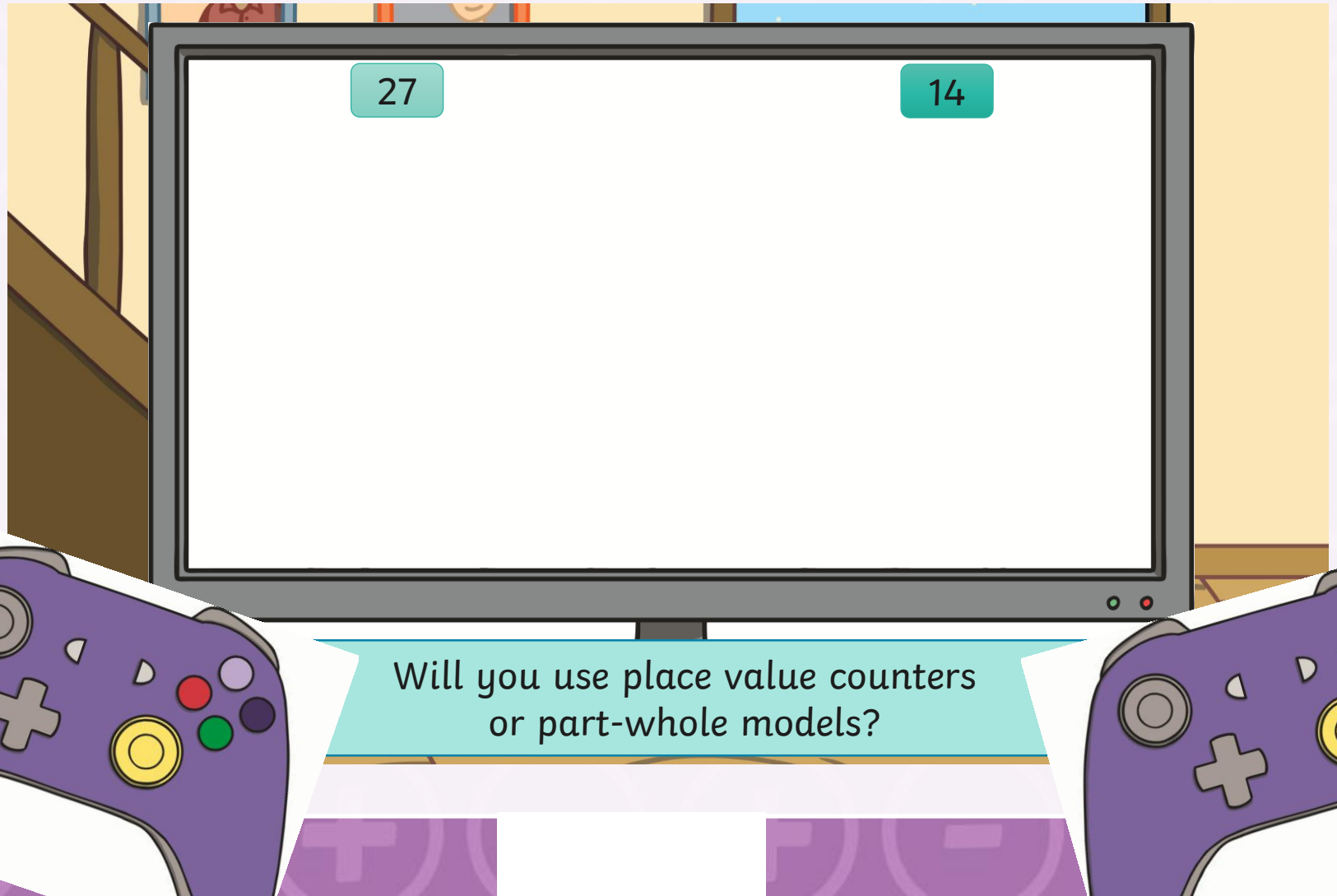
10 + 10 = 20

6 + 5 = 11

20 + 11 = 31

High Score

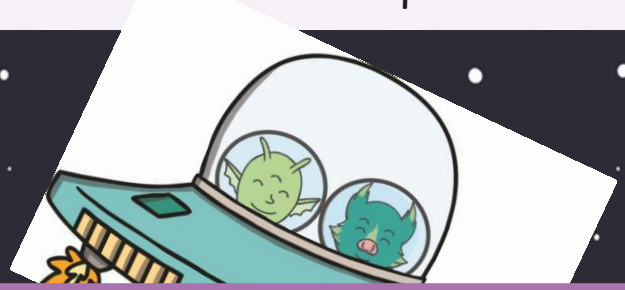
Let's try some more.



High Score

Whole Class

Anna used a place value grid to find the total.



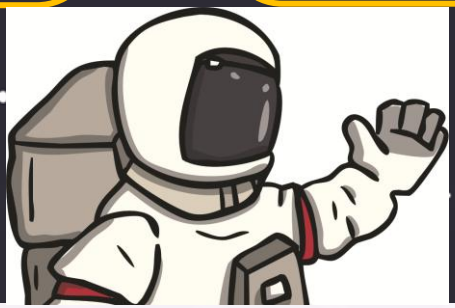
Tens	Ones
10 10	1 1 1 1 1 1 1
10	1 1 1 1

27 + 14 = 31

20 + 10 = 30

7 + 4 = 11

30 + 11 = 41

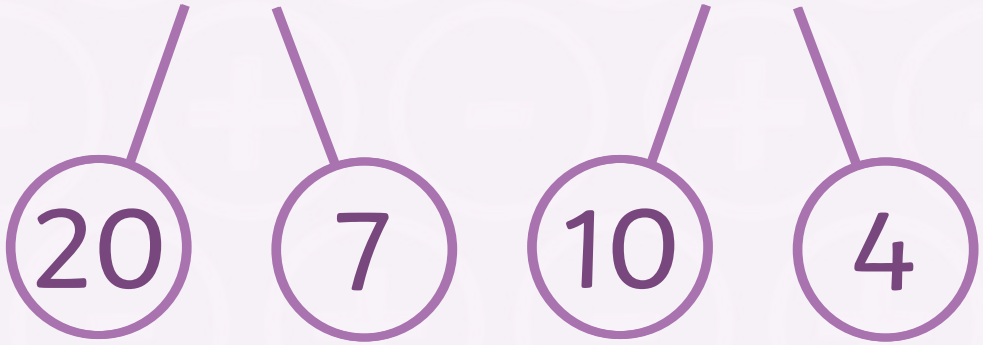


High Score

Whole Class

Felix used part-whole models to find the total.

27 + 14 = 41



20 + 10 = 30

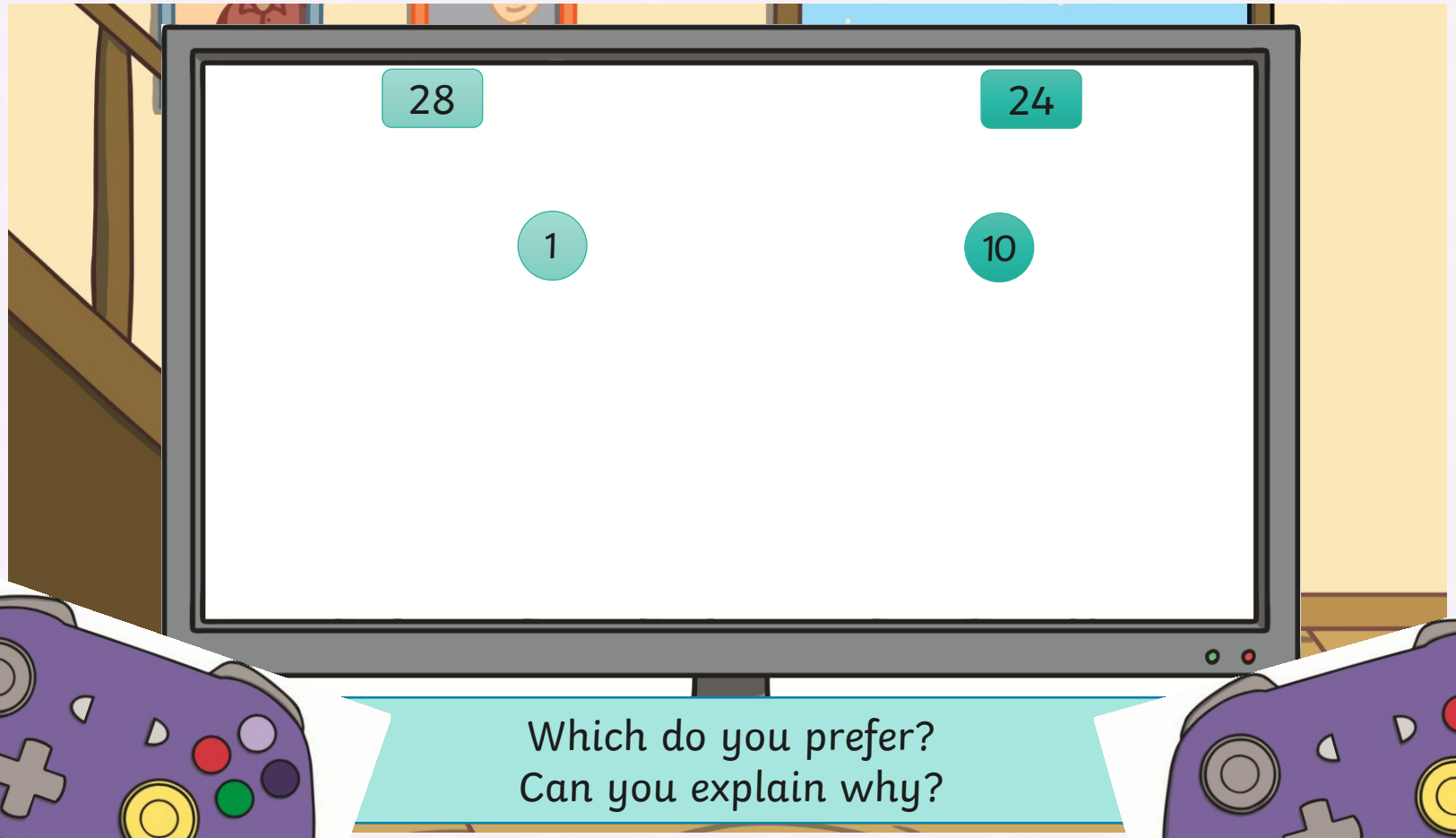
7 + 4 = 11

30 + 11 = 41

High Score

Whole Class

Use place value columns or part-whole models to find the total.

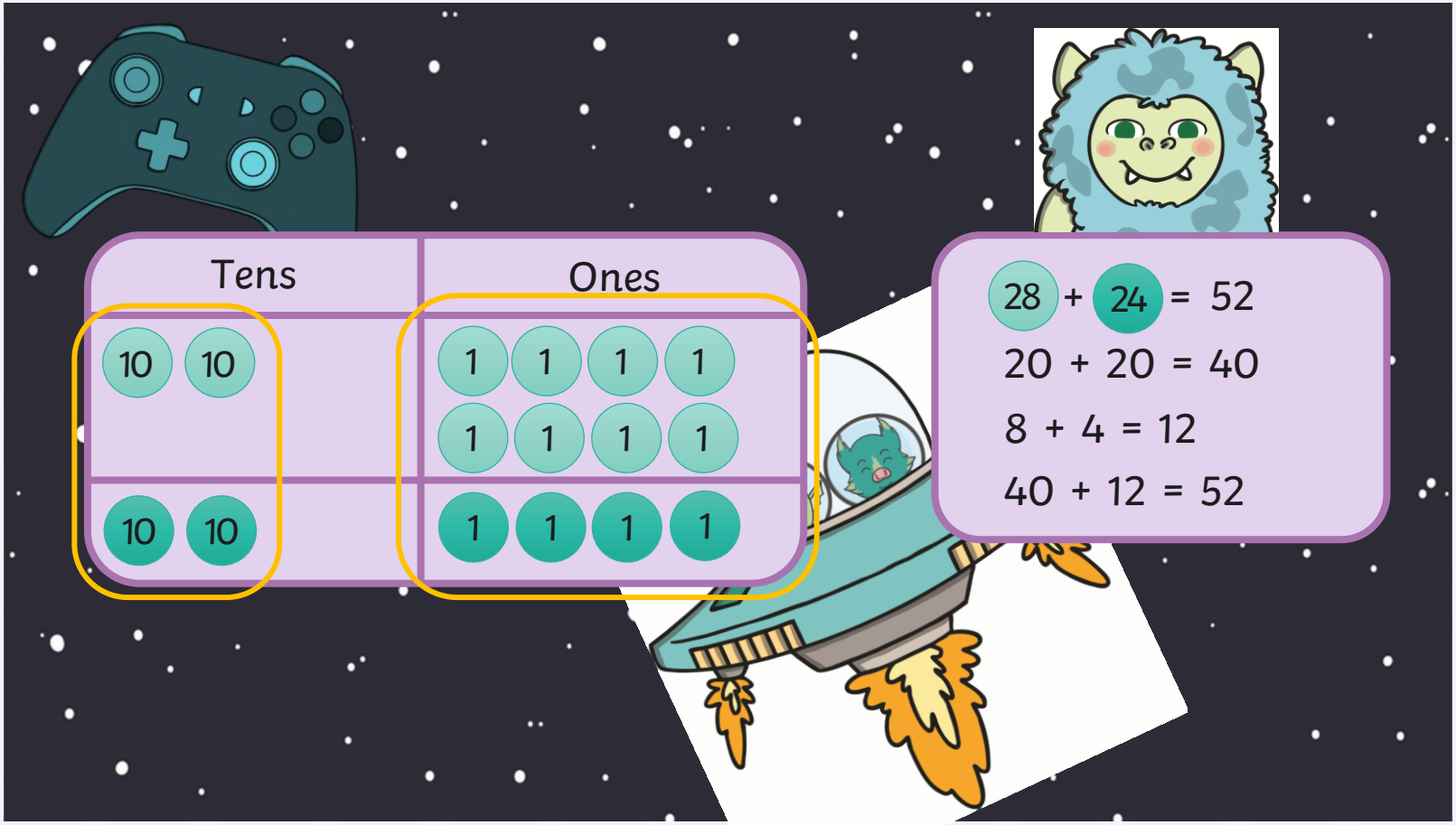


Which do you prefer?
Can you explain why?

High Score

Whole Class

Anna used a place value grid to find the total.

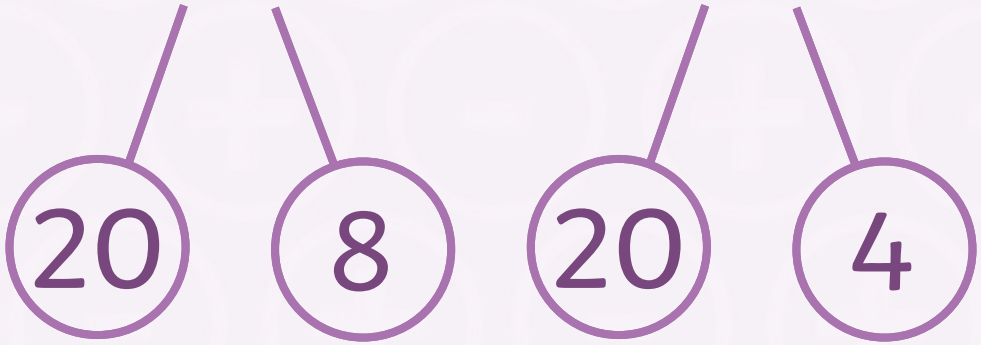


High Score

Whole Class

Felix used part-whole models to find the total.

28 + 24 = 52

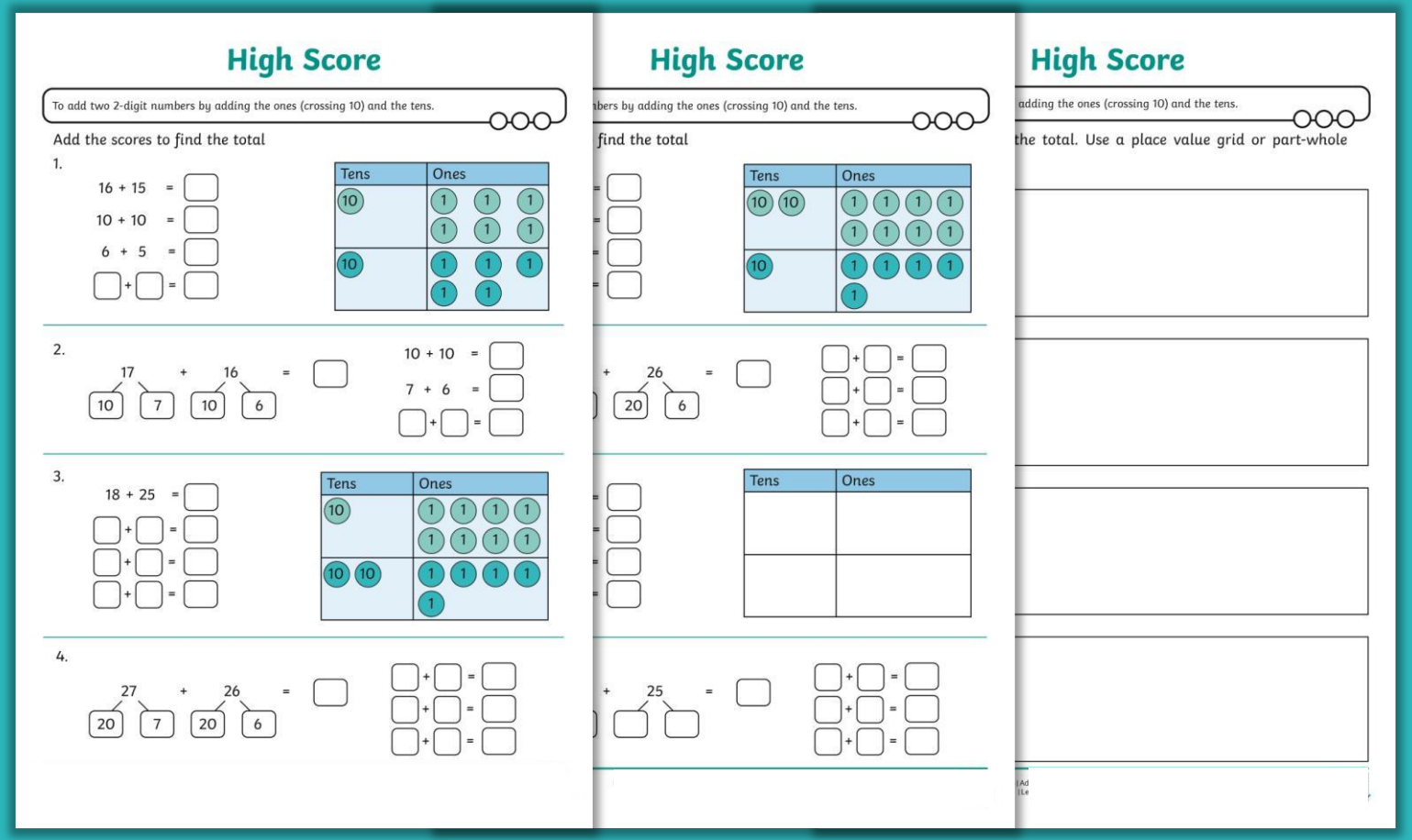


20 + 20 = 40

8 + 4 = 12

40 + 12 = 52

High Score Activity



High Score

To add two 2-digit numbers by adding the ones (crossing 10) and the tens.

Add the scores to find the total

1.

16 + 15 = ☐

10 + 10 = ☐

6 + 5 = ☐

☐ + ☐ = ☐

Tens	Ones
10	1 1 1 1 1
10	1 1 1 1 1

2.

17 + 16 = ☐

10 7 10 6

10 + 10 = ☐

7 + 6 = ☐

☐ + ☐ = ☐

3.

18 + 25 = ☐

☐ + ☐ = ☐

☐ + ☐ = ☐

☐ + ☐ = ☐

Tens	Ones
10	1 1 1 1 1 1 1 1
10 10	1 1 1 1 1

4.

27 + 26 = ☐

20 7 20 6

☐ + ☐ = ☐

☐ + ☐ = ☐

☐ + ☐ = ☐

High Score

bers by adding the ones (crossing 10) and the tens.

find the total

= ☐

= ☐

= ☐

= ☐

Tens	Ones
10 10	1 1 1 1 1 1 1 1
10	1 1 1 1 1

+ 26 = ☐

20 6

☐ + ☐ = ☐

☐ + ☐ = ☐

☐ + ☐ = ☐

= ☐

= ☐

= ☐

= ☐

Tens	Ones

+ 25 = ☐

☐ + ☐

☐ + ☐ = ☐

☐ + ☐ = ☐

☐ + ☐ = ☐

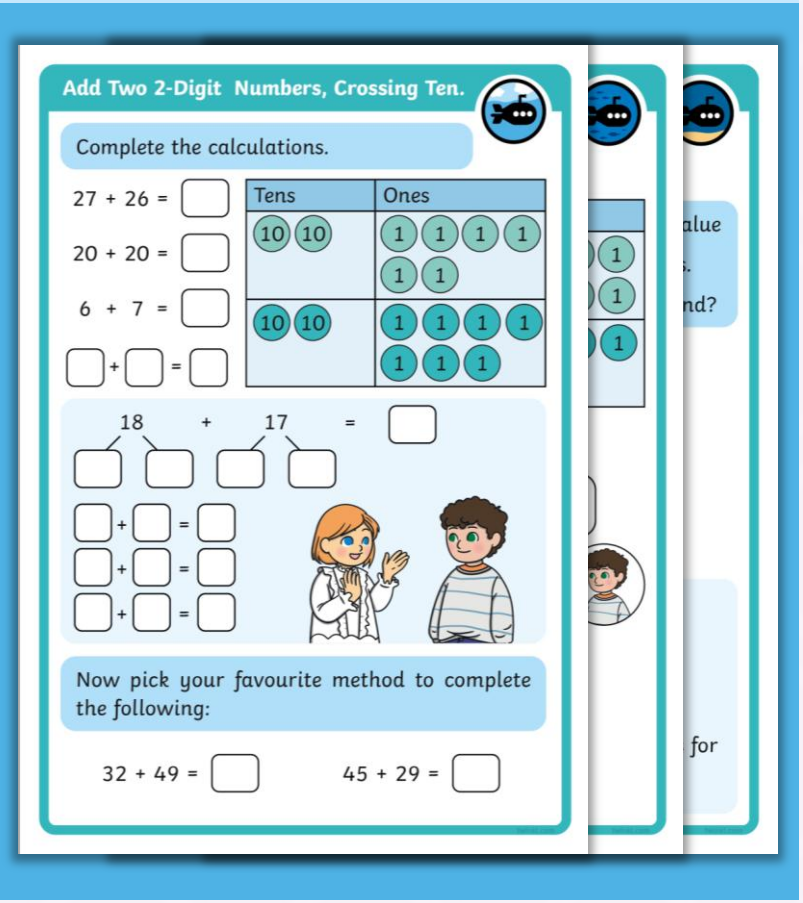
High Score

adding the ones (crossing 10) and the tens.

the total. Use a place value grid or part-whole

Diving into Mastery

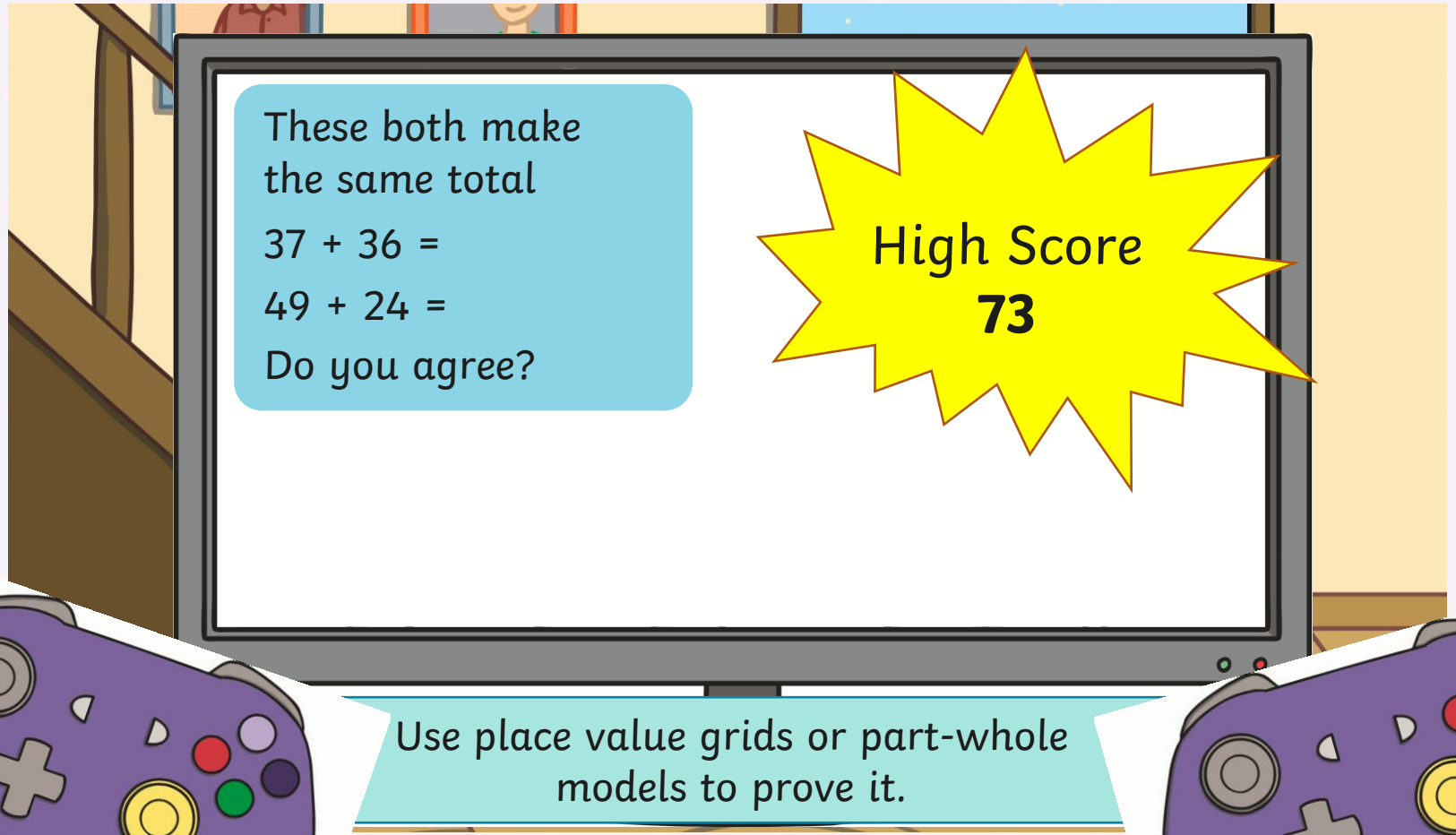
Dive in by completing your own activity!



Check It

Whole Class

Use place value columns or part-whole models to find the total.



Aim

- I can add and subtract a multiple of 10 to and from any 2-digit number.

Success Criteria

- I can use place value grids to add two 2-digit numbers, crossing ten.
- I can use part-whole models to add two 2-digit numbers, crossing ten.