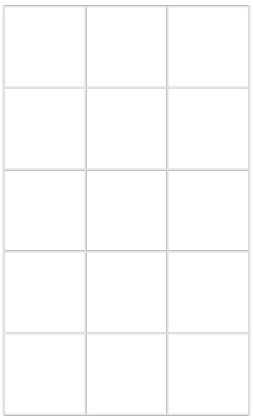
Year 2 - Column Addition — Lesson Guide

Step 1

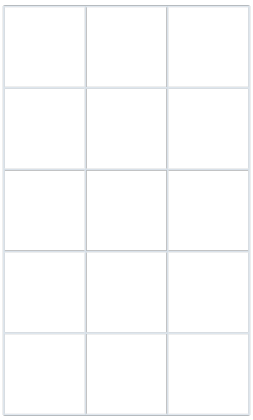
25 + 17 = ☐



The plus sign tells us to add. When we add more, the number gets bigger. We circle the plus sign.

Step 2

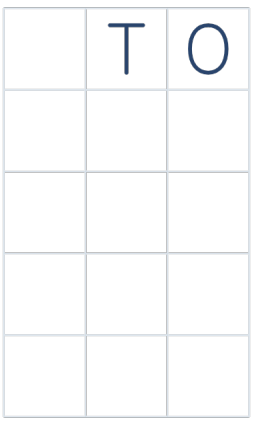
25 + 17 = ☐



First, check whether a mental method would be quicker. Look at the ones. 5 ones and 7 ones make 12 ones. We can exchange 10 ones for 1 ten. Column addition keeps the place values lined up.

Step 3

25 + 17 = ☐



Next, our largest number has 2 digits, so we neatly write the headings T and O below the question, with one heading in each box. These stand for tens and ones.

Step 4

25 + 17 = ☐

	T	O
	2	5

The first digit of 25, 2, is in the tens column, so we start there. Now, we write 25 in the correct columns, with one digit in each box.

Step 5

25 + 17 = ☐

	T	O
	2	5
+	1	7

Remember: There must always be a digit in the ones column, even if it is a 0.

Then, we write a plus sign on the left of the calculation. 17 has two digits, so we start with 1 in the tens column. We write 17 in the correct columns, with one digit in each box.

Step 6

25 + 17 = ☐

	T	O
	2	5
+	1	7

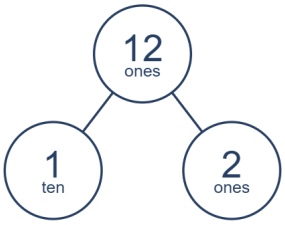
Draw a line under 17. Leave one row for the sum, then draw the second line below that row. Write exchanges below the second line.

Step 7

25 + 17 = ☐

	T	O
	2	5
+	1	7

First, we add the ones, the smallest place-value column. 5 ones + 7 ones = 12 ones. As we can only write one digit per box, we partition 12 ones into 1 ten and 2 ones.



Step 8

25 + 17 = ☐

	T	O
	2	5
+	1	7
		2
	1	

We write the 1 ten in the tens column underneath the answer, ready for the next step. Then we write the remaining 2 ones in the ones answer box.

Step 9

25 + 17 = ☐



Remember: Check both places. Keep the small 1 below the tens column and the 2 in the ones answer square.

The small 1 below the tens column stands for 1 ten. The 2 in the ones answer square stands for 2 ones. Together, they make 12 ones.

Step 10

25 + 17 = ☐

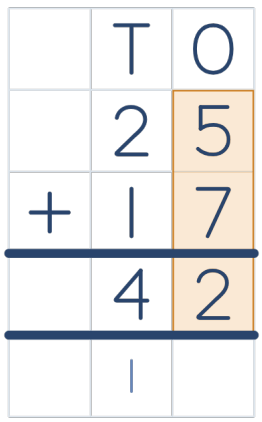


Remember: Look below the column you are working on. Add the exchanged amount written there.

Finally, we add the tens. 2 tens + 1 ten = 3 tens. Add the 1 exchanged ten shown by the small 1 below the tens column. 3 tens + 1 exchanged ten = 4 tens. We write 4 in the tens column. No exchange is needed this time.

Step 11

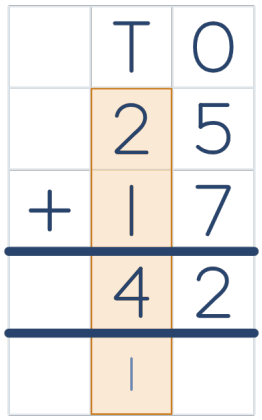
25 + 17 = ☐



Our sum is 42. Before we copy our answer into the answer box, let's check each column, including the exchanges. First, we check the ones: 5 + 7 = 12. We have correctly recorded 1 ten underneath the answer and 2 ones in the ones answer box.

Step 12

25 + 17 = ☐



Finally, we check the tens, including the exchanged ten: 2 + 1 + 1 = 4. We have correctly included the exchanged ten and written 4 in the tens answer box.

Step 13

25 + 17 = **42**



The sum is 42. Copy 42 into the answer box. Make sure you copy the answer correctly.