Number Champions
1 2 3 4 5
fun + skills = confidence

Add a 2-digit and a 1-digit number without exchange

This is based on an NRICH example called "Two Spinners" https://nrich.maths.org/10391.
It aims to let the child practise skills and see patterns.

Here are two sets of numbers, in squares and circles:

| 60 | 61 | 62 | 63 |

(3) (4) (5) (6)
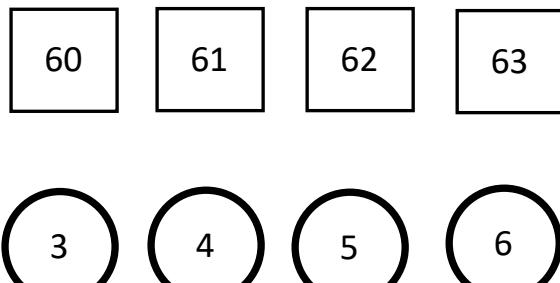
Which numbers can you make by adding the 60 in the first square to the numbers in the different circles?

Repeat this for the numbers in the other three squares.

Can you see any patterns?

How many additions have you done?

How many different numbers are there in the totals?

Discuss
Why are there 16 additions?
Why are there only 7 different answers?

Ideas
Each of the 4 squares can go with each of the four circles. This gives 4 times 4 additions which is 16.

Some of the answers are duplicated, in the following pattern

Answer	Different ways	Number of ways
63	60+3	1
64	60+4, 61+3	2
65	60+5, 61+4. 62+3	3
66	60+6, 61+5, 62+4, 63+3	4
67	61+6, 62+5, 63+4	3
68	62+6, 63+5	2
69	63+6	1