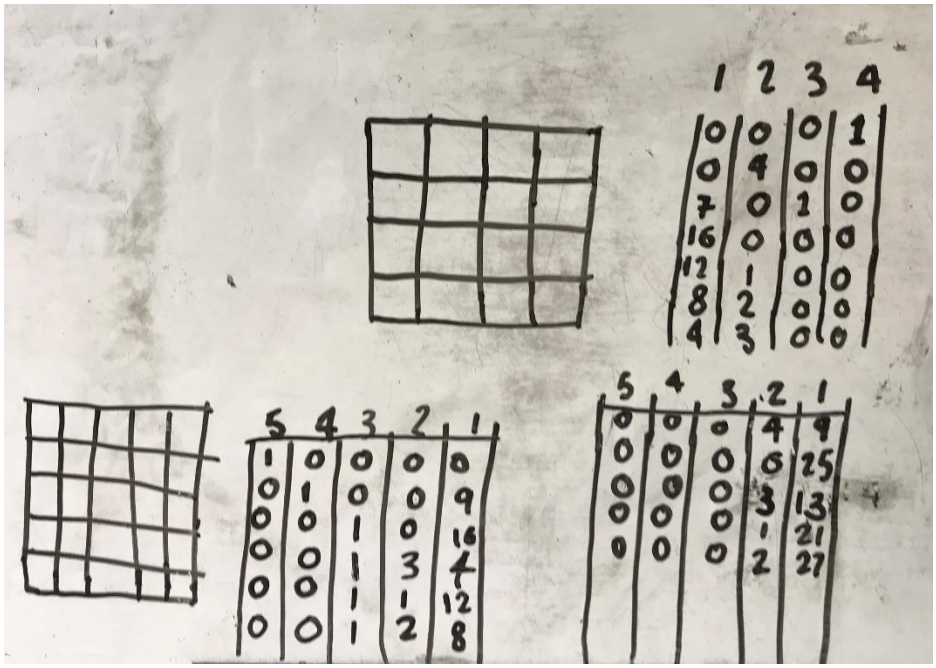
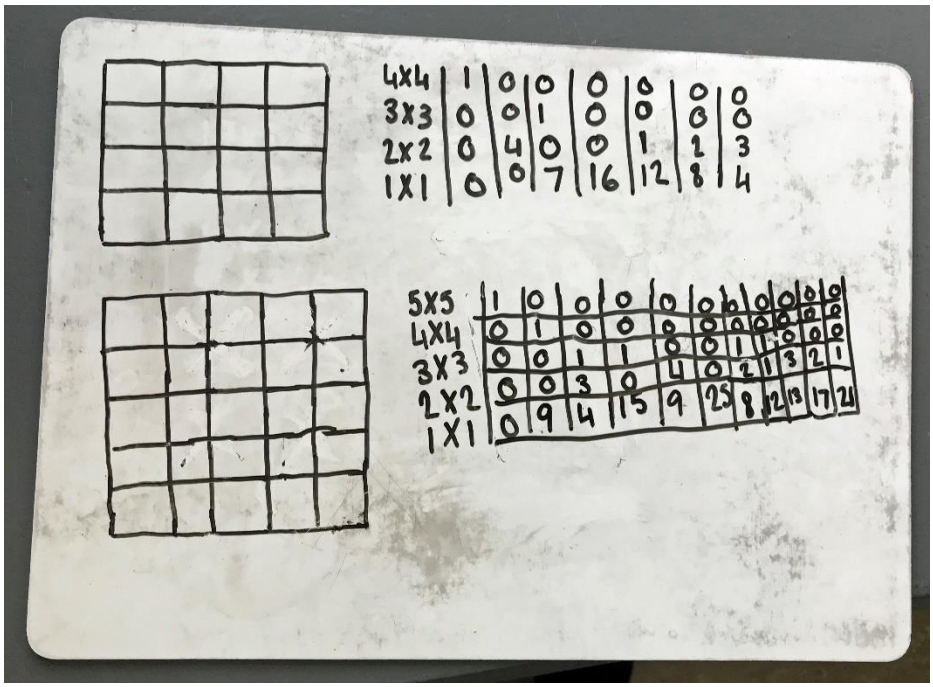
Alex, Ayali, Brodie & Keya
Strand on the Green Junior School

We decided the easiest way was to start with the biggest tiles that could fit.





We agreed there are 7 possibilities for the 4 by 4 square and 11 for the 5 by 5 square. Initially that looks like a sequence adding 4 each time. However there are already 7 possible totals for the 6 by 6 square using the 6x6, 5x5 and 4x4 tiles so there will definitely be more than 15 (but we didn't have time to find them all).

6x6 **5x5** **4x4** **3x3** **2x2** **1x1** Total

1	0	0	0	0	0	1
0	1	0	0	0	11	12
0	0	1	0	0	20	21
0	0	1	0	1	16	18
0	0	1	0	2	12	15
0	0	1	0	3	8	12
0	0	1	0	4	4	9
0	0	1	0	5	0	6

We know that there are 2 combinations for the 2 by 2 square.

	different numbers of tiles
2x2	2
3x3	3
4x4	7
5x5	11

The only pattern we found was that they are all prime numbers.