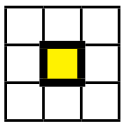
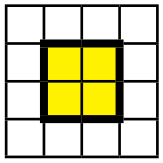
Square Numbers 1

Y7

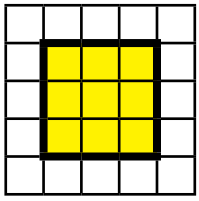
Here is a pattern of squares. Count the number of small squares. Continue the pattern on the other grids.



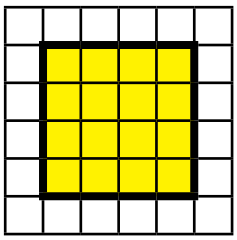
Big square side length: 1
1 × 1 = 1
Total number of small squares = **1**



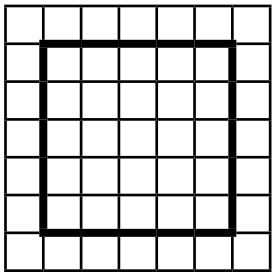
Big square side length: 2
2 × 2 = 4
Total number of small squares = **4**



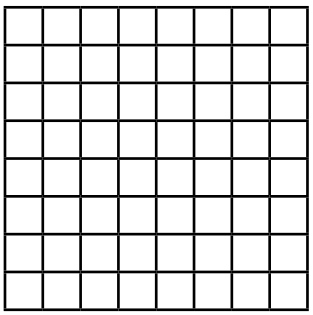
Big square side length: 3
3 × 3 = 9
Total number of small squares = **9**



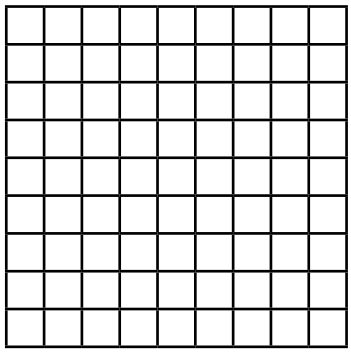
Big square side length: 4
4 × 4 = 16
Total number of small squares = **16**



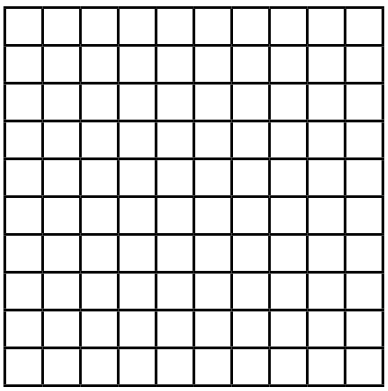
Big square side length: 5
5 × 5 = 25
Total number of small squares = **25**



Big square side length: 6
___ × ___ = ___
Total number of small squares = _



Big square side length: 7
___ × ___ = ___
Total number of small squares = _



Big square side length: 8
___ × ___ = ___
Total number of small squares = _

These numbers are called ***square numbers***.

Look at the pattern. Work out the next two square numbers.

Colour the square numbers on the grid below.
The first two have been done for you.
What do you notice about the pattern?

1	2	3	4	5	6	7	8	9	10
2	4	6	8	10	12	14	16	18	20
3	6	9	12	15	18	21	24	27	30
4	8	12	16	20	24	28	32	36	40
5	10	15	20	25	30	35	40	45	50
6	12	18	24	30	36	42	48	54	60
7	14	21	28	35	42	49	56	63	70
8	16	24	32	40	48	56	64	72	80
9	18	27	36	45	54	63	72	81	90
10	20	30	40	50	60	70	80	90	100