

Discovering square numbers

Investigation (NS2.3 - Unit 1)

- ☺ Model each array with your counters.
- ☺ Record your representations in the table below using words and diagrams.
- ☺ Record the total number of counters used to model each array.

Array in words	=	Array using symbols	=	Total number of counters	Representation using a diagram	Representation in words
1 by 1	=	1^2	=	1	○	one row containing one counter
2 by 2	=	2^2	=	4	○ ○ ○ ○	two rows of two counters
3 by 3	=	3^2	=			three rows with three counters in each row
4 by 4	=		=			
5 by 5	=		=			
6 by 6	=		=			
7 by 7	=		=			
8 by 8	=		=			
9 by 9	=		=			
10 by 10	=		=			

Explain why the numbers 1, 4, 9, 16, 25, 36, 49, 64, 81, 100 are called square numbers.