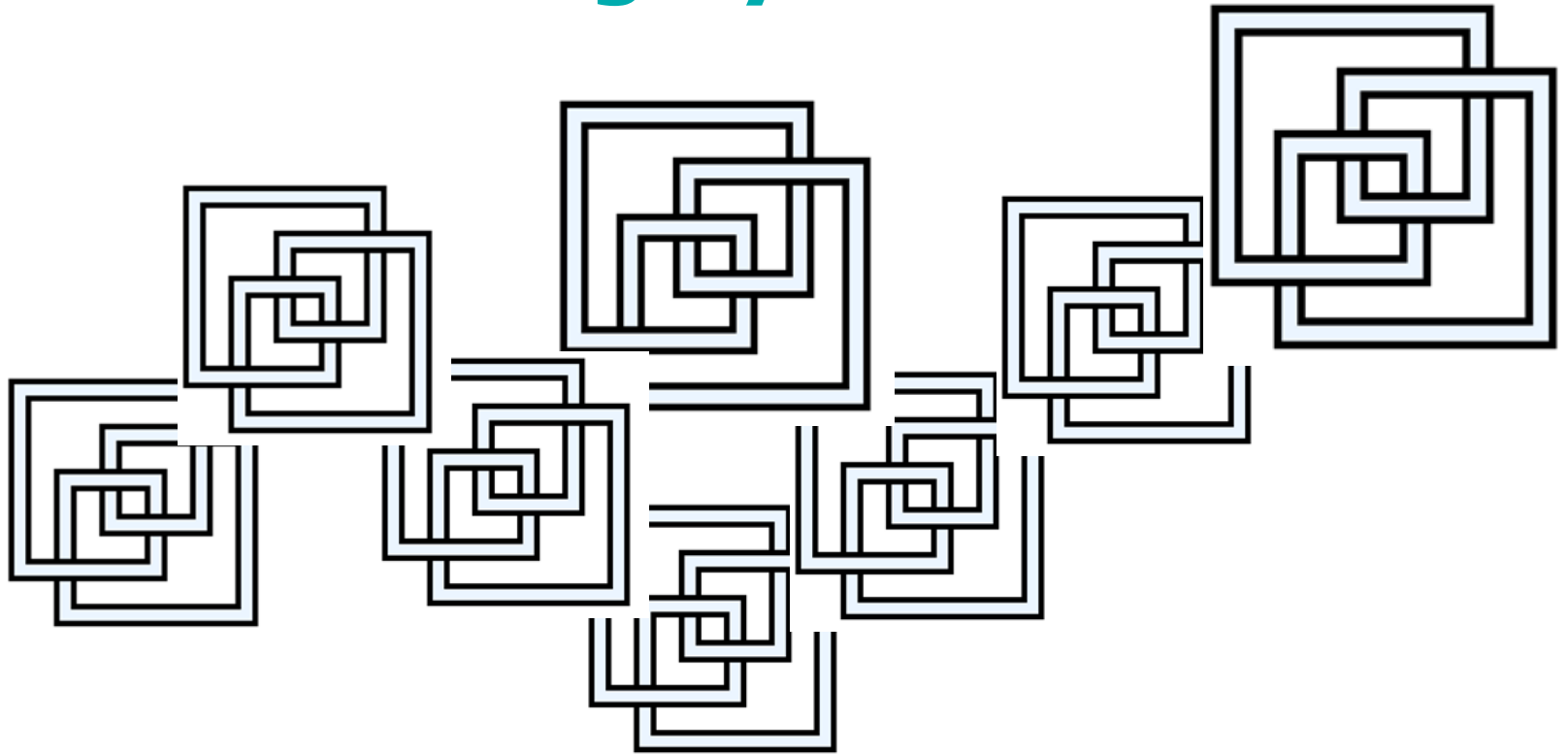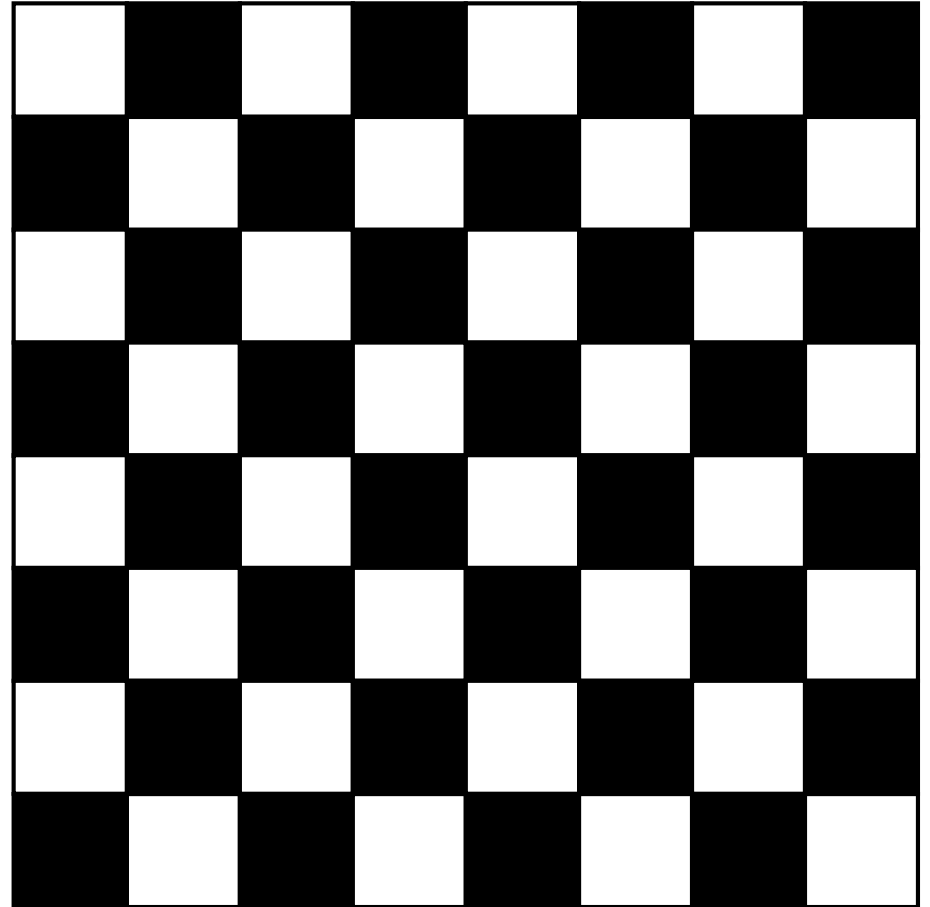# Royal Institution Primary Maths Masterclasses

Off the shelf Masterclass:
Being Systematic

Counting Squares
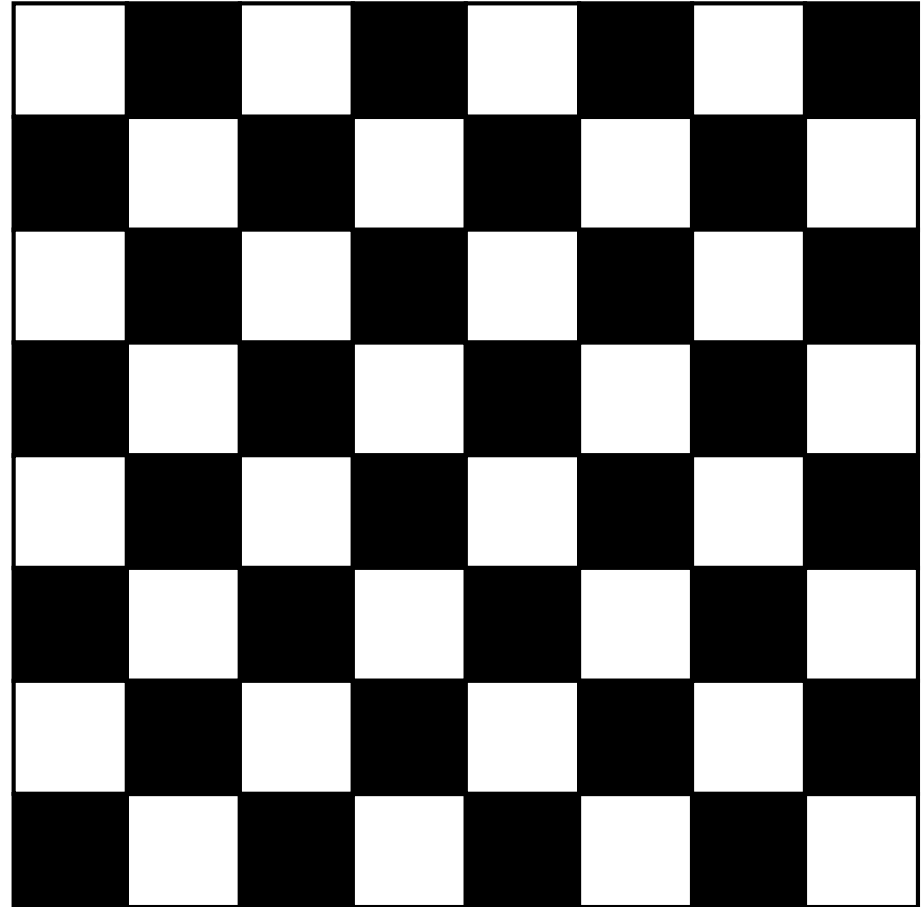
How many squares are in this image?

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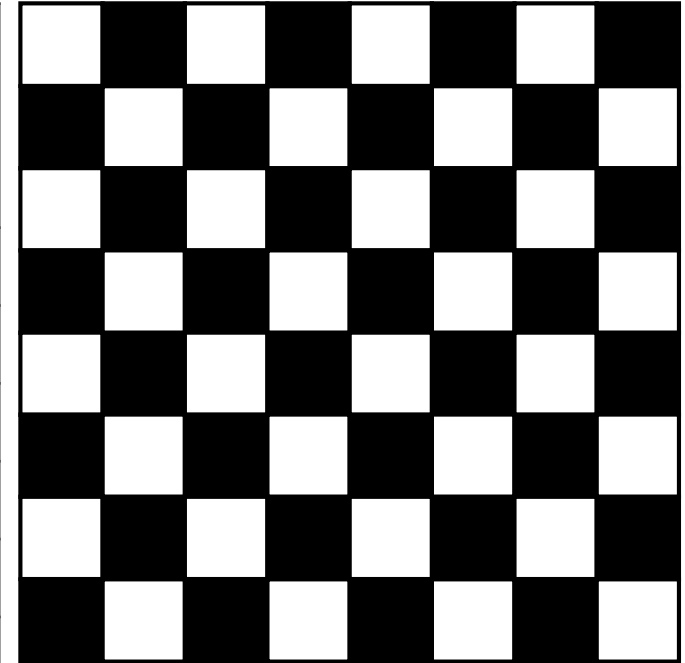
Counting Squares

Can you use a **systematic approach** to ensure you have counted all of them?
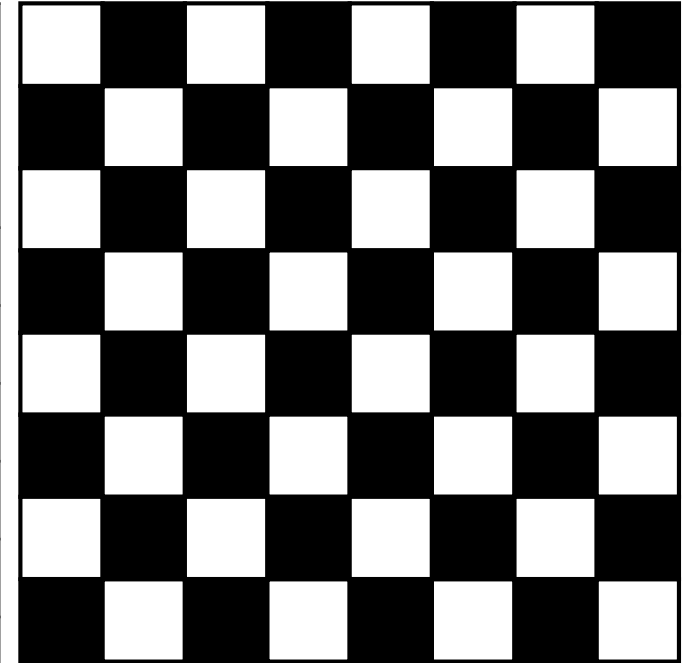
How can you record your data?

Counting Squares

Square size	How many along/up?	How many on the whole board

Counting Squares

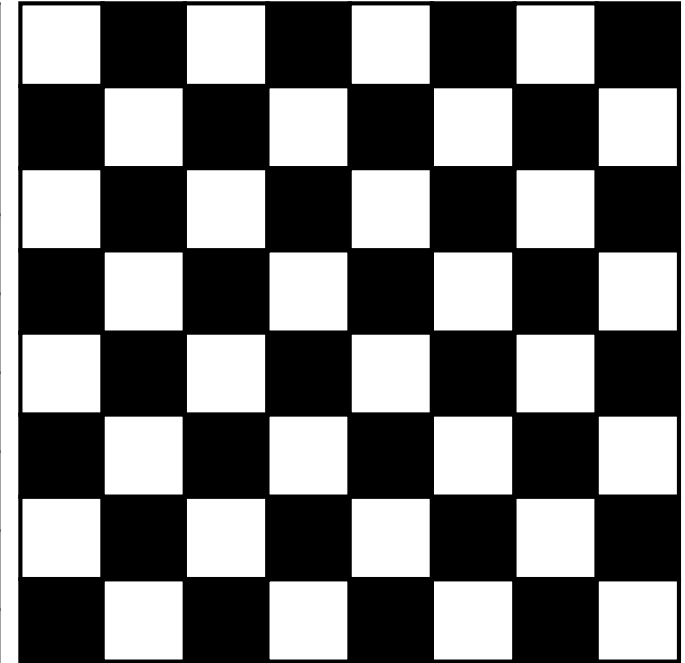| Square size	How many along/up?	How many on the whole board
1x1	8	64
2x2	7	49
3x3	6	
4x4	5	
5x5	4	
6x6	3	
7x7	2	
8x8	1	

Can you fill in the missing boxes?

Answers on the next slide

- Do not look at the next slide until you have had a go yourself.

Counting Squares

Square size	How many along/up?	How many on the whole board
1x1	8	64
2x2	7	49
3x3	6	36
4x4	5	25
5x5	4	16
6x6	3	9
7x7	2	4
8x8	1	1

Number of squares on 8 by 8 chessboard
= 64 + 49 + 36 + 25 + 16 + 9 + 4 + 1
= 204

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