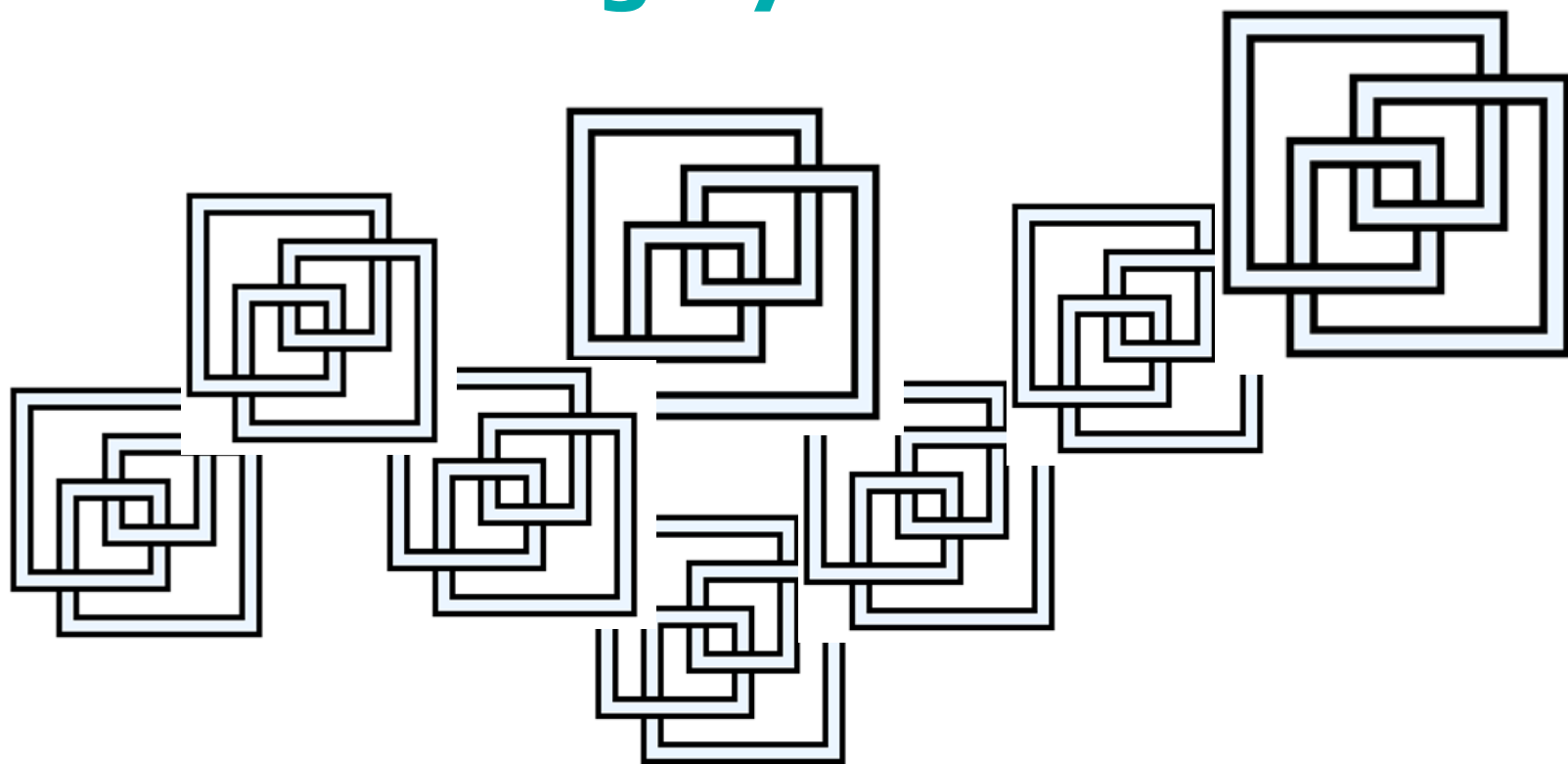


# Royal Institution Primary Maths Masterclasses

## Off the shelf Masterclass: **Being Systematic**



# Counting cubes!

**How  
many  
cubes?**



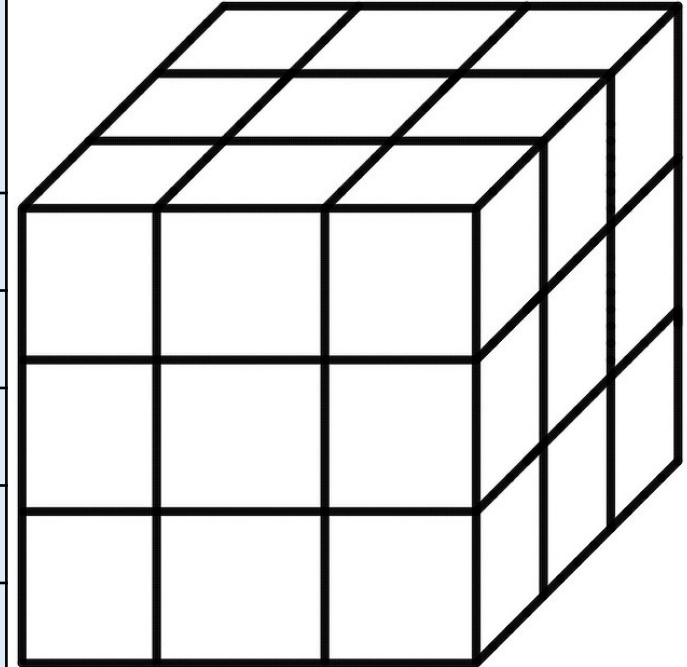
*Image credits: Acdx via Wikimedia Common*

# Answers on the next slide

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

# Counting cubes!

Inner cube size	Upwards/ along/ backwards	In whole cube
1x1x1	3	27
2x2x2	2	8
3x3x3	1	1



Number of cubes in 3 by 3 cube  
 $= 3^3 + 2^3 + 1^3 = 27 + 8 + 1 = 36$

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