Welcome to Maths

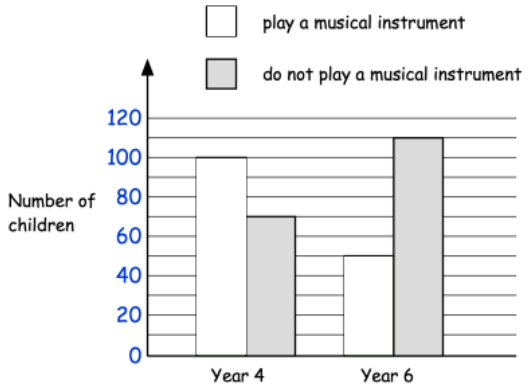
Please have a seat.

Do Now

- Complete the Do Now in your booklets.

Do Now - Answers

$606 + 2{,}525$	$\frac{2}{7} + \frac{3}{7}$
3,131	$\frac{5}{7}$
Round 3,541 to the nearest 100	Round 3,541 to the nearest 1,000
3,500	4,000



How many students are there in **total** in Year 4?

170

How many **more** Year 4 children than Year 6 children play a musical instrument?

50

Do Now – Extension Answers

MAGIC Squares

In each square, the rows, columns and diagonals all total the same **MAGIC** number!

Can you complete the squares?

A

1	0	5
		−2

MAGIC No. = 6

B

−3		
	1	−2
		5

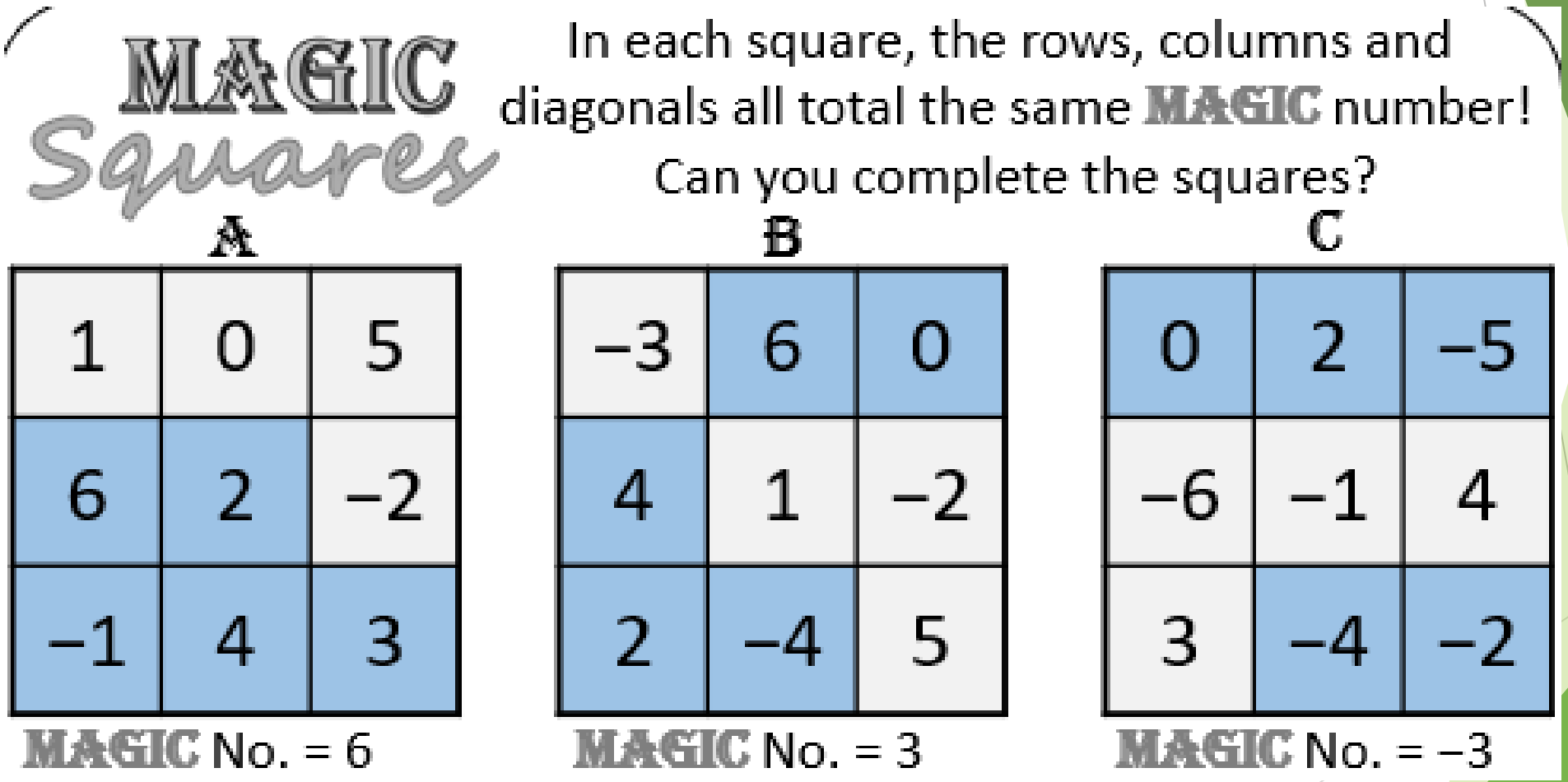
MAGIC No. =

C

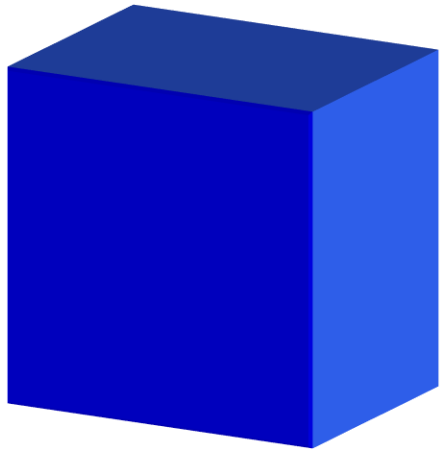
−6	−1	4
3		

MAGIC No. =

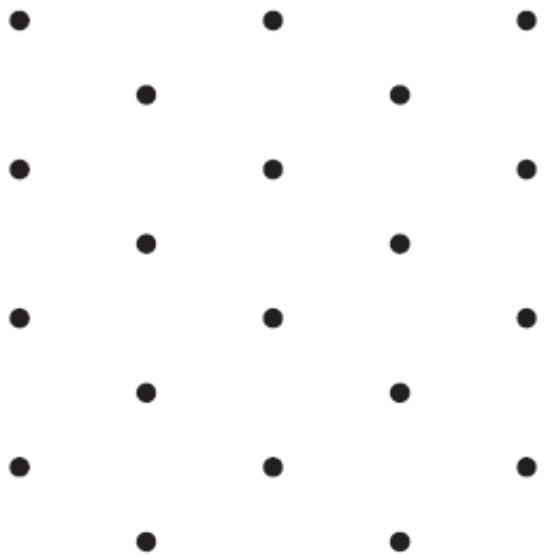
Do Now – Extension Answers



HIDDEN FACES INVESTIGATION

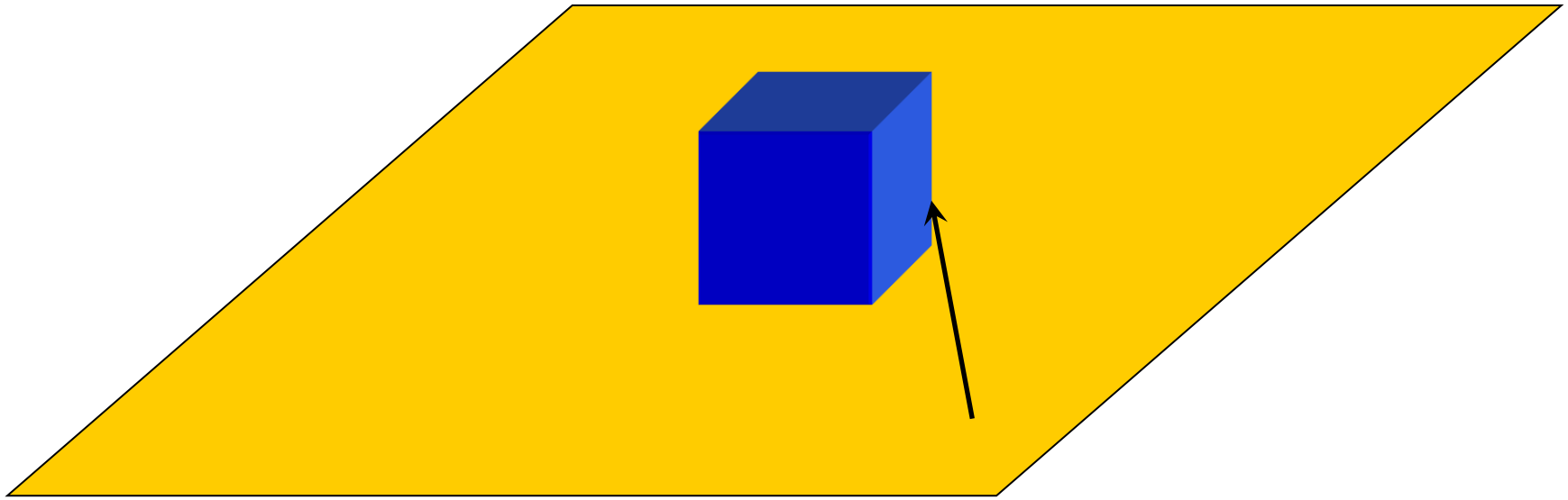


1. Draw one cube on the isometric paper with pencil and a ruler



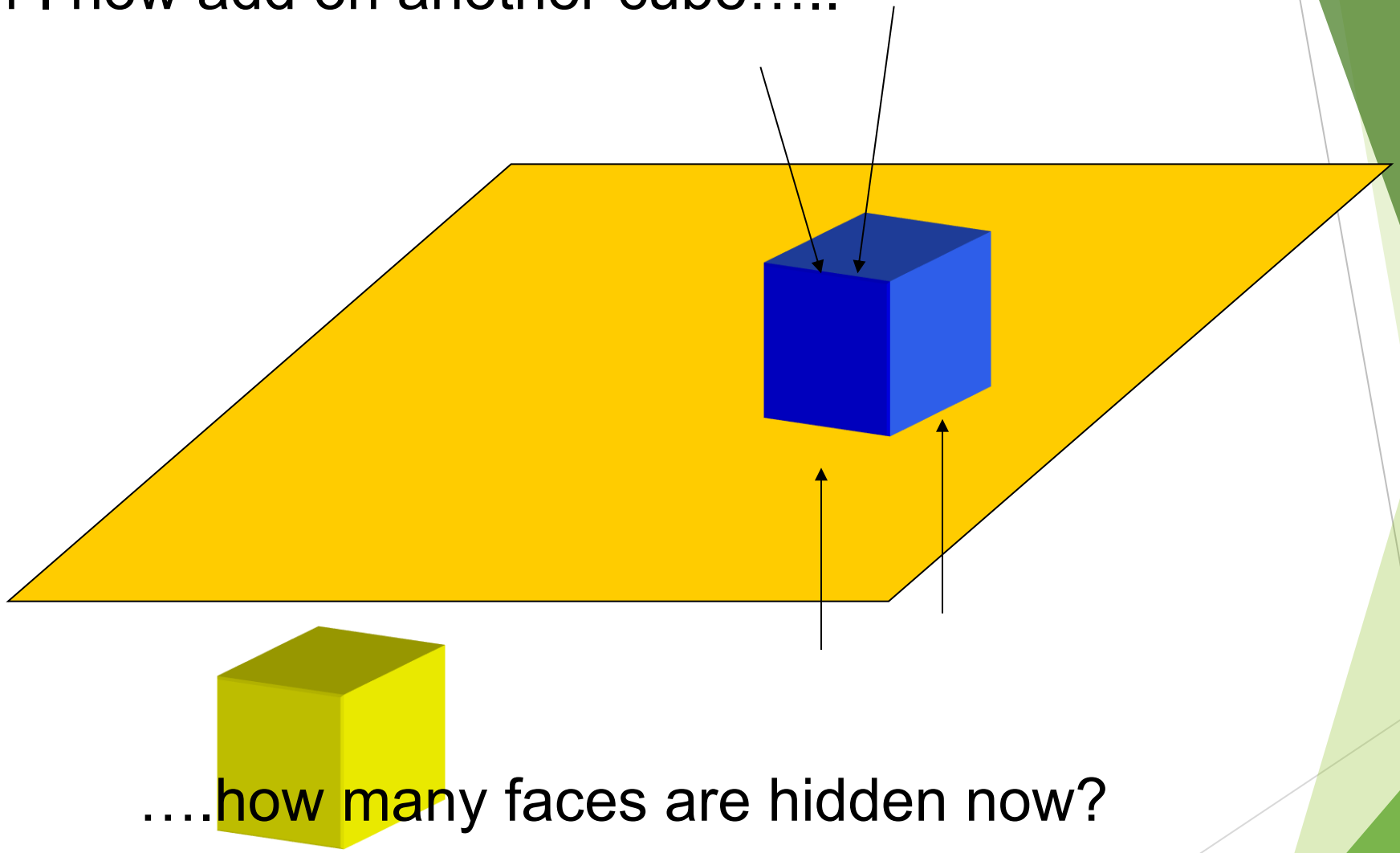
Think about the cube you have just drawn, imagine it is sitting on a table.

You can walk around the table but you cannot pick the cube up



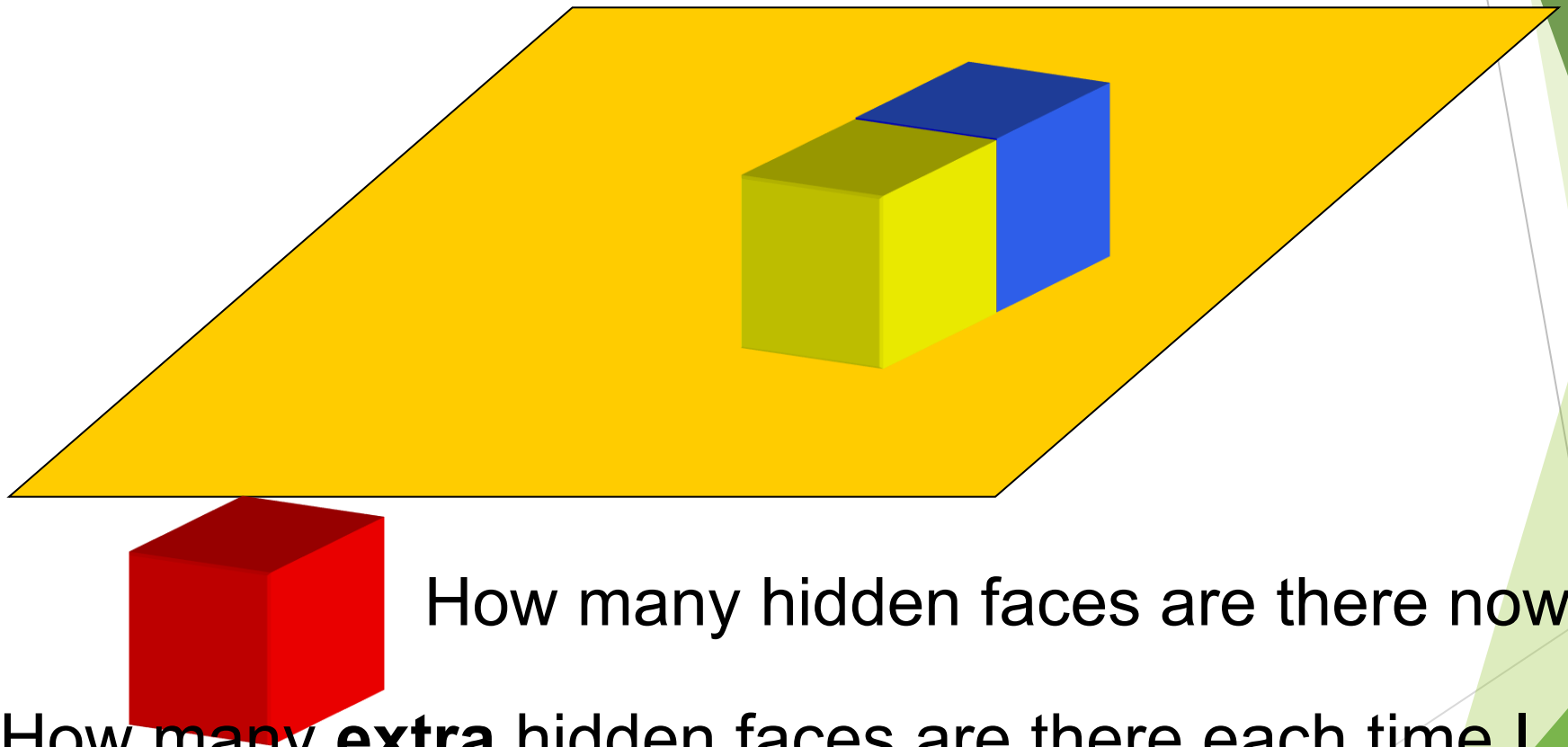
How many faces are hidden?

If I now add on another cube…..



….how many faces are hidden now?

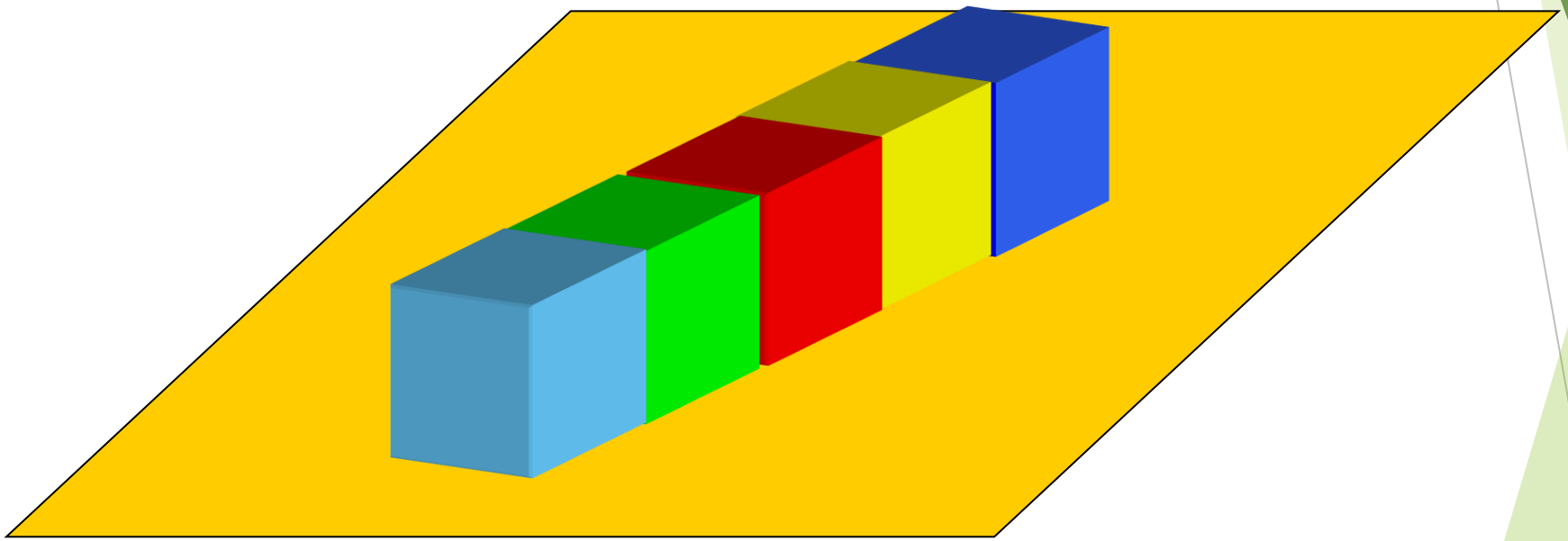
What if I now add another cube?

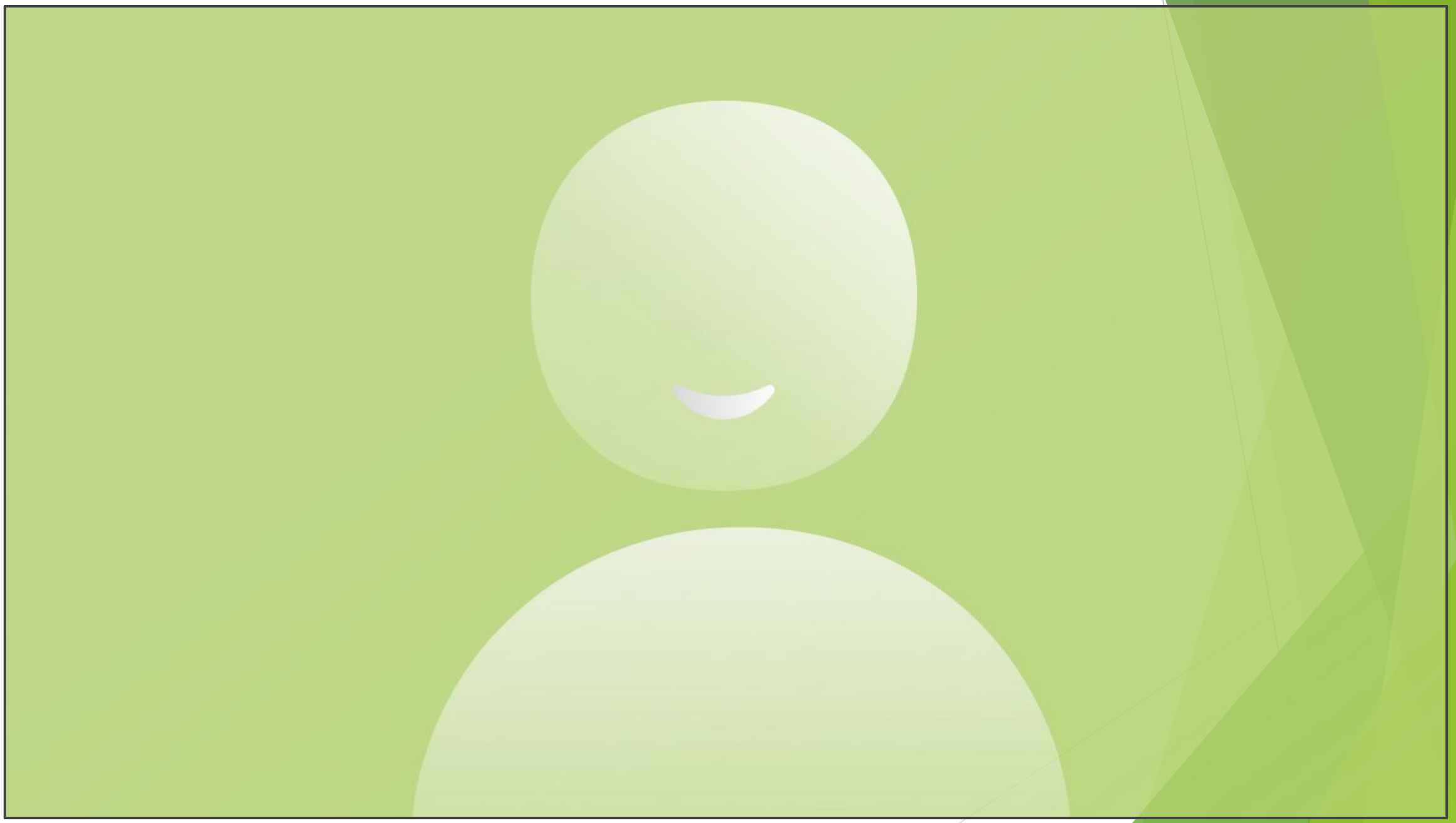


How many hidden faces are there now?

How many **extra** hidden faces are there each time I add on another cube?

Now keep adding on cubes and see if you can find a rule connecting the number of cubes and the amount of hidden faces





Cubes	Hidden	Seen	Total
1			
2			
3			
4			
5			

Cubes	Hidden	Seen	Total
1	1	5	6
2			
3			
4			
5			

Cubes	Hidden	Seen	Total
1	1	5	6
2	4	8	12
3	7	11	18
4			
5			

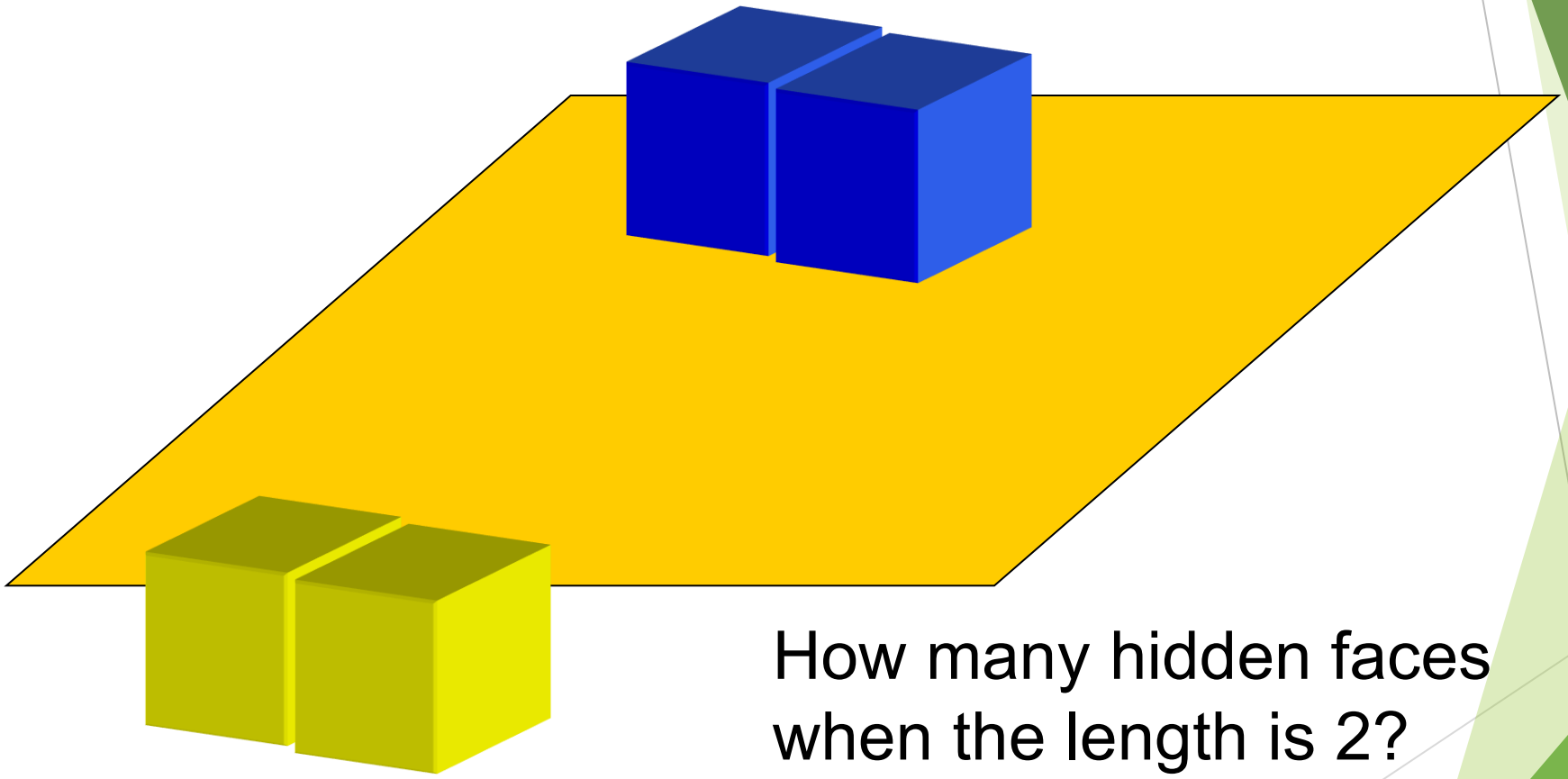
What rules can you spot?

Can you predict what will happen next?

Cubes	Hidden	Seen	Total
1	1	5	6
2	4	8	12
3	7	11	18
4	10	14	24
5	13	17	30

Cubes	Hidden	Seen	Total
1	1	5	6
2	4	8	12
3	7	11	18
4	10	14	24
5	13	17	30
	x3 -2	x3 +2	x6

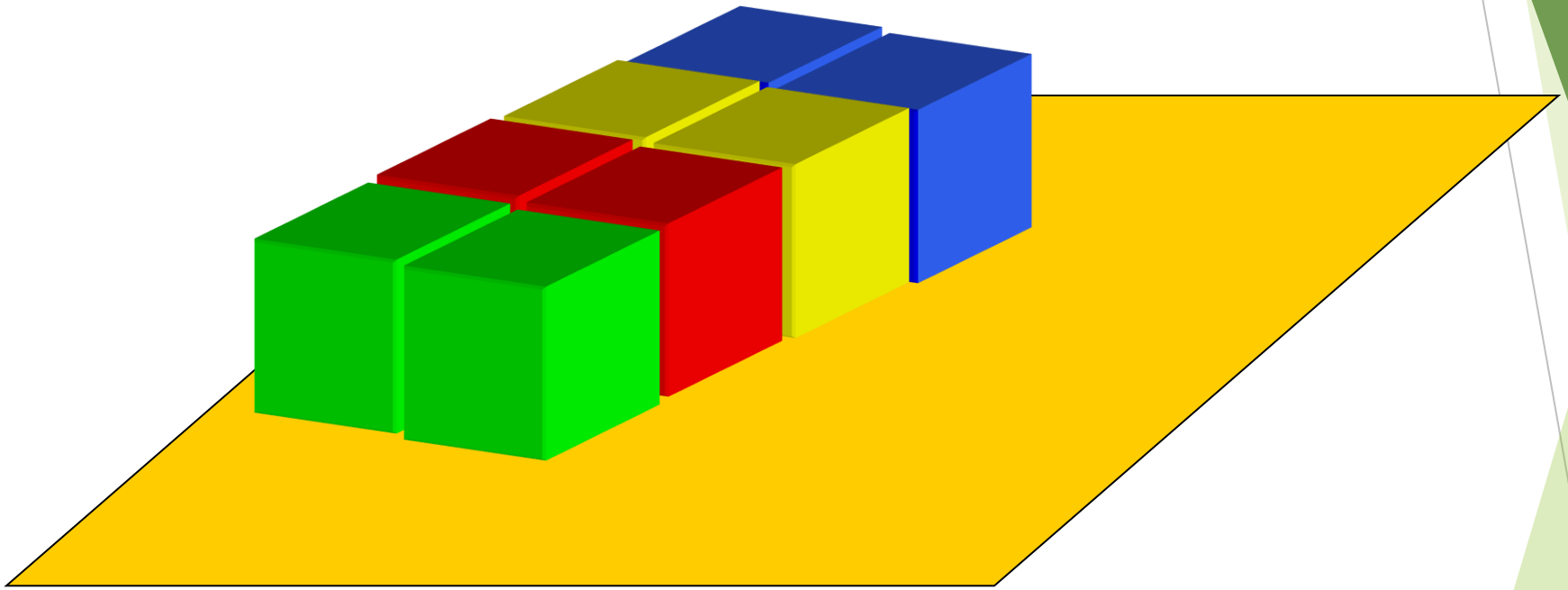
What will happen if I use 2 rows of cubes?
How many hidden faces when the length is just 1?



How many hidden faces when the length is 2?

How many **extra** hidden faces each time I add on two more cubes?

Now keep adding on 2 cubes and see if you can find a rule connecting the length and width and the amount of hidden faces



Bingo!!

9	27	12	5	25	13
27	21	18	6	2	15
8	3	19	26	4	17
10	20	30	11	23	16
1	24	14	29	7	22

Bingo!!

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