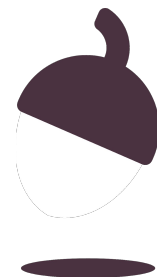


Maths

# Independent Task

To develop strategies to plan and solve problems

Mr Critchlow



**OAK**  
NATIONAL  
ACADEMY

# To Start

## Times tables speed challenge

	4	8	7	10	5	6	9	2	3
4									
9									
8									
10									
11									
12									
6									
7									
5									



## Moving on

Can you work out how many blocks would be needed to make the first 6 steps in the sequence?

Step	Total triangles
1	1
2	4
3	
4	
5	
6	

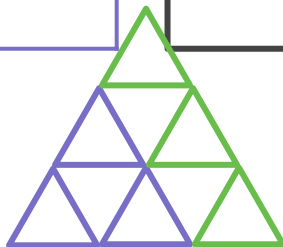
What is the rule of this sequence? What happens to the total number of triangles each time? Explain in a sentence:

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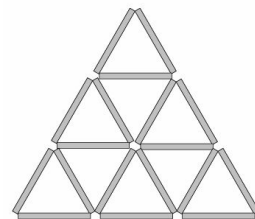
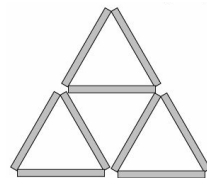
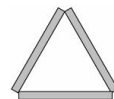
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# Main task

Lets go a step further now and record more information

Step	new matches	Total matches	Triangles
1	3	3	1
2	6	9	4
3			
4			
5			
6			
7			
8			



# Challenge

What do we notice? Can you explain 3 things that you notice here?

Step	new matches	Total matches	Triangles
1	3	3	1
2	6	9	4
3	<b>9</b>	<b>18</b>	<b>9</b>
4	<b>12</b>	<b>30</b>	<b>16</b>

