

Independent Task

To develop strategies to plan and solve problems

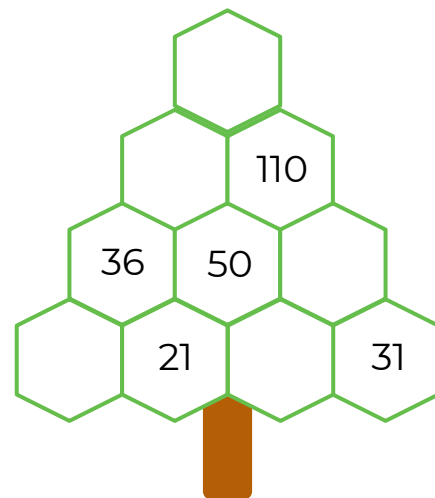
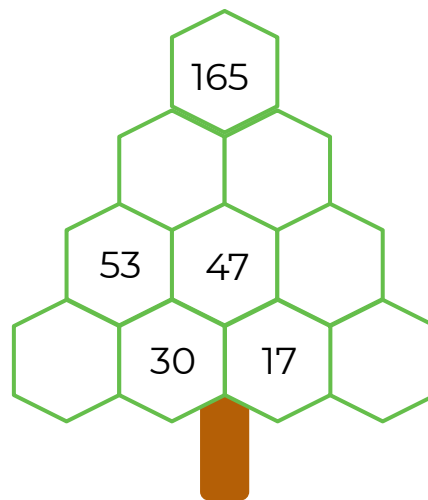
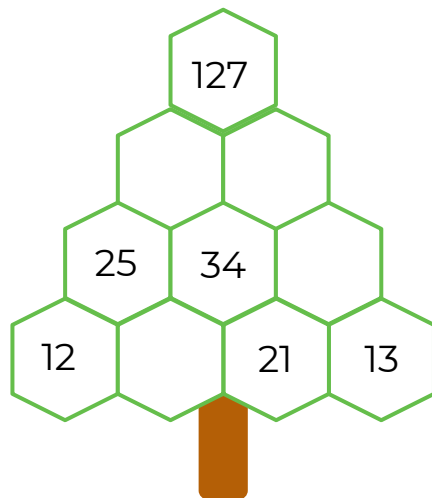
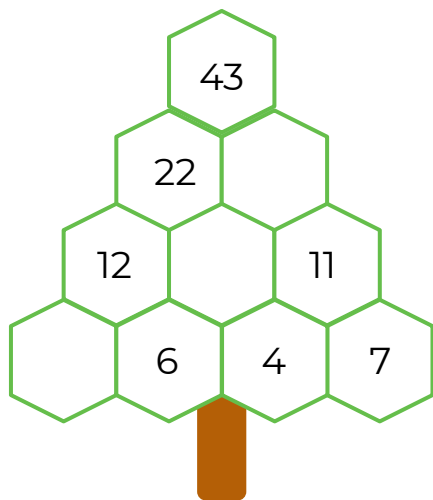
Maths

Mr Critchlow



To Start

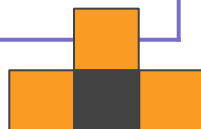
Complete the number trees. The number at the top is the sum of the two numbers below it.



Moving on

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

Step	Total Blocks
1	1
2	4
3	
4	
5	
6	



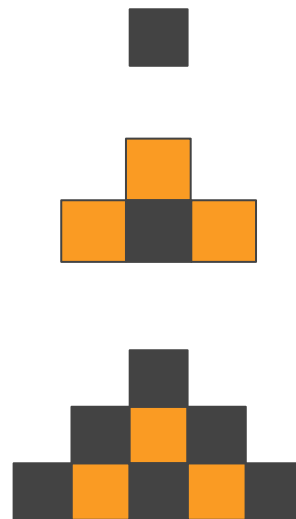
What is the rule of this sequence? What happens to the total cubes value each time?
Explain in a sentence:



Main task

What other patterns can we spot if we break it down even more?

Step number	New blocks	Total blocks
1	1	1
2	3	4
3		
4		
5		
6		
7		
8		



Challenge

Using what we know, how can we work out the number of blocks for ANY step number?

Step number	Way to work it out	Total
1	1×1 or 1^2	1
2	2×2 or 2^2	4
3		
9		
10		
20		
50		

