

Name:

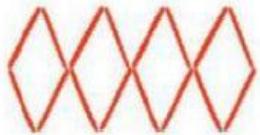
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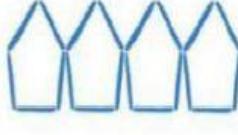
T-table – Patterns

1.

5

Number patterns can help in creating shape patterns. These patterns are made with sticks. Fill in the gaps.

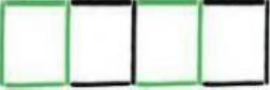
Pattern of sticks	Rule for making the pattern	How many sticks are needed?										
e.g. 	Start with 3 sticks. Increase the number of sticks by 3 for each new triangle.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number of triangles</th><th>1</th><th>2</th><th>3</th><th>4</th></tr> </thead> <tbody> <tr> <td>Number of sticks</td><td>3</td><td>6</td><td>9</td><td>12</td></tr> </tbody> </table>	Number of triangles	1	2	3	4	Number of sticks	3	6	9	12
Number of triangles	1	2	3	4								
Number of sticks	3	6	9	12								
a 	Start with 4 sticks. Increase the number of sticks by _____ for each new diamond.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number of diamonds</th><th>1</th><th>2</th><th>3</th><th>4</th></tr> </thead> <tbody> <tr> <td>Number of sticks</td><td></td><td></td><td></td><td></td></tr> </tbody> </table>	Number of diamonds	1	2	3	4	Number of sticks				
Number of diamonds	1	2	3	4								
Number of sticks												

b 	Start with _____ sticks. Increase the number of sticks by _____ for each new hexagon.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number of hexagons</th><th>1</th><th>2</th><th>3</th><th>4</th></tr> </thead> <tbody> <tr> <td>Number of sticks</td><td></td><td></td><td></td><td></td></tr> </tbody> </table>	Number of hexagons	1	2	3	4	Number of sticks				
Number of hexagons	1	2	3	4								
Number of sticks												
c 	Start with _____ sticks. Increase the number of sticks by _____ for each new pentagon.	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Number of pentagons</th><th>1</th><th>2</th><th>3</th><th>4</th></tr> </thead> <tbody> <tr> <td>Number of sticks</td><td></td><td></td><td></td><td></td></tr> </tbody> </table>	Number of pentagons	1	2	3	4	Number of sticks				
Number of pentagons	1	2	3	4								
Number of sticks												

2.

6

These stick patterns are made in a different way. Complete the rule and write the number of sticks for each term.

Pattern of sticks	Rule for making the pattern	How many sticks are needed?										
e.g. 	Start with 3 sticks. Increase the number of sticks by 2 for each new triangle.	<table> <thead> <tr> <th>Number of triangles</th><th>1</th><th>2</th><th>3</th><th>4</th></tr> </thead> <tbody> <tr> <th>Number of sticks</th><td>3</td><td>5</td><td>7</td><td>9</td></tr> </tbody> </table>	Number of triangles	1	2	3	4	Number of sticks	3	5	7	9
Number of triangles	1	2	3	4								
Number of sticks	3	5	7	9								
a 	Start with 4 sticks. Increase the number of sticks by _____ for each new square.	<table> <thead> <tr> <th>Number of squares</th><th>1</th><th>2</th><th>3</th><th>4</th></tr> </thead> <tbody> <tr> <th>Number of sticks</th><td>4</td><td></td><td></td><td></td></tr> </tbody> </table>	Number of squares	1	2	3	4	Number of sticks	4			
Number of squares	1	2	3	4								
Number of sticks	4											
b 	Start with _____ sticks. Increase the number of sticks by _____ for each new hexagon.	<table> <thead> <tr> <th>Number of hexagons</th><th>1</th><th>2</th><th>3</th><th>4</th></tr> </thead> <tbody> <tr> <th>Number of sticks</th><td>6</td><td></td><td></td><td></td></tr> </tbody> </table>	Number of hexagons	1	2	3	4	Number of sticks	6			
Number of hexagons	1	2	3	4								
Number of sticks	6											