**Level E – Matchstick maths**

Your Task: Complete a number of matchstick activities similar to the one completed in the algebra orientation. They need to have a table for each investigation and a rule.

Video- <http://theglobalschool.net/maths/paE>

Key Ideas:











Rule: Number of match sticks Number of boxes x 3 + 1

Here are some investigations for you to conduct:

|  |  |
| --- | --- |
| Number of stars | Number of lines |
| 1 | 8 |
| 2 | 15 |
| 3 | 22 |
| 4 | ... |
| - | - |
| 10 | ... |

1.



Rule:

1. Fill in the table of values and find the rule

Rule: Number of match sticks Number of boxes x 3 + 1

Rule: Number of match sticks Number of boxes x 3 + 1

1. Predict the number of lines in 10 Stars

2.

|  |  |
| --- | --- |
| Number of Pentagons |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| - | - |
| 10 | . |



Rule:

1. Fill in the table of values and find the rule
2. Predict the number of dots in 10 Pentagons

3.

|  |  |
| --- | --- |
|  |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| - | - |
| 10 | . |



Rule:

1. Fill in the table of values and find the rule
2. Predict the number of lines in 10 rows

Your turn...

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| - | - |
| 10 | . |

4.



1. Fill in the table of values and find the rule

Rule:

1. Predict the number of lines in 10 cross arms

5.



1. Draw a table of values and find the rule
2. Predict the number of lines in 10 triangles