Pattern Stations

Direction: Go to each station with a partner. After completing a station come see me to see if you did it correctly for a sticker. There are two stations with stars- these are the challenging stations! Please write which station you are at.
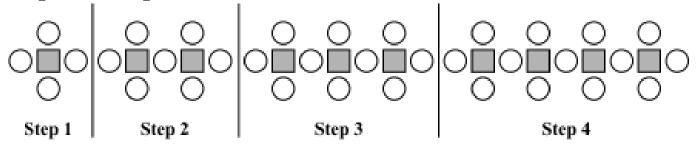
1. **Station**_____

2. Make a sketch or show step 5.	3. Complete the table of values below.
          How many units make up this step? ____	<table><tr><td>Step Number</td><td>Number of Units</td></tr><tr><td></td><td></td></tr><tr><td>5</td><td></td></tr><tr><td>6</td><td></td></tr><tr><td>7</td><td></td></tr><tr><td>8</td><td></td></tr><tr><td>9</td><td></td></tr><tr><td>10</td><td></td></tr></table>
How many units would step 25 be?	Describe any number patterns you notice. Make an equation if you can.

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How many units would step 25 be?	Describe any number patterns you notice. Make an equation if you can.

Station P

Don made a pattern using circles and squares. The first four steps of his pattern are shown below.

Step 1   Step 2   Step 3   Step 4

Station A

Kate wrote the number pattern shown below.

5, 20, 80, 320, . . .

Station T1

Sheila started the geometric pattern shown below.

1, 3, 9, 27, __?__

Francine started the number pattern shown below using the rule "multiply the previous number by 2 and then add 3 to the result to get the next number."
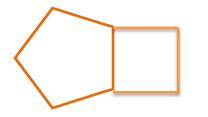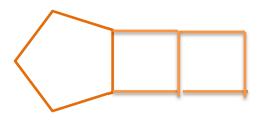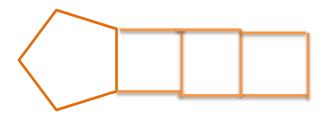
1, 5, 13, 29 . . .

Station E

A comet passed by Earth in the year 1835. It passes by Earth every 60 years. (make 1835 step one)
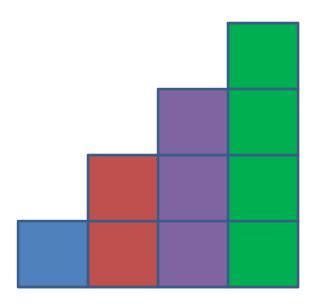
Station R

The first three stages are shown below:

Station N

A "staircase" that is 4 cubes high is shown below. Notice that 10 cubes are needed to build the staircase.

Height of Stair Case	1	2	3	4
Number of cubes needed	1	3	6	10