## MathFLIX CHALLENGE

## Using a Table to Discover a Pattern: Practice

Each figure is made of toothpicks. Assume that the sequence of figures continues with each pattern increasing in size in a similar manner. How many toothpicks will be needed to create the 15 th figure in the sequence?


1. What do you see?
2. Can you predict the question?
3. Read the problem.
4. How many toothpicks do you need to make 1 square? How many are added to make 2 squares? How many are added to make 3 squares? How many are added to make 4 squares?
5. Predict how many you would need for 5 squares, for 6 squares and for 7 squares.

5 What rule did you use to make the prediction?
6. Complete this table for up to 15 squares:

| \# of <br> Squares | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| \# of <br> Toothpicks |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

First I studied the diagram because $\qquad$
Second I read the problem because $\qquad$
Next, I decided to make a table because $\qquad$
My answer is $\qquad$ because $\qquad$

