

Name _____

Date _____

Toothpicks II

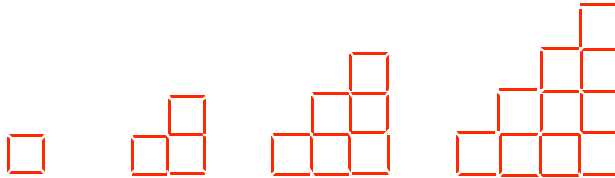


Figure 1 **Figure 2** **Figure 3** **Figure 4**

1. Extending the pattern, what is the perimeter of **Figure 5**? Show or explain how you figured this out.
2. How many toothpicks are needed to make **Figure 6**? Show or explain how you figured this out.
3. How did you decide how each new figure in the sequence is made?
4. Write a formula that you could use to find the perimeter of any Figure N. Tell what your variables represent. Explain how you figured this out.
5. Write a formula that you could use to find the total number of toothpicks needed to make any Figure N. Tell what your variables represent. Explain how you figured this out.