

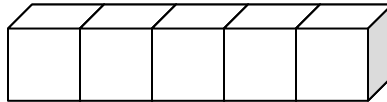
# Describing Patterns 2

NAME \_\_\_\_\_

Visit the “Describing Patterns” web page

<http://standards.nctm.org/document/eexamples/chap4/4.1/Part2.htm> and go to “Figure 2b”.

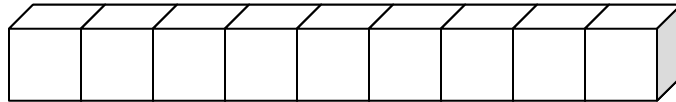
1. Using the interactive tool in “Figure 2b,” click on the Step Button, only 2 times, creating a growing cube pattern. Color the “growing” pattern that appeared using the blocks below.



2. Discuss with your partner how the pattern will look, after it “grows” one more time. Draw your team’s prediction.

3. Use the interactive tool in “Figure 2b.” Click on the step button one more time. How many connecting-cubes are now in the pattern?

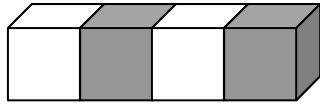
4. Color the “growing” pattern that appeared using the blocks below. Discuss with your partner how the pattern that appeared is similar to your prediction.



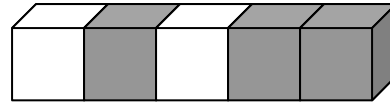
5. Imagine this “growing” connecting-cube pattern has twenty connecting cubes. Draw and color the pattern with 20 connecting-cubes. Then write a description of this connecting cube pattern using the letters “A and B”



6. Explain how a “growing pattern” is different from a “repeating pattern.”



Repeating Pattern



Growing Pattern

7. Imagine the growing pattern with twenty connecting cubes continues growing. How many steps will be needed until the total number of cubes more than doubles? Explain how you know.