Making Patterns 2

NAME _____

Visit the Making Grid Patterns web page at
http://standards.nctm.org/document/eexamples/chap4/4.1/standalone1.htm.

1. Look at the two-square (red-blue) pattern unit shown at the top of the grid on the web site. Click the **Up Arrow** (near the top right); this will make the words Pattern Unit 2 change to Pattern Unit 3, and it will add a square to make a three-unit pattern. Then, change the color of all three squares by clicking a square and then clicking one of the color buttons. Make your three-unit pattern **green**, **red** and **purple**.

2. When you are done changing your colors, click the **Step Button** 12 times. Look at the patterns created by this three-unit pattern. With your team, predict the color of the 40th square. Explain why you made this prediction.

Step Button

3. Click the Up Arrow to add another square to your unit pattern. Color the new square yellow. Imagine that the whole grid is filled with this four-unit pattern.

   a. What does your team predict the color of the 8th square on the grid will be? Explain why.

   b. What color does your team predict the 16th square on the grid will be? Explain why.

   c. What color does your team predict the 40th square will be? Explain why.

4. Now, click the **Play Button** to fill the entire grid with your four-unit pattern (green, red, purple, yellow). Look at the computer and color your grid below so it matches the grid on the screen. Did you guess the 8th, 16th and 40th colors correctly?

Play Button

							8th		
					16th				
									40th

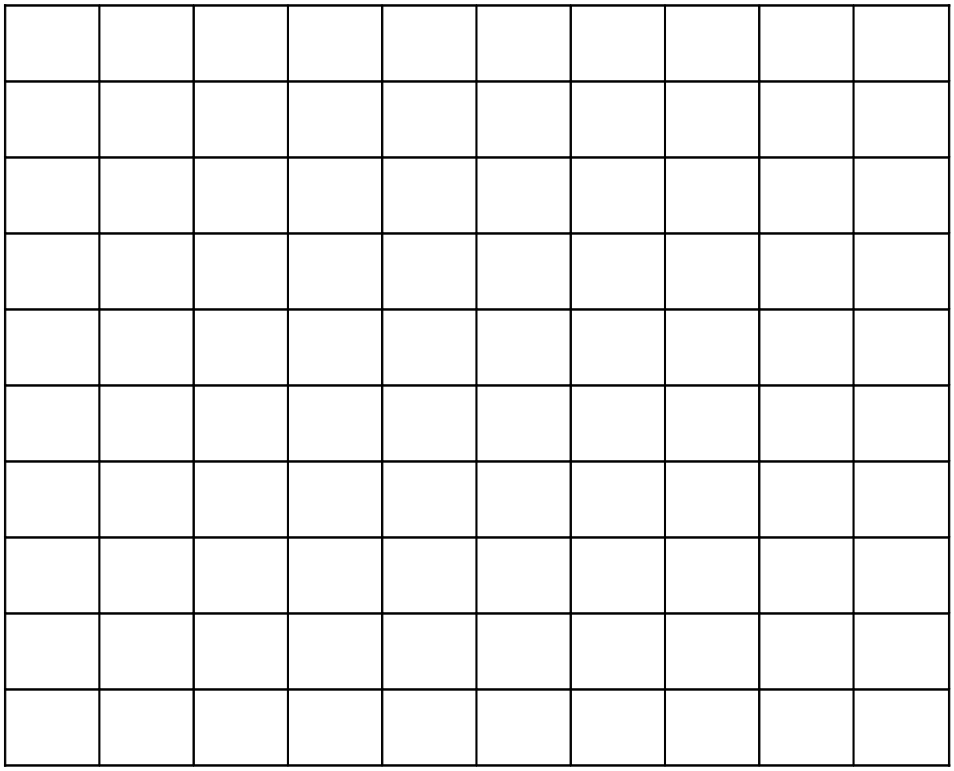
a. How was the four-unit pattern **different** from the three-unit pattern?

b. How was the four-unit pattern **similar** to the three-unit pattern?

5. Now add a blue square to make a five-unit pattern.

a. How many times will this five-unit pattern fit in the first row of the grid? How do you know?

b. Predict how the rows in the grid will look once it is filled with the five-unit pattern. Color your prediction below



6. When you are done coloring, click the **Play Button** to fill in the whole grid. Compare the pattern that appeared on the screen with your prediction above. Describe one way the five-unit pattern is **different or similar** to a four-unit pattern.