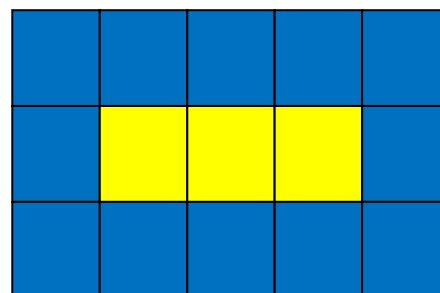
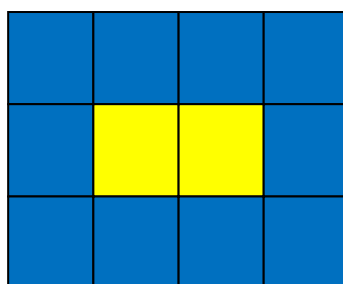
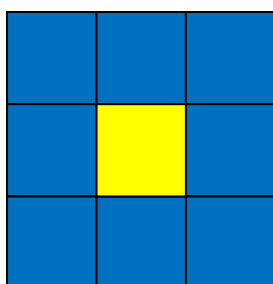


Student Activity: Tile Patterns

Use in connection with the interactive file, 'Tiles', on the Student's CD.



- Each time a new figure is made in the diagram above how many blue tiles and how many yellow tiles are added?

- Complete the following table:

Number of Yellow Tiles	Number of Blue Tiles	Number of blue tiles added	Number of yellow tiles added
1	8		
2	10	2	1
3			
4			
5			
6			
7			
8			
9			
10			

- For each yellow tile added how many blue tiles are added?

- Describe the pattern formed with the yellow and blue tiles in your own words.

- Let the number of yellow tiles = n , we know from our first shape that the yellow tile is surrounded by 8 blue tiles, and each time we add a yellow tile we must add two blue tiles.
 - Can you write a formula that represents the total number of tiles used in any of the shapes?

- What is the formula in terms on the number of yellow tiles that represents the total number of blue tiles?

- If 100 yellow tiles are used, how many blue tiles must be used to complete the pattern? Explain how you got your answer.
