LOOK FOR PATTERNS

When students use this problem-solving strategy, they are required to analyze patterns in data and make predictions and generalizations based on their analysis. They then must check the generalization against the information in the problem and possibly make a prediction from, or extension of, the given information. A pattern may be numerical, visual or behavioral. By identifying the pattern, students can predict what will come next and what will happen again and again in the same way.

Example 1:

If the following figure is continued, how many letters will there be in the G row?

A
BBB
CCCCC
DDDDDD

Students may notice a pattern of adding 2 letters for each row. Therefore, there will be 13 letters in the G row.

Example 2:

Julius used 6 blocks to make this 3-step staircase. How many blocks will he need to make a 5-step staircase?

He needs 1 block for 1-step staircase
He needs 3 blocks for 2-step staircase   (+2)
He needs 6 blocks for 3-step staircase   (+3)
He needs 10 blocks for 4-step staircase   (+4)
He needs 15 blocks for 5-steps staircase   (+5)

Students may also combine their strategies. This is what it may look like when they combine Make a Table and Look for patterns strategies.

Steps	Total blocks needed
1	1
2	1+2 = 3
3	1+2+3 = 6
4	1+2+3+4 = 10
5	1+2+3+4+5 = 15