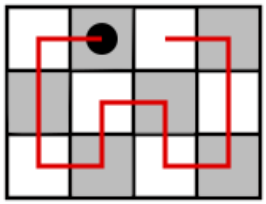
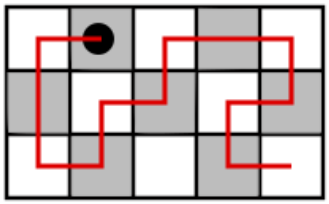
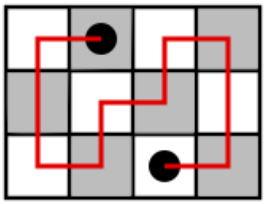
Puzzle of the Week
Paths on Checkerboards – 2

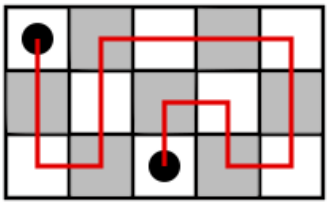
In the Puzzle of the Week "Paths on Checkerboards - 1" we looked at when it was possible, starting at a given point, to make a path on a checkerboard that visited every square. Starting at the black dot, the first 3 by 4 checkerboard has a path and the second 3 by 5 checkerboard does not.



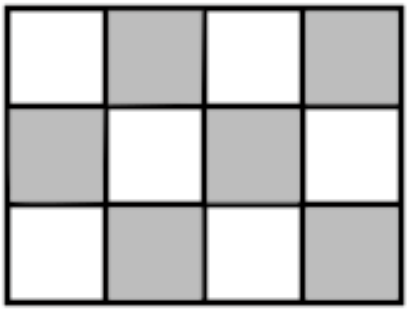


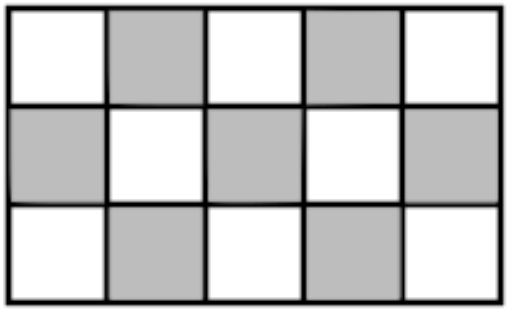
For this puzzle we have both a starting and ending point, and ask the question of whether there is a path that starts at one point and visits every point exactly once on the way to ending at the other point.





THE CHALLENGE: For these two checkerboards, identify which pairs of starting and ending positions have a path that links them that visits every square in the board once, and which ones do not. What is the difference?





EXPLORATION: Create some other sizes of checkerboards and try various starting positions on these. Do you see any patterns for which starting positions work on each board?