

Here's what you'll need to make Martin Gardner's Magical Möbius Surprise:



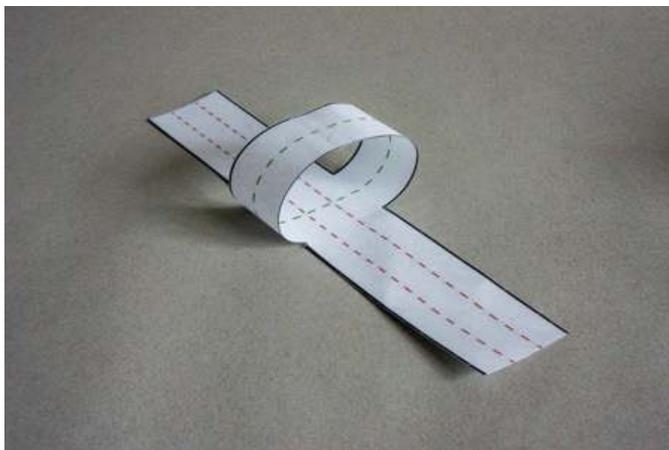
Printing Instructions:

Print page 2 of this document on an 8-1/2 x 11" sheet. Plain white paper is best. Be sure your print margins are *the same on all four sides of the page*. Now take the paper, turn it over, put it back in the printer, and print page 2 again on the back of the sheet. (Printing on both sides of the paper is not necessary, but it makes it a bit easier to follow the lines when you're cutting them.)

Assembly Instructions:

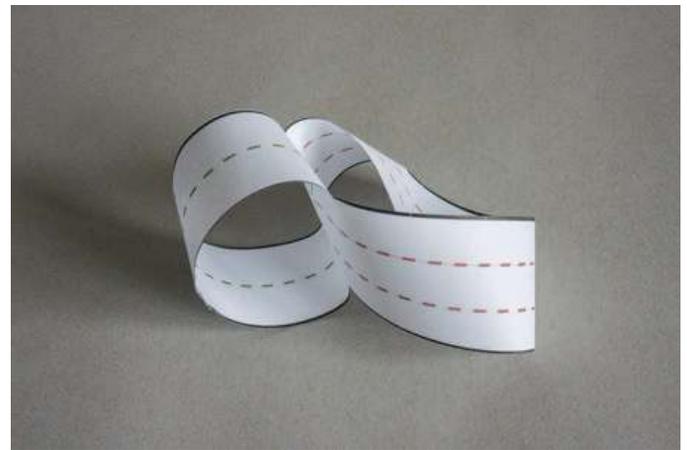
Step 1:

Cut out the big cross-shaped piece, following the heavy black outline. Tape the short ends labeled *A* together *without twisting them*, to make a loop, as shown:



Step 2:

Bend the two ends labeled *B* away from the *A*-loop you just made, *give one end a half-twist*, and tape them together. Here's what you'll get:



Magic Möbius Strip Puzzle Challenge:

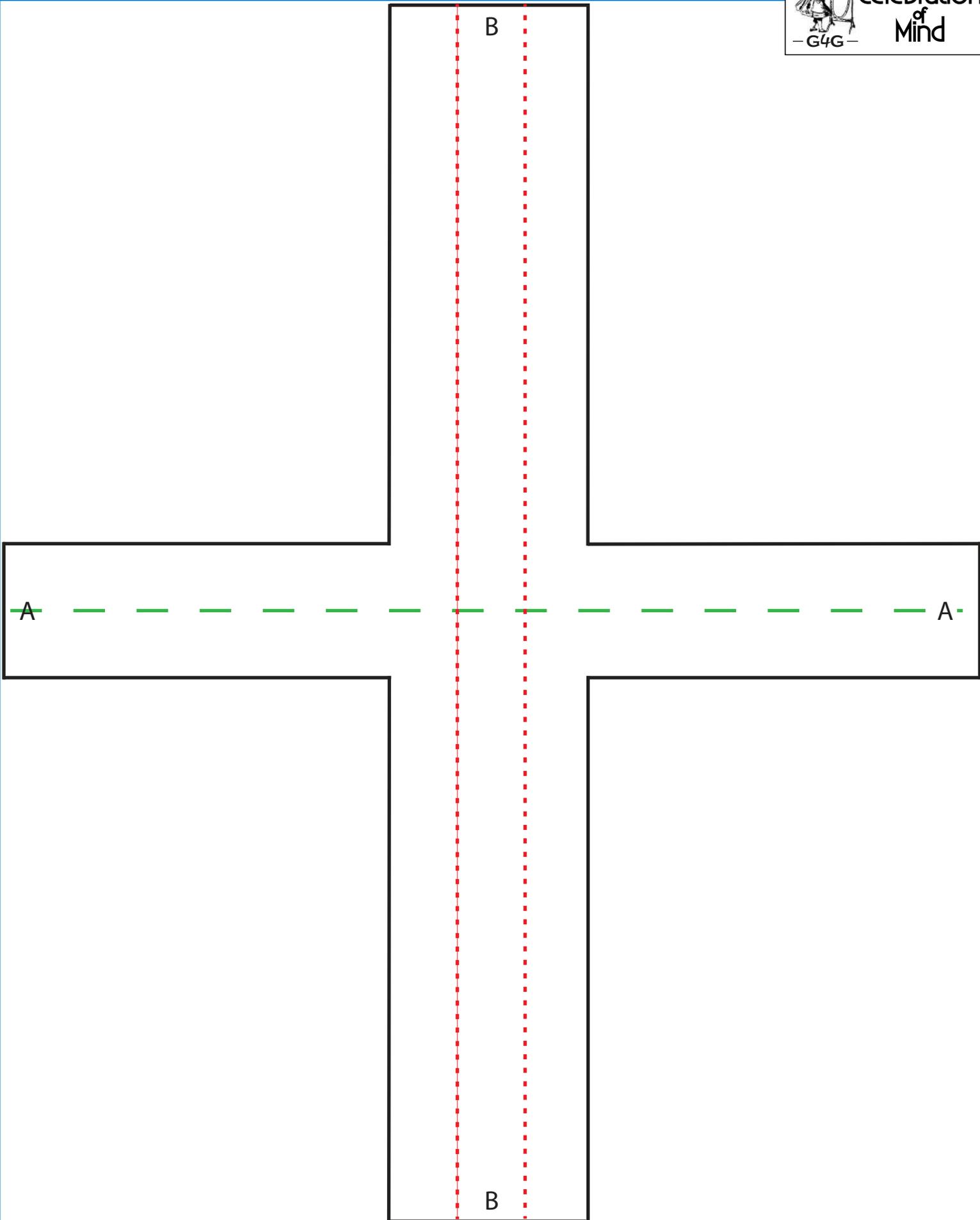
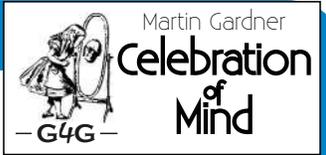
Before you cut the möbius surprise, look at the four multiple-choice outcomes for the puzzle on page three, and guess which one is correct!

Cutting Instructions:

Cut along the dotted red lines *first* to trisect the long section. Then bisect the short section by cutting along the green dashed line. Be sure to cut in this order, so the surprise will work!

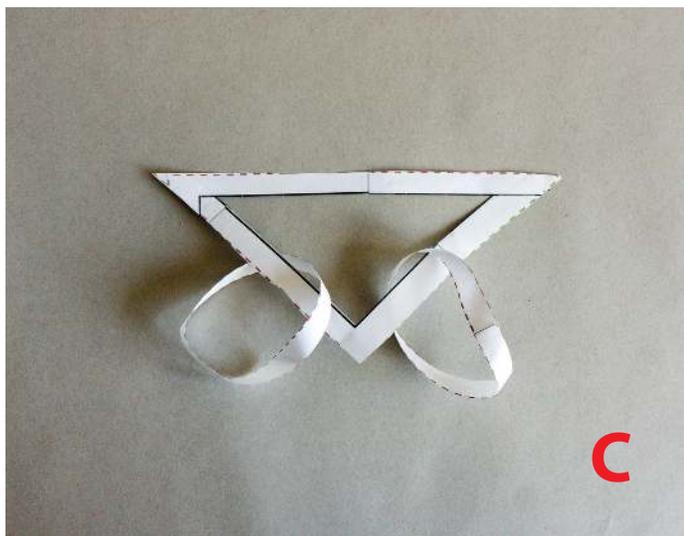
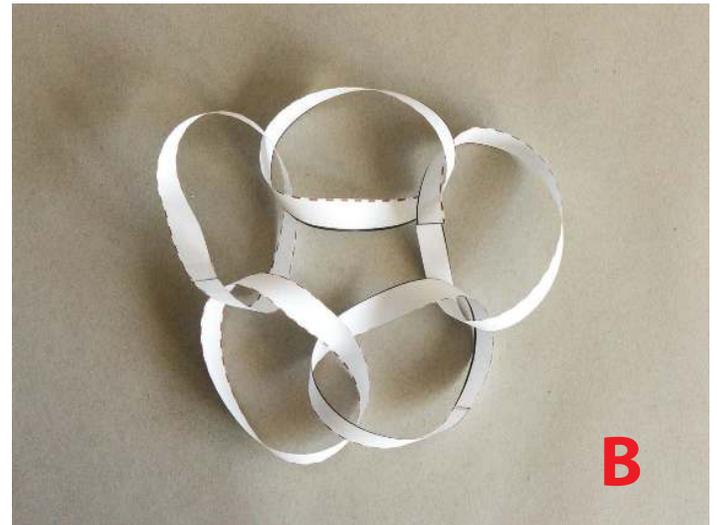
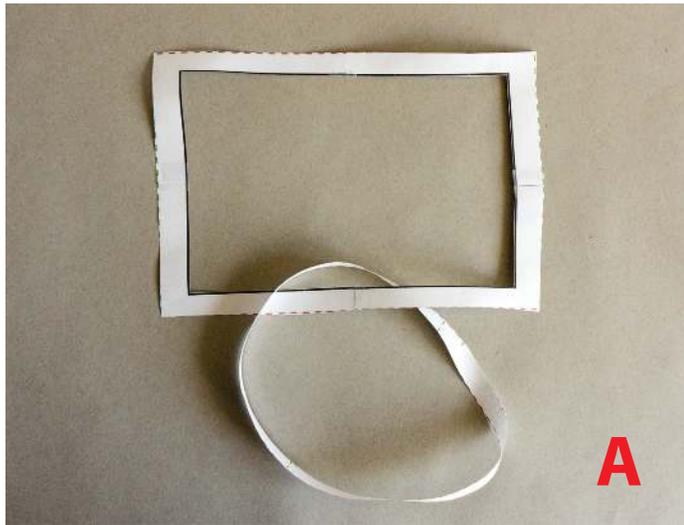


MARTIN GARDNER'S MAGICAL MÖBIUS SURPRISE



The Magical Möbius Strip Challenge:

Which of the following four photographs shows what you'll get when you cut out the Magical Möbius Surprise?



Background:

This amazing puzzle came about when Ivars Peterson received a letter from Martin Gardner containing a copy of this puzzle, which Gardner said was unpublished.

See: <http://mathtourist.blogspot.com/2010/10/martin-gardners-mobius-surprise.html>