

Name:

Math Olympiad Construction Fun!

A Möbius Strip

Create a Möbius Strip: For this activity, you need some tape, scissors, and a pencil. Be careful with the scissors! Cut off the blank half of this sheet. Holding it the tall way, label the top left corner "A," the top right corner "B," the bottom left corner "C," and the bottom right corner "D." Give the strip a twist and tape the two ends together so that "A" touches "D" and "B" touches "C."

Properties of a Möbius Strip: Take your pencil and draw a line. If you take your pencil and start drawing a line around the middle of the strip, where do you end up?

The line is on both sides of the paper – that means that this piece of paper only has one side! Now use your scissors to cut the paper along the line. What do you think will happen? What happens?

Do the same thing again. Draw a line around the middle of the new strip. How many sides does this paper have?

What do you think will happen if you cut it again? Cut it again and see what happens. Draw a picture of what happened.