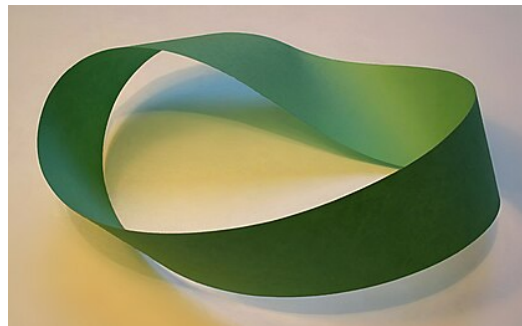


Learning Activities: Möbius Strip
PA Core Standards Content Area:
Mathematics

Introduction

What is a Möbius strip?

A Möbius strip is a really interesting mathematical shape. It was discovered by August Möbius, a German mathematician, in 1858. The shape is a flat circle with a twist in it.



The strip is a continuous strip that circles in upon itself. It doesn't have a beginning or end. It doesn't have an inside or outside.

What does a Möbius strip have to do with *Romeo and Juliet*?



In the ballet, Romeo and Juliet get married under a canopy. After the ceremony Friar Laurence's acolytes turn the canopy into a Möbius strip. It symbolizes the unbreakable unity and bond between Romeo and Juliet. It means that even death will not end their love.

Watch the wedding here:

[2002 Romeo & Julietta](#)

Watch from 59:30 - 1:10:00

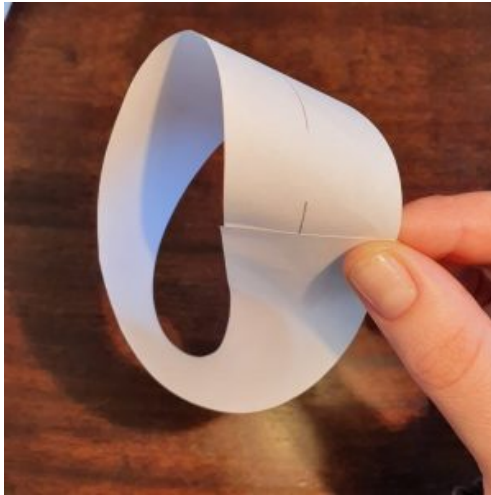
Activity 1: Make your own

Möbius strip!

Supplies:

- 8 ½ X 11 paper or construction paper
- Scissors
- Tape
- Pencil

Process:



- Cut a 1-inch strip from the short end of the paper so that you have an 8 ½ inch long strip.
- Loop it around to make a circle but flip one end over, making a twist in the circle.
- Tape the ends horizontally, all the way across where the ends meet. This is your Möbius strip!

Take your pencil and draw a line around the middle of the strip, without picking up your pencil (you may need to twist the strip as you go along). Where did you end up?

Activity 2: Make interlocking Möbius Valentine hearts!



Supplies:

- Pink, red, or white 8 ½ X 11 paper
- Tape
- Scissors

Process:

- Make two Möbius strips from Activity 1, HOWEVER, change the orientation of the twist. If you twisted your first strip to the right, twist the 2nd one to the left. This is very important!
- Place your strips perpendicular to each other (at right angles) and tape the joined area securely.



- Cut lengthwise down the middle of the strips!

Here's a quick video tutorial: <https://www.youtube.com/watch?v=X-eu1rmzH1E>