

The Möbius Strip or The Möbius Band

Lesson 1

LO to investigate the Mobius Strip.

August Ferdinand Möbius

- 1790-1868
- German
- Contributed to:
 - Geometry
 - Number Theory
- Studied under Gauss
- Most know for his Möbius Strip



A. F. Möbius

Here is a strip of paper.



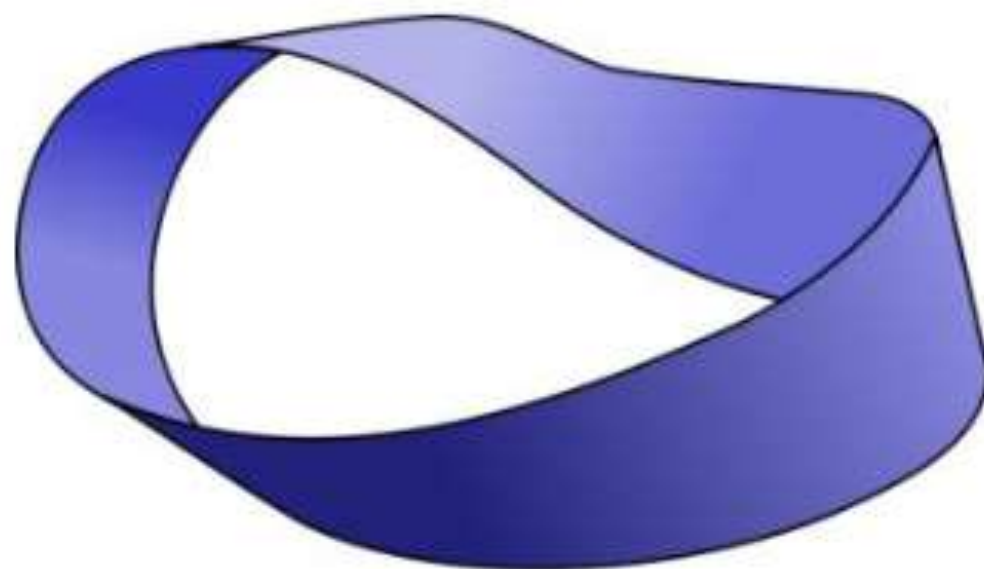
How many sides does it have?

How many edges does it have?

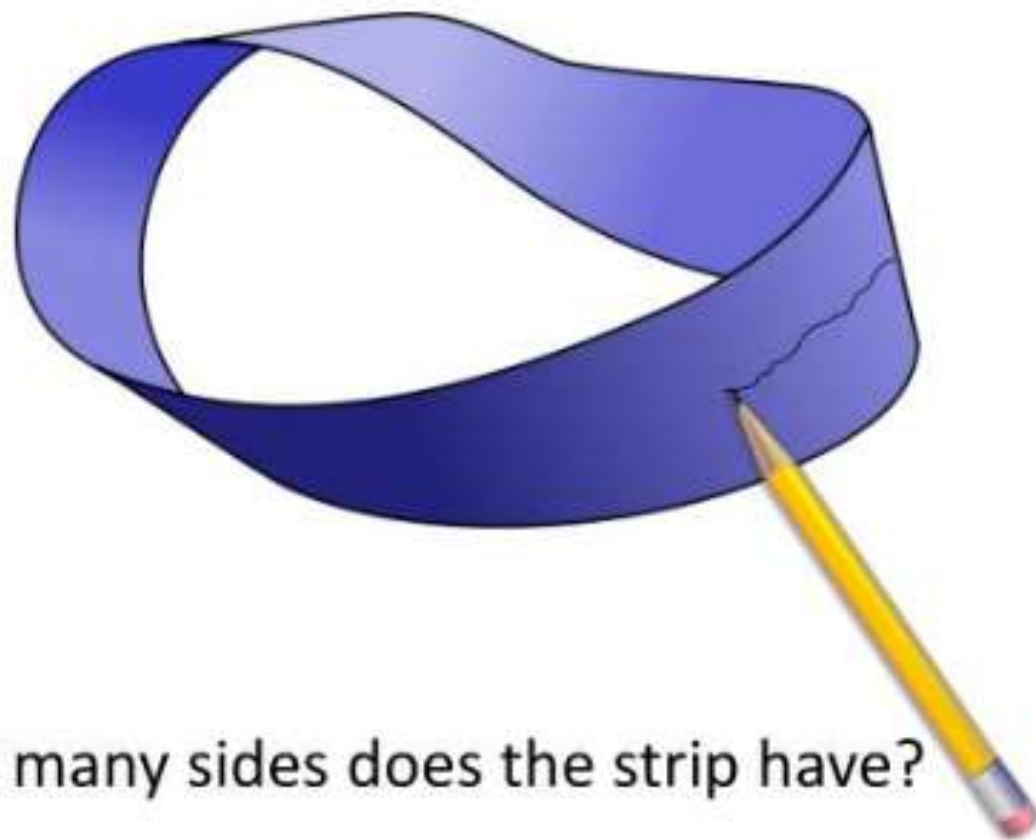
Now make a loop by sticking the ends together but
give a half twist first



It should look
something like this.
This is a Möbius Strip.



Now draw a line down the middle of the strip.



How many sides does the strip have?

How many edges does it have?

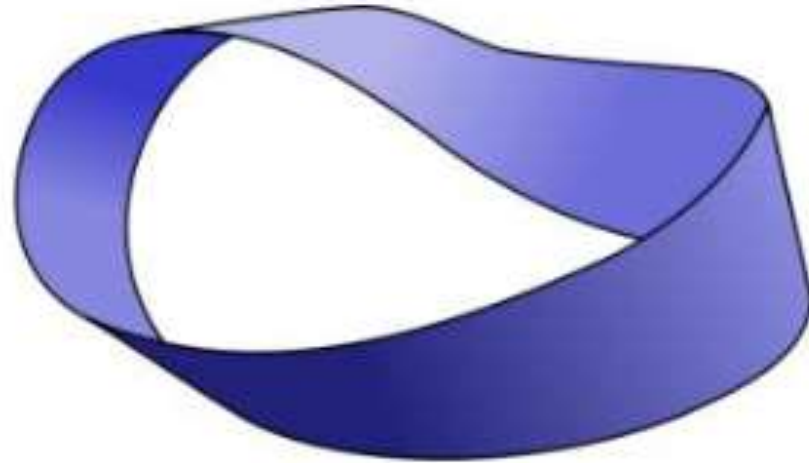
Cut along the line you have just drawn.
What do you think will happen?



Were you right?

Try making some more strips. Make some predictions and record your results when you try the following.

- Drawing lines a third of the way across the strip.
- Cutting this line.
- Putting a whole twist in the strip before joining the ends.
- Cutting the results of the above strips in two down the middle.



More about Möbius Strips

In some factories the conveyer belts are Möbius Strips to spread the wear over the whole surface.

The recycle logo is a Möbius Strip.



How would a game of chess or draughts on a Möbius Strip work?